

State of California  
AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking  
(Amendments to Small Refiner Exempt Volume Provisions)

**PUBLIC HEARING TO CONSIDER PROPOSED AMENDMENTS TO THE SMALL  
REFINER VOLUME PROVISIONS IN THE REGULATION LIMITING THE AROMATIC  
HYDROCARBON CONTENT OF CALIFORNIA MOTOR VEHICLE DIESEL FUEL**

Public Hearing Date: July 29, 1994  
Agenda Item No: 94-7-3

**I. GENERAL**

This rulemaking was initiated by the issuance of a public hearing notice and a Staff Report: Initial Statement of Reasons for Rulemaking (the Staff Report), which was available for public inspection on June 10, 1994. The Staff Report, which is incorporated by reference herein, contains the text of the regulatory amendments as initially proposed by the staff, along with an extensive description of the rationale for the proposal. All of the proposed amendments pertained to the small refiner provisions in the Air Resources Board (ARB) regulation limiting the aromatic hydrocarbon content of diesel fuel sold on or after October 1, 1993 for use in California motor vehicles (Title 13, California Code of Regulations, section 2282).

This Final Statement of Reasons covers only one element of the rulemaking--amendments pertaining to the methodology for determining small refiners' allowable annual production volume of motor vehicle diesel fuel that is subject to the 20 percent limit on aromatic hydrocarbon content. The rulemaking also included a second element, regarding the fourth quarter 1994 volume limitations for small refiners who--pursuant to sections 2281(g) and 2282(a)(4)--were subject to a suspension from the aromatic hydrocarbon content requirements until October 1, 1994. The amendments comprising the second element were submitted to the Office of Administrative Law (OAL) on an expedited basis on

September 15, 1995 so they could become effected by the fourth quarter of 1994. The amendments were approved by OAL on September 29, and became effective immediately.

The Board considered all of the proposed amendments at a July 29, 1994 hearing. At the hearing, the Board concluded that the second element of the rulemaking should be adopted as proposed, and that the first element should be adopted in a substantially modified form based on recommendations made by the staff at the hearing. The Board effectuated these actions by adopting Resolution 94-52. Attachment B to the resolution described the regulatory modifications proposed by the staff. In the resolution, the Board directed the Executive Officer to incorporate into the approved amendments the modifications described in Attachment B, with such other conforming amendments as may be appropriate, and to make the modified language available to the public for a 15-day period for comment on the proposed modifications. He was then directed either to adopt the modified amendments with such additional changes as may be appropriate in light of the supplemental comments, or to present them to the Board for further consideration if he determined such an action was warranted by the comments.

Pursuant to the Board's direction, the text of the modified amendments was made available on August 10, 1994 for a 15-day period for the public to comment on the modifications approved by the Board. Since supplemental comment was not solicited on the amendments to section 2282(e)(1) pertaining to the fourth quarter of 1994, the Executive Officer proceeded to adopt those amendments and to expedite their submittal to OAL. Ten written comments on the modifications to the original proposal were received during the supplemental 15-day comment period. After considering these comments, the Executive Officer issued Executive Order G-94-49, adopting the amendments to section 2282 other than those pertaining to the fourth quarter of 1994.

This Final Statement of Reasons updates the Staff Report by identifying and explaining the modifications to the originally proposed amendments. The Final Statement of Reasons also

contains a summary of the comments the ARB received on the proposed amendments during the rulemaking process and the ARB's responses to the comments.

The Board has determined that this regulatory action will not result in a mandate to any local agency or school district, the costs of which are reimbursable by the state pursuant to Part 7 (commencing with section 17500), Division 4, Title 2 of the Government Code.

The Board has further determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed or would be as effective and less burdensome to affected private persons than the action taken by the Board. The bases for these findings are contained in Section IV of the Staff Report and in the responses to comments set forth in Section III below.

## **II. MODIFICATIONS TO THE ORIGINALLY PROPOSED AMENDMENTS**

### **A. Overview of the Originally Proposed Amendments**

Section 2282 of Title 13, California Code of Regulations, was adopted by the ARB following a November 1988 hearing. It establishes aromatic hydrocarbon content limits for diesel fuel sold or supplied after September 30, 1993 for use in motor vehicles in California. Motor vehicle diesel fuel produced by large refiners or imported into the State is subject to a 10 percent aromatic hydrocarbon content standard. A small refiner is allowed to meet a less stringent 20 percent aromatic hydrocarbon content standard, but there are annual limits on the amount of diesel fuel produced by the small refiner that is subject to the 20 percent standard. Once the annual limit is reached, any additional California motor vehicle diesel fuel produced by the small refiner is subject to the 10 percent aromatic hydrocarbon content standard. "Independent refiners" as defined under section 2282 were permitted to operate under the small refiner provisions for one year until October 1, 1994, with the possibility of a two-year extension.

In order to increase flexibility, the regulations provide two alternative means for refiners to comply with the aromatic hydrocarbon content requirements. Refiners subject to the 10 percent standard are permitted to produce and supply an alternative diesel fuel formulation with a higher aromatic hydrocarbon content if it has been shown through engine testing that the alternative formulation results in emissions no greater than those associated with diesel fuel meeting the 10 percent standard. In a separate alternative, a refiner is permitted to produce and supply diesel fuel batches having an aromatic hydrocarbon content above 10 percent if the refiner also produces and supplies, within a specified time frame, batches with aromatic hydrocarbon contents sufficiently under 10 percent to offset the higher aromatic hydrocarbon contents. Small refiners are permitted to use both of these mechanisms, with the operative aromatic hydrocarbon limit being 20 percent instead of 10 percent.

The annual volume limit on the diesel fuel produced by a small refiner subject to the 20 percent aromatic hydrocarbon content limits is called the refiner's "exempt volume." Each small refiner's "exempt volume" equals 65 percent of the average of the three highest annual production volumes of "distillate fuel" at the small refiner's refinery during 1983-1987, as reported in required annual reports to the California Energy Commission (CEC). In these reports, "distillate fuel" includes the refiner's production of No. 1, No. 2 and No. 4 diesel fuel, and No. 1 and No. 2 fuel oil, whether sold for use in California or exported. A different calculation of "exempt volume" is permitted for a small refiner that was shut down for two or more years during 1983-1987, but that had already installed hydrotreating processes allowing the production of low-sulfur diesel fuel. For these refiners, exempt volume may be determined as 65 percent of their reported distillate fuel production in 1989 and 1990. Only one small refiner---Powerine--qualifies for this alternative calculation. In this document the term "base years" refers to 1989 and 1990 in the case of Powerine, and to 1983-1987 in the case of the other small refiners.

The small refiner provisions adopted in the 1988 rulemaking reflected a balancing of several objectives. The Board was sensitive to the unique position of small refiners and was

concerned that requiring compliance with the 10 percent aromatic hydrocarbon content limit could force them out of the diesel fuel market. Given their limited production capabilities, small refiners lacked a strong financial base to make the significant capital investments needed to comply with the standards applicable to large refiners. Further, the staff estimated that the cost for small refiners to meet the sulfur limits and the 20 percent aromatic hydrocarbon content standards would be slightly greater than the cost for large refiners to meet both the sulfur and the 10 percent aromatic hydrocarbon content standards. The Board adopted the small refiner provisions in light of these considerations and the procompetitive role that small refiners play in the oil refining industry.

The limits on the volume of small refiner diesel fuel subject to the less stringent 20 percent aromatic hydrocarbon content standard were designed to preserve the air quality benefits of the regulation and to maintain fairness for large and small refiners while enabling small refiners to produce sufficient quantities of diesel fuel subject to the less stringent standard to permit their continued economic viability. The object of the "exempt volume" provisions was to limit the small refiner's production of 20 percent aromatic hydrocarbon content diesel fuel to the small refiner's historic production level of California motor vehicle diesel fuel. The Board based the exempt volumes on data reported to the CEC for 1983-1987 because the reports provided fixed, preexisting figures that could not be modified to maximize production of diesel fuel subject to the less stringent 20 percent aromatic hydrocarbon limit. Because the reported "distillate fuel" volumes included fuel that was not sold for use in California diesel vehicles, it was necessary to adjust the reported volumes to exclude that nonvehicular fuel. The Board applied a single adjustment factor for all small refiners, based on the industry-wide average proportion of California motor vehicle diesel fuel to all reported distillate fuel. This proportion, based on a survey of both large and small refiners, was 65 percent.

When the Board approved the regulation in 1988, fourteen refiners could have qualified under the small refiner provisions. The 1988 Staff Report estimated the maximum potential

volume of small refiner 20 percent aromatic hydrocarbon content diesel fuel to be about 19,000 barrels per day (bpd).

## **B. The Originally Proposed Amendments on Small Refiner Exempt Volume Limits**

Many of the small refiners that were operating in 1988 were no longer operating in 1994, or were no longer producing diesel fuel. The staff identified four refiners operating in 1994 who would qualify for treatment under the small refiner provisions of section 2282: Kern Refining, Paramount Petroleum, Powerine, and Witco-Golden Bear. Under the original small refiner provisions, these four refiners would qualify for exempt volumes totaling approximately 10,850 bpd.

The amendments originally proposed by staff in this rulemaking would have maintained the preexisting approach for calculating a small refiner's "exempt volume." However, the amendments would have allowed each small refiner the option of producing 20 percent aromatic hydrocarbon content diesel fuel in an annual volume of 100 percent (rather than the exempt volume limit of 65 percent) of its distillate fuel production during the base years--as long as the small refiner's total California distillate sales for the year are limited to 100 percent of the base-years' distillate production figure.

The impetus for this initial approach was a determination that, for the four remaining small refiners, the percentage of small refiner reported "distillate fuel" production during the base years that was actually sold as motor vehicle diesel fuel was much greater than 65 percent. As a result, the preexisting volume limits would restrict the small refiners to the production of 20 percent aromatic hydrocarbon content diesel fuel in volumes substantially less than their production of California motor vehicle diesel fuel during the base years. Consistent with the Board's underlying intent for the small refiner provisions in the 1988 rulemaking, the amendments originally proposed by staff would have assured that a small refiner has the opportunity to sell 20 percent aromatic hydrocarbon content diesel fuel in volumes up to those

equal to its base-years' production levels. The cap on total California distillate production was designed to preclude a small refiner from using the amendments to increase its total sales of motor vehicle diesel fuel while concurrently maintaining or expanding its other distillate markets.

The staff recognized that the proposed amendments would increase emissions compared to the "no action" alternative of leaving the regulations unchanged. The original proposal would have resulted in optional volume limits of about 16,700 bpd, compared the expected exempt volume limits of about 10,850 bpd that would result from the original small refiner provisions. The staff concluded that the resulting loss of emission benefits was necessary to enable small refiners to produce California motor vehicle diesel fuel in sufficient quantities to maintain their economic viability.

### **C. The Board's Modifications to the Originally-Proposed Approach**

Between issuance of the 45-day notice and the Board hearing, the staff reviewed additional information and analysis provided by small refiners and others during the comment period. As a result, at the hearing the staff recommended modifications to the originally proposed amendments pertaining to small refiner "exempt volumes." These modifications were approved by the Board and ultimately adopted.

The staff concluded that it was inappropriate to derive the "exempt volumes" for the small refiners from their base-year production figures, even with the addition of the initially proposed option of 100 percent of base-year distillate production. This was due to two considerations. First, the small refiners generally had lower than average refinery utilization rates during the base years, due to factors including lack of financing for capital improvements, lengthy down-times, bankruptcy, and changes in ownership. Thus their base-year production figures are not a good indicator of a production level sufficient to make their manufacture of diesel fuel economically viable. Secondly, as the CEC representative testified

at the hearing, all refiners have found it necessary to substantially increase their refinery utilization rates in recent years to recover increasing costs associated with environmental regulations and to remain competitive. In 1982, the average utilization rate for California refiners was 71 percent. During what constituted the base-years for most of the small refiners, the average utilization rate increased from about 73 percent in 1983 to about 83 percent in 1987. In 1991 and 1992, the overall refinery utilization rate was about 90 percent, and it reached 95 percent in 1993.

Limiting small refiners to producing 20 percent aromatic hydrocarbon content diesel fuel in volumes equal to 65 or 100 percent of their base-year distillate production would force them to either operate at refinery utilization rates far below the rates of the other refiners, find out-of-state or nonvehicular markets for their diesel fuel produced in excess of their exempt volumes, or produce 10 percent aromatic hydrocarbon content diesel fuel. The small refiners do not have refining capability to produce 10 percent aromatic hydrocarbon content diesel fuel at the present time, and the viability of the individual small refiners to sell their diesel fuel streams into markets without aromatic hydrocarbon content limits is discussed on pages 24-25 of the Staff Report. Kern Refining in Bakersfield is presented with the most difficult challenge, as the San Joaquin Valley jet fuel market has substantially diminished due to military reductions, has no access to marine markets, and can only export by truck.

The staff recommended replacing the originally-proposed amendments with an optional method a small refiner may elect for determining its "exempt volume" under the diesel aromatics regulation. The option is designed to identify an "exempt volume" value for a small refiner that will enable production of a sufficient volume of 20 percent aromatic hydrocarbon content diesel fuel to enable economically feasible production of motor vehicle diesel fuel for the California in today's refining environment. Under the new option, a small refiner's exempt volume is calculated using the following steps:



First, the barrels per calendar day "operable crude oil capacity" of the small refiner's refinery for 1991 and 1992 is identified, based on CEC data derived from refiner reports submitted to the CEC not later than June 30, 1994.

Second, this crude oil capacity is multiplied by 0.9011, representing the overall refinery utilization rate in the California refining industry for 1991 and 1992, as derived from CEC reports.

Third, the resulting crude throughput volume is multiplied by the average of the refinery's two highest annual ratios of distillate produced to crude oil distilled in the period 1988 through 1992, based on CEC data derived from refiner reports submitted to the CEC not later than June 30, 1994.

Fourth, the resulting volume is multiplied by the average of the small refiners' two highest annual fractions of distillate production that have been sold as California motor vehicle diesel fuel during the period 1988 through 1992. This figure will be determined by the Executive Officer.

The option avoids reliance on the original base-year production figures because of the substantial changes in refinery operations since the 1983-87 time period. Rather it focusses on projected distillate production where a small refinery is run at the 1991-1992 average refinery utilization rate and its 1991-1992 crude oil capacity. 1992 was the last calendar year with production figures that would not be affected by implementation of the diesel regulations in October 1993. The third and fourth steps are necessary to obtain a value representing production of California motor vehicle diesel fuel. Since the ratio of distillate produced to crude oil distilled can vary significantly from year to year, deriving the ratio from four years of data should result in a more representative figure. Relying on data already reported to the CEC reduces the possibility that the data can be manipulated to maximize the exempt volume. The fraction of distillate that has been sold as California motor vehicle diesel fuel is the one

figure that cannot be derived from CEC data and is the most difficult figure to verify; working from an average figure for the four year period should provide a reasonably reliable figure.

The modifications provide that "exempt volume" will continue to be determined in accordance with the method designated in the regulation prior to this rulemaking for any independent refiner qualifying for interim treatment as a small refiner. There were no data before the Board demonstrating a need to have the new option apply to independent refiners, who would already have been subject to the existing exempt volume provisions.

Based on data available at the time of the hearing, the staff estimated that the effect of the amendments on the small refiners' "exempt volume" would be approximately as follows:

**Comparison of Small Refiner Exempt Volume Limits (bpd)**

<b>Small Refiner</b>	<b>Existing Regulation</b>	<b>Original Proposal</b>	<b>Modified Proposal</b>
Kern	3,600	5,525	6,400
Paramount	2,375	3,650	7,500
Powerine	4,500	6,925	8,350
Witco	400	600	1,375
<b>Total</b>	<b>10,875</b>	<b>16,700</b>	<b>23,625</b>

The modified approach should maintain a level of fairness among large and small refiners because the average cost for a small refiner to comply with the 20 percent aromatics limit is estimated to be about 7.5 cents per gallon, compared to an average cost of about 6 cents per gallon for large refiners to comply with the 10 percent aromatic hydrocarbon content standard. Thus the Board concluded that the amendments do not give the small refiners an unfair advantage.

The final amendments will significantly reduce the oxides of Nitrogen (NOx) and particulate matter (PM10) emissions benefits that would otherwise result starting in 1995 from compliance with section 2282. The reduction in emission benefits could be as great as 3 tons per day of NOx and 0.6 tons per day of PM10 if all small refiners produce diesel fuel up to their exempt volume limits. As discussed in the comments and responses below, the final amendments will increase exempt volumes somewhat less than what was sought by the small refiners. The Board could not identify any alternatives or mitigation measures that would lessen the reduction in air quality benefits while maintaining a small refiner mechanism that will make it likely that small refiners will be able to continue to produce diesel fuel in an economically viable manner. The Board determined that the interest in having the few remaining small refiners continue to operate as a positive competitive force was an overriding consideration justifying the reduction in emission benefits.

The Board also made one other minor modifications to the regulations. Section 2282(e)(1) was amended to allow a small refiner to enter into a protocol with the Executive Officer under which batches of diesel fuel reported by the small refiner as not exempt from the 10 percent aromatic hydrocarbon content limits would not be counted against the small refiner's exempt volume. This accords a measure of flexibility for a small refiner who may be able to produce some amounts of fully complying diesel fuel before the annual exempt volume is reached.

### **III. SUMMARY OF COMMENTS AND AGENCY RESPONSE**

Summarized below are all comments that were submitted during the 45-day comment period or at the hearing and that offered an objection to or recommendation regarding the proposed modifications to the methodology used to determine small refiners' exempt volume limits. Because modifications to staff's original proposal described in the Staff Report were approved by the Board at the July 29, 1994 board hearing, a 15-day notice for supplemental

public comment was provided to the public. We also summarize and address herein the comments made during the supplemental comment period. Comments which did not constitute objections or recommendations specifically directed towards the proposed action, or the procedures followed by the ARB regarding the rulemaking, are not summarized.

Comments were received from various interested parties regarding the exempt volume element of the rulemaking. Comments were received from: Mobil Oil Company (Mobil), ARCO Products Company (ARCO), Unocal 76 Products Company (Unocal), Chevron USA Products Company (Chevron), Ultramar Inc. (Ultramar), Texaco Refining and Marketing (Texaco), Western Independent Refiners Association (WIRA), Exxon Company, U.S.A. (Exxon), California Independent Oil Marketers Association (CIOMA), California Energy Commission (CEC), California Trucking Association (CTA), Kern Oil and Refining (Kern), Powerine Oil Company (Powerine), San Joaquin Refining (SJR), Paramount Petroleum (Paramount), and Bruce's Truck Stops.

A number of commenters supported adoption of the proposed amendments regarding small refiners' exempt volume limit. These commenters included: CIOMA, CTA, Kern, Powerine, WIRA, Paramount, and Bruce's Truck Stop. General comments of support are not separately summarized below.

#### **A. Comments Made Prior to or at the Hearing**

##### **Comments on the Staff Report or Staff's Proposals**

1. **Comment:** In proposing the amendments described in the June 10, 1994 Staff Report, the staff failed to recognize several important factors:
  - a) Small refiners need to operate their facilities at an optimal level in order to spread out investment costs over a larger product volume. The staff's proposal

would limit the amount of crude which could be run through the refinery. By restricting the distillate output of each remaining small refiner to its own historical level, the ARB will be increasing the cost disparity between small and large refiners. Only the large refiners will be able to spread their fixed costs over the additional barrels previously produced by large and small refiners who have left the market. (WIRA, Kern, Paramount, Powerine)

- b) Small refiners need to collectively retain their historical market share. Based on CEC data, small refiners produced 15-20 percent of total distillate production in 1988. Since several small refiners have left the diesel fuel market, the remaining small refiners would need to contribute more than 15-20 percent distillate production to maintain the same market as in 1988. Also, based on previous knowledge and conversations with small refiners, small refiners have historically produced higher percentages of their distillate as diesel fuel. Therefore, the Board's intent of insuring fairness to all parties, including larger refiners, would be preserved if the California small refiners were assigned exempt volumes totaling 23,500 bpd because rather than taking over any market share formerly enjoyed by larger refiners, the remaining small refiners would be retaining only a portion of the market share of the small refiners who either have ceased operating or have departed from the California motor vehicle diesel market. This volume, which is barely 15 percent of the total California motor vehicle diesel market, is much less than the amount of motor vehicle diesel supplied by all small refiners in 1988 and earlier. This does not appear to be inconsistent with the intent of the Board in 1988 in their balancing of the small refiners' needs with the air quality benefits of the regulation. (Kern)
- c) Kern is uniquely impact by staff's proposal in that Kern is located in the midst of California's most active distillate market, which is almost exclusively motor vehicle diesel fuel. There is virtually no market for jet fuel in the southern San

Joaquin Valley, so Kern cannot shift the product slate as Los Angeles refiners can. (Kern)

Agency Response:

- a) We agree that low exempt volumes would severely restrict small refiners' ability to recover costs. Small refiners are complying with the diesel regulation by investing in new processing equipment. These modifications require up front investments which will need to be recovered. If production is limited to low levels, then refiners will need to recover the costs over fewer gallons of diesel and the resultant cost per gallon will be higher. This would put small refiners at a competitive disadvantage, which the Board was trying to prevent through the small refiner provisions. Realizing that small refiners would suffer an unfair disadvantage at the original exempt volume, the ARB has modified the exempt volume calculation method to allow small refiners to operate more efficiently than previously allowed.
- b) There is no intent of the Board that the small refining sector should keep its historic market share. In 1988, the Board's intent in setting exempt volumes was to limit the potential for producing the lower-quality 20 percent aromatic hydrocarbon diesel into the market. The amendments now adopted by the Board merely allow small refiners a chance at competing with large refiners for market share, and they tend to protect the small refiners' customers' supply of diesel fuel and to promote competition in the fuel production industry.
- c) We recognize Kern's situation. The revised proposal adopted by the Board will improve Kern's ability to deal with its unusual circumstances.

2. Comment: The staff's modified proposal would limit our production to 6,400 bpd according to staff's estimate. This would have the effect of curtailing sales of diesel fuel to independent marketers and direct users, and gasoline to those customers who lift gasoline at our refinery. More likely, we will be put out of business. In addition, our capacity utilization will be held to the 1991-92 industry average of 90 percent while our larger competitors can operate at 100 percent. We agree with the staff's final proposal except for that. If the 90 percent utilization factor were removed, we could produce 7,000 bpd of diesel and utilize our full rated refinery capacity. We then would have a chance of remaining profitable going into our reformulated gasoline project. This is what we request -- the revised staff proposal without the 1991-92 utilization factor of 90 percent. (Kern)

Agency Response: First, the 6,400 BPD exempt volume cited by the commenter is only an estimate. This value represents an estimate of Kern's exempt volume based on the methodology adopted by the Board. The actual amount of exempt volume is yet to be determined based on the more accurate data required under the adopted amendments. Also, no data was provided to us to suggest that Kern would go out of business at a diesel fuel production rate of 6,400 bpd. We believe that through the adopted amendments, independent marketers will only be slightly affected by a drop in Kern's production. Kern suggests that it is unfair to calculate Kern's exempt volume on the basis of a 90 percent utilization rate while large refiners can operate at 100 percent. However, sustained operation at 100 percent capacity is not practical. The value of 90 percent is a documented recent historical value for the industry. Thus, it is fair.

3. Comment: We request an additional 1,469 bpd of additional exempt volume. We believe that this volume is absolutely critical to remain viable and believe that the incremental emissions impact of this volume will be insignificant when considering the

environmental objective of the rule. We believe that our economic and pro-competitive influence on the local area far outweighs any possible environmental impact of allowing an additional 1,469 bpd of small refiner diesel fuel beyond the 5,531 bpd recommended by the ARB staff in its June 1994 proposal. (Kern)

Agency Response: We agree that an exempt volume greater than the original is necessary for Kern's continued viability, but we do not agree that the proposed value of 7,000 bpd (5,531 + 1,469 bpd) is critical. See the response to comment 2. Under the adopted amendments, Kern's exempt volume will be about 6,400 bpd.

4. Comment: The proposal in the June 10 staff report does not allow an adequate exempt volume for the small refiners to function as viable entities. If today's small refiners leave the market, there would be an unstablizing effect on diesel fuel price, real loss of jobs in the state and there would be a substantial reduction in local taxes and fees paid to the various agencies.

We urge the Board to adopt the small refiners' proposal to increase the amount of diesel fuel subject to the 20 percent aromatic hydrocarbon content limit to approximately 25,000 bpd for the small refining sector. (CTA, CIOMA, WIRA) Increasing the exempt volume to 25,000 bpd is fair to both the small, independent and large refiners, because from an economic standpoint it does not provide any price advantages to small refiners. In addition, our proposed exempt volume will preserve the air quality benefits of the diesel fuel regulation because the Board based its original adoption of the diesel fuel regulation on air quality impacts of 27,000 bpd of 20 percent diesel fuel, which is more than the 25,000 bpd we are requesting. (WIRA, CTA, Paramount)



Agency Response: The Board understands the potential adverse economic effects of forcing small refiners out of the diesel market and out of the local economies. The basic premise for the small refiner provisions are to prevent the aromatic regulation from causing such effects. Small refiner proponents argue that 25,000 bpd would allow for optimal production rates. However, ARB staff believes that to simply set an industry-wide number without reference to historical data would not be appropriate and would be beyond the original intent of the Board. Therefore, while we agree with the notion that the small refiners need additional exempt volumes, we believe the industry proposal is inappropriate. The Board adopted amendments setting individual small refiner's exempt volumes that will total approximately 23,700 bpd. While this total is less than the volume requested by small refiners, the adopted amendments are more appropriate since the individual exempt volumes are firmly based on a combination of historical data on each small refiners' diesel fuel production and industry-wide operation.

5. Comment: The ARB staff is now proposing to increase the exempt volume limit to 16.7 kbpd. The original volume limits were based on the three highest annual distillate production years of the baseline period for each small refiner and on an estimate by California refiners of the highway diesel percentage of distillate sales. The ARB staff now suggests that this percentage was low, resulting in an overly restrictive volume limit on small refiners. However, no substantiating evidence or analysis is presented for this opinion by the ARB staff. (Exxon)

Agency Response: The rationale for amending the exempt volume provisions is contained on page 18 of the Staff Report. The Staff Report states that recent analyses by the staff indicate that the small refiners' volume is more restrictive than necessary to preserve the Board's original intent. The analyses also show that the 65 percent ratio of motor vehicle diesel fuel to distillate was not realistic for the small refiners operating

today. In fact, data indicate that the historic ratio of motor vehicle diesel fuel to distillate was well above the 65 percent factor for these refiners. The amendments adopted by the Board ensure that small refiners are allowed to produce diesel fuel in volumes that represent historic marketing practices. Additional arguments are cited in the responses to comments 7,8 and 25.

6. **Comment:** Additional costs from new laws and regulations adopted since the historical period used for calculating exempt volume have forced all refiners to operate at nameplate capacities or above if they are to have any chance of surviving. We (Paramount) have operated at near nameplate capacity and are expecting to achieve nameplate crude charge by early 1995. Our refinery needs to operate at nameplate capacity to cover additional costs. The only way we can survive is to operate at as high a crude rate as possible and to hold our operating costs at past levels. It is important that small independent refiners are afforded an opportunity to continue to compete to supply products to the independent markets to lend stability to petroleum products, price, and distribution in the state of California. We ask that the exempt volume of diesel fuel closely match the nameplate capacity. (Paramount)

Agency Response: The adopted amendments provide small refiners exempt volumes which are reasonably based on data representing a competitive refining facility. The amendments use 90 percent utilization of capacity to set the exempt volumes. For Paramount, this will yield about 7,800 bpd of 20 percent aromatic hydrocarbon diesel production. However, nothing will prevent Paramount from increasing its refinery utilization above 90 percent by changing its yield of diesel fuel from crude oil or by making 10 percent aromatic diesel as well as 20 percent aromatic diesel.

7. Comment: The Staff Report doesn't even begin to explain what was wrong with the original "65 percent" rule which had already been increased from 55 percent in the 1988 proposed rule presumably at the request of the small refiners. Was a mistake made? The staff proposal is seriously flawed in that it appears totally arbitrary and without foundation save for the outcome. (Chevron)

Agency Response: In 1988, the staff originally proposed to limit exempt volume to 55 percent of total distillate production. The 55 percent ratio of motor vehicle diesel to distillate erroneously included exported diesel fuel. Small refiners argued that the ratio should exclude exports since exports were not subject to the aromatic limit. Hence, the Board modified staff's original proposal by changing the 55 percent ratio to 65 percent.

As applied to the four remaining small refiners who remain in the diesel fuel market today, the 65 percent factor yields exempt volumes that are too low to make economic operation practical under modern business conditions. Its use would counter the Board's basic intent to allow small refiners to compete despite having to meet the aromatic regulation.

8. Comment: In the Staff Report, staff indicates that small refiners' ratio of diesel fuel to distillate was substantially greater than 65 percent. If this is the case, it may be appropriate to increase their exempt volume to more accurately reflect their 1983 to 1987 base year production. Changing the period to reflect a higher period of production is completely unwarranted. The original regulation addressed the potential problem of low production by allowing averaging of the three highest year production. (Unocal)

Agency Response: See the response to comment 25.

9. Comment: Although we question the need and rationale for the proposed amendment (to adjust small refiner production limits), we recommend that the Board continue to base the exempt volume on total distillate production. (Ultramar)

Agency Response: The commenter appears to recommend a limit on total distillate production, rather than on diesel fuel production. While this kind of limit would allow somewhat more diesel fuel to be produced, it would not solve the basic problem posed by the existing exempt volume--unrealistic restriction of small refiners' ability to compete in the fuel markets. Also, it could have unknown effects on the supply of other distillate fuels.

10. Comment: One last correction of the June 10, 1994 Staff Report we need to make for the record is our crude capacity (Table 2, p. 12). Powerine's crude capacity is 49,500 bpsd versus 44,120 bpd listed in the report. (Reference "United States Refinery Capacity, " January 11, 1994, National Petroleum Refiners Association.) (Powerine)

Agency Response: To maximize predictability and consistency, we believe that the ARB should use for all refiners the data on capacity submitted by each refinery to the CEC. Powerine's submittals over several years identified a 44,120 bpd capacity.

11. Comment: We wish to update you on our recent production volumes of CARB diesel and make some minor corrections to the June 10, 1994 CARB Staff Report. Attached for your information are Powerine's total distillate less jet and CARB diesel production volumes for January through June 1994. As you can see, our production varies from 5860 to 19,641 bpd of total distillate less jet and from 5404 to 14,524 bpd of CARB diesel. Specifically CARB diesel production in March of 1994 was 8299 bpd versus

the 6300 bpd estimated in CARB's Staff Report (Table 6, p. 19). Therefore we take exception to CARB staff's comments on p. 25 of the Staff Report:

"Under the proposed option, Powerine's limit on exempt volume would increase from 4,505 bpd to 6,931 bpd, which is very close to its current production. We expect that Powerine will only be marginally impacted and will probably market additional volumes out-of-state."

(Powerine)

Agency Response: We acknowledge the 8299 bpd production information. As noted in the Staff Report, the volume reported for March 1994 is an estimate. It was calculated from data sent to us as part of the reporting requirements associated with the temporary suspension. We did not receive actual March production information for Powerine until after the Staff Report was written.

#### **Comments Related to Air Quality:**

12. Comment: The ARB has primary responsibility to reduce emissions. In fashioning the original aromatic hydrocarbon content regulation, the ARB sought to limit the increased emissions resulting from small refiner diesel fuel through the imposition of a production limit cap. The proposals being considered go contrary to limiting these emissions.

(ARCO)

The ARB staff's own analysis states that the emissions increase from the proposed amendments "would constitute a significant adverse environmental impact." (Staff Report June 10, 1994, page 22.) As such, the proposals would substantially increase emissions of NOx and PM. Small refiners' exempt volumes should not be increased at the expense of

increased emissions. (Unocal) The exempt volume proposal is counter to the Board's charge to reduce motor vehicle emissions and improve air quality. (Exxon, ARCO)

Agency Response: We fully recognize that the amendments to the exempt volume provisions are likely to significantly reduce the emission benefits of the diesel aromatics regulation. The Staff Report notes on page 22 that increasing the exempt volume limits could result in an adverse environmental impact due to the increased volume of diesel fuel that could meet the 20 percent aromatic standard. Also, Resolution 94-52 states that the amendments "... could reduce the emission benefits that would otherwise occur under the existing regulation starting January 1, 1995 by up to about 3 tons per day of NOx and 0.6 tons per day of PM10 . . . ."

These reductions in the benefits of the regulation are the maximum potential adverse effects. They will be realized only if all the small refiners are able to produce and market 20 percent aromatic hydrocarbon content diesel fuel up to their full exempt volume limits. This may occur only if there is an unusual demand for diesel fuel. As noted by the staff at the hearing, the small refiners' costs to comply with the 20 percent aromatic limit are expected to average about 7.5 cents per gallon. The average cost of compliance for large refiners is estimated to be about 6 cents per gallon. This competitive disadvantage may keep the small refiners' production below the exempt volume unless demand is high.

State law does not prohibit the Board from adopting the amendments because of a potential increase in emissions. While Health and Safety Code section 43018 directs the Board to endeavor to achieve the maximum degree of emission reductions possible from vehicular sources, it also requires the Board to consider the effects of its standards and regulations on the economy of the state. As noted in the resolution, the ARB has sought to identify any feasible alternatives or mitigation measures which would result in greater emission benefits while still assuring that small refiners are treated equitably and fairly. None were identified.

Finally, while the adopted amendments will allow the four small refiners to produce substantially more 20 percent aromatic diesel fuel than under the preexisting exempt volumes, the amendments will not substantially increase the total amount envisioned for the entire small refining sector. This is because many former diesel producers who originally would have qualified as small refiners longer produce California motor vehicle diesel fuel. Thus, relative to the emission effect of the exempt volumes adopted in 1988, the effect of the current amendments is modest.

### **Comments Related to Supply and Distribution:**

13. Comment: Just as Texaco has expanded their market share between 1988 and 1994 from 25.9 percent to 57.6 percent in the San Joaquin Valley, staff acknowledges that the trend of shifting the market to large refiners will continue if the originally proposed amendments are adopted. Staff notes that by losing small refiner production in the market, the distribution system will need to realign itself as end-user customers seek new supplies of diesel fuel. Independent marketers will find themselves securing supplies of diesel fuel from large refiners with uncertain short term product availability and strict guidelines on contract and credit terms. The marketing environment will change relative to the casual relations independent marketers currently have with the small refiners. (WIRA)

Agency Response: The amendments, as finally adopted, should not substantially encourage the shift of the market to large refiners. Rather, the amendments should provide small refiners with a reasonable opportunity to compete in the market. Thus, any future change in the distribution system should be the result of market forces, not the diesel fuel regulation.

14. Comment: Small refiners produce 100 percent of the asphalt in southern California and half of the asphalt in northern California. If small refiners are unable to produce an adequate amount of diesel fuel, it may disrupt not only the diesel fuel market but also the market for these other petroleum products. (CTA)

Agency Response: The adopted amendments are intended to let the small refiners continue to compete in the diesel fuel market and thus operate refineries at a reasonable rate. Therefore, relative to the original provisions on exempt volumes, they tend to help avoid disruption in historic supplies of asphalt and other small refiners' products..

15. Comment: There appears to be a concern by ARB that there could be a reoccurrence of the diesel fuel shortage that occurred last fall and that ARB quality diesel should be increased to protect against that possibility. (Mobil) There is no evidence of supply shortage. The average market demand is over supplied at the current production level. Demonstrated CARB idle diesel production capacity for majors/independents far exceeds small refiner capability. Current inventory today is much higher than during October 1993 and industry is in a much better position to handle peak demand through inventory draw-down this year than in 1993, thus, normal inventory can easily handle peak demand. (Texaco) Therefore, the proposed revisions unjustified from a supply standpoint. (Texaco, Ultramar, Mobil)

Agency Response: While we agree that the refining capacity (i.e. potential to produce) diesel exists to provide sufficient statewide supply, it should be noted that the remaining small refiners are located in the southern San Joaquin Valley and in southern California. If the small refiners' production of diesel fuel was curtailed, the reduction in supply would occur suddenly in the localized areas within the small refiners' markets. The refining capacity and inventory of northern California refiners could have little immediate impact to address localized shortages in the areas supplied by small refiners. Historically, little of northern California refiners' production or inventory has been used in the southern part of



the state to maintain the statewide supply and demand balance. Furthermore, the adequacy of supply today does not guarantee adequacy in the future.

16. Comment: The Staff Report presents no analysis or support that the farmers and oil marketers' concerns are valid and warrant the proposed amendments. (Exxon)

Agency Response: The amendments were not adopted solely because of farmers' and marketers' concerns. The ARB staff believes that small refiners do have legitimate concerns because of comments made at meetings and personal conversations with those affected. The experience in the fall of 1993 indicates that when shortages occur, these are groups that may be disproportionately affected. For example, a farmer who cannot secure diesel during critical periods such as the harvest season, will incur significant economic losses.

17. Comment: We do not believe that the proposed amendments go far enough. Based on the proposed amendments, small refiners may be forced to make production decisions that take the needed diesel fuel gallons out of the California market or the proposals may not enable the small refiners to produce enough products to remain viable. Without all refiners producing in the state, supply problems are inevitable. Independent marketers will not be able to supply all customers' needs. In some rural areas, only small refiners supply customers through independent marketers. Thus, if small refiners are not part of the system, supply problems would result. (CIOMA)

Agency Response: We believe that the amendments adopted by the Board provide small refiners the opportunity to compete with large refiners and produce adequate volumes.

Thus, locally needed fuel will be produced and the imposition of the exempt volumes will not disrupt supplies suddenly.

**Comments Related to Equity:**

18. **Comment:** The ARB's proposal to allow small refiners to produce 20 volume percent aromatic hydrocarbon diesel fuel up to their "exempt volume" based on the period from 1988 to 1992 is unwarranted from an equity standpoint. The proposed change to increase small refiner production caps allow a situation that hurts the ability of refiners to recoup investment costs made in good faith to comply with the regulations. (Unocal, Chevron) Through the proposed action, the ARB is continuing an alarming trend of intervention into the marketplace which interferes with the free market. (Chevron) Basing exempt volumes on a period of overall higher production clearly allows small refiners to use the less stringent 20 percent standard to increase their market share with a dirtier fuel. With this proposal, the ARB tilts the playing field even more to the advantage of the small refiners by increasing their exempt volume limit. (Unocal, Chevron)

Agency Response: We believe that the modifications are fair and will not undercut the large refiners' cost recovery. Because large refiners will incur an estimated 6 cents per gallon compliance cost while small refiners will incur a cost of 7.5 cents per gallon, the modifications will not guarantee an increase in the small refiner's market share. Therefore, while increasing the exempt volume allows small refiners a reasonable chance to remain competitive in the California market place, it does not provide them a share of that market at the expense of large refiners.

19. Comment: In the June 10 Staff Report, the ARB staff proposed that the exempt volume limits be increased to a total of 16.7 kbpd. The ARB staff's justification that the amendment is necessary to protect the economic viability of the small refiners is groundless. Rather, the small refiners affected by the proposed amendments are currently reaping a substantial windfall from the executive orders allowing for suspension volumes, and the proposed amendments would continue that windfall. The windfall comes at the expense of air quality and those refiners producing "clean diesel." Denying the proposed amendments will return the small refiners to the volume limits established by the original regulation and correct the economic distortion created by the executive order. Both the original and modified staff proposals are inappropriate in any context. The small refiners deserve to remain constrained under the original rule if for no other reason than to reimburse the state's air quality for the damage already done.(Exxon, Chevron, Mobil)

Agency Response: The initial staff proposal was based on data submitted by small refiners. The data indicated serious economic consequences for small refiners if their diesel production were curtailed to the exempt volumes in the 1988 regulation. They would incur higher costs due to trucking fuel outside of California and from spreading their compliance costs over a smaller volume of diesel fuel.

We do not expect the small refiners to gain a future "windfall" from the modifications. As previously stated in the response to Comment 1, we estimate that the cost for small refiners to comply will be higher than that for large refiners. The commenter also alleges a past windfall for small refiners and damage to air quality from temporary suspensions from the regulation. The availability of suspensions was provided by the Board in the original regulation and is not a subject of this rulemaking. Any redress of alleged "excess" emissions, by altering the proposed new exempt volumes, would not be appropriate.

20. Comment: Any calculation of the exempt volume based on historical production during the 1980's would lock small refiners into an uneconomical mode of operation. It would also result in an exempt volume that is too low because during the base years, the three refiners were operating well below capacity due to bankruptcy, changes in ownership, lack of financing for capital improvements and generally a poor economy for refiners. Any proposal constraining future operations to such a period of historical production locks small refiners into operating uneconomically. So many things have changed in the refining industry as a whole, that a limitation to historical production would not be appropriate for any refiner in the California marketplace. Every refiner has found it necessary to increase utilization for California refineries from 1982 to 1992. Increased utilization is necessary because of increased operating costs. The costs of environmental regulations, process safety management, and especially reformulated gasoline must be allowed to be spread over a refinery's entire processing capacity. The impacts of reformulated gasoline were not anticipated during the 1988 rulemaking. To limit small refiners to historical diesel production will necessarily limit crude throughput. Limiting crude throughput unfairly disadvantages small refiners vis-a-vis major oil companies. Ultimately, the limitation may cause these last small refiners to terminate motor vehicle diesel fuel production or cease operations altogether. (WIRA)

Agency Response: The considerations identified by the commenter have served as the basis of the modifications to the original proposal.

21. Comment: The amendments proposed in the June 10 Staff Report will limit the small refiner to a historically low utilization because of the limits on the final volume of 20 percent aromatic hydrocarbon diesel. Furthermore, it is less cost effective for small refiners than it is for large refiners to make complying diesel fuel.

By limiting small refiner production of 20 percent aromatic fuel, the ARB essentially will deny small refiners the ability to satisfy their traditional regional customers. These customers, many of which have been getting their diesel fuel from the same small refiner for decades, will have to find other sources, large refiners. This allows large refiners to gain a much greater market share than they historically enjoyed and at a lower per gallon cost than the small refiners. (WIRA)

Agency Response: The proposal in the June 10 report was replaced with the adopted changes. The combined exempt volumes under the adopted changes are 23,700 BPD, which should satisfy the traditional regional customers.

22. Comment: The fairness issue also requires consideration of the fact that small refiners provide price stability to the petroleum product marketplace. Congress and myriad regulatory agencies, including the ARB, have acknowledged the procompetitive impact of the small and independent refining sector. In the diesel fuel market in particular, small refiners are a critical supplier for the independent, unbranded marketers that distribute a majority of California motor vehicle diesel fuel. (WIRA)

Agency Response: The Board approved Resolution 94-52, recognizing that small refiners play a crucial role in the statewide diesel fuel market. In crafting the original regulation, the Board intended to ensure that small refiners could remain competitive in the diesel fuel market. The currently adopted amendments further that intent.

23. Comment: Limiting our exempt volume to the limits proposed in the June 10 Staff Report has major impacts on our operation, including the following:

- An additional 3,000 bpd of gasoline production will be shifted to distillates when the ARB Phase 2 reformulated gasoline (RFG) regulations become effective. Our refinery

will be producing over 23,000 bpd of distillate (jet and diesel fuel). The company does not have the ability to market additional jet fuel or EPA diesel fuel from a resource standpoint. (Powerine, Paramount)

Agency Response: We believe that the choice of product mix is a business decision for the refiner. In any case, the June 10 proposal was superseded by the adopted amendments.

- We currently sell our products to a third party and committed to deliver over 8,000 bpd of the ARB diesel under this arrangement which was to continue until January 1, 1998. (Powerine)

Agency Response: In our assessment, this has no bearing on the adopted amendments. Powerine entered into a business decision knowing the strict exempt volume limits placed on them. Furthermore, Powerine has options for meeting its business obligations while ensuring compliance with the regulation. For example, Powerine could purchase diesel fuel from another diesel fuel producer to provide the volumes of diesel fuel under their agreement.

- We must operate at our optimal capacity utilization to be economically viable. We will lose \$2.5-\$3.0 million per year if the exempt diesel fuel volume is capped at 6,905 bpd. The ARB should approve an exempt volume of diesel fuel based on Powerine's refinery operating at its optimal level which it finally has achieved during the period 1993-1994. The volume that we now require is 11,159 bpsd and based on a 94 percent operating factor for the refinery, the volume is 10,489 bbls/calendar day (bpcd). (Powerine)

Agency Response: The Board's intent has not been to allow economic optimality; the intent has been to allow competitiveness.

24. Comment: If the "exempt volume" does not closely match our diesel production, it will cause us undue hardship. If we are not given an exempt volume that will closely match our diesel product make, we will be unable to sell our diesel to the California market and must look to markets outside of California to sell our products. To compound this problem, when California starts marketing Phase 2 RFG, hundreds of thousands of barrels of jet fuel will be dumped into the middle distillate market making it even harder to market our jet and diesel fuel in or out of California. If we were allocated the "exempt volume" as recommended by the ARB staff the losses resulting from transportation charges to our closest market are \$2,429,440/year now and \$2,879,120/year in 1995. By not setting our exempt volume to closely match its diesel production, you will place us at a disadvantage to other refiners and will not level the playing field as was intended in Title 13 CCR 2282 to assist small refiners to survive and recover its capital outlay. We have spent millions of dollars to comply with the small refiners section of Title 13 CCR 2281/2282 and are expecting the ARB to set our exempt volume as intended by the spirit of the rule to protect small independent refiners survival. As you well know, there are only a few of us that have not given up and allowed ourselves to be forced out of business by the extraordinary costs associated with rules and regulations that have been implemented. (Paramount)

Agency Response: We do believe that the small refiner exemption limit in the original regulation needs to be modified to reflect the changes that have occurred in the refining industry. At the July 29 hearing, the Board adopted amendments to account for these changes. The new methodology is based on the use of each small refiner's crude capacity; the industry average utilization of crude capacity for 1991-1992, which is approximately 90 percent; each small refiner's ratio of distillate product to crude input; and the average small refiner's diesel fraction of distillate produced. We believe that this methodology provides fairness and equity to all refining sectors, yet limits the small refiner production of 20 volume percent aromatic diesel fuel to preserve the benefits of the regulation.

### **Comments Related to the Board's Intent:**

25. **Comment:** The ARB's proposal to allow small refiners to produce 20 volume percent aromatic diesel fuel up to their "exempt volume" based on their production for the period from 1988 to 1992 is contrary to the ARB's stated intent in adopting the small refiner provisions, to preclude a small refiner from using the less stringent 20 percent standard to increase its market share, over that experienced in the period from 1983 to 1987, at the expense of increased emissions. (Ultramar, Unocal)

Agency Response: When the diesel fuel regulations were adopted, the Board set a less stringent aromatic standard for small refiners to make compliance financially practical. Also, the Board adopted an annual limit on each small refiner's production of fuel made to this standard. These limits were based on each small refiner's estimated diesel fuel production in 1983-1987. The Board included these volume limits in the regulation for two principal reasons. First, the Board intended to preserve the air quality benefits of the regulation by limiting the volume of diesel fuel meeting the less stringent limits. Second, the Board intended to guard against small refiners using any advantage in compliance cost to gain additional market shares from other refiners who must meet the 10 volume percent aromatic standard.

However, the 1983 to 1987 period turned out to be inappropriate as the basis of exempt volumes. Several of today's small refiners were experiencing technical and financial problems (such as bankruptcy and changes in ownership). They were unable to produce diesel fuel or other products at economic rates. Contrary to the assumption made in 1988, much of their distillate did not go to diesel fuel, but rather to other products (e.g. jet fuel) for markets that no longer exist today.



Therefore, basing the exempt volumes on 1983-1987 diesel fuel production would unreasonably limit current diesel sales. This would tend to depress crude oil processing rates for small refiners, in opposition to the current trend to higher rates now demanded by additional economic requirements. This would be counter to the Board's basic intent in 1988 for the small refiner's provisions, which is to allow small refiners a chance to continue to compete in the diesel fuel market.

The exempt volumes per the adopted amendments are more representative of viable refining economics and today's diesel market. The amendments do not alter the small refiners' cost of compliance. On a per-gallon basis, these costs are still estimated to be greater than large refiners' costs. Therefore, the change will not provide a greater market share for any small refiner. It will merely preserve each small refiner a chance to compete for a market share.

26. Comment: Staff notes that the amendments are justified on the basis of the Board's intent. But we believe that the Board's intent must be crystal clear and the policies derived therefrom must be applied uniformly. The new proposal would actually allow an increase in production beyond any historical level except for that reached under the sulfur rule suspension. Clearly this violates the Board's original intent and even staff's intent. It appears that staff's intent is to help small refiners influence the marketplace at the expense of the environment and at the expense of complying refiners. (Chevron)

Agency Response: See the response to comment 25.

27. Comment: Without the flexibility of a proper "exempt volume" the ARB will be dictating how Paramount Petroleum Company must run its business. We do not believe that is your intent or the intent of Title 13 CCR 2282. (Paramount)

Agency Response: The ARB agrees that the original "exempt volume" are so low as to unduly restrict the small refiners' diesel fuel production and refinery operation. This situation would conflict with the Board's intent in 1988 to allow small refiners a continued ability to compete. The adopted changes mitigate this conflict.

28. Comment: The effect of this change is to allow the small refiners to produce for sale in California a volume of diesel equal to their entire historical production, including any export volumes. Such a change allows an increase in distillate production by the small refiners beyond their historic levels, which is in direct conflict with the staff's stated premise for the amendments. (Ultramar)

Agency Response: Although the new exempt volumes would allow small refiners to produce more distillate than they have produced in the past, the extra distillate will not necessarily be produced. The Board intended in 1988 to allow small refiners an opportunity to compete in the market despite the diesel fuel regulation. To fulfill this intent, it is appropriate to make the exempt volume more consistent with modern refinery operational practice as demanded by current economics and as reflected in recent historical data, not in production data from 1983-1987. While enabling the small refiners to continue to compete in the diesel fuel market, the adopted amendments do not violate the premise that the market shares should not be provided and that the amount of 20 percent aromatic diesel fuel should be limited.

**Miscellaneous Comments:**

29. California refiners are in good faith currently spending hundreds of millions of dollars to re-configure their refineries to comply with the ARB's Phase 2 reformulated gasoline (Phase 2 RFG) regulations. If the proposed amendments are adopted, then the message

being sent to refiners is that the Phase 2 RFG regulations are subject to change and this would weigh heavily on refiners as they nervously make the investments necessary to produce Phase 2 RFG. This implication could affect the smooth implementation of the Phase 2 RFG regulations. (Exxon, Mobil, Ultramar, Unocal)

Agency Response: All regulations are subject to change to correct perceived weaknesses after initial adoption. This is necessary and appropriate and has already occurred for the Phase 2 RFG regulations. The notion that the particular changes in this rulemaking about diesel fuel will affect the success of the Phase 2 RFG program is only speculative. There is no intended parallel between the current rulemaking and the Phase 2 RFG regulations.

30. Comment: The proposed amendments will limit the amount of throughput as a result of limiting the amount of resulting 20 percent aromatic hydrocarbon content diesel fuel which in turn would impact the Phase 2 RFG regulations. (WIRA)

Agency Response: Although based on an assumed 90 percent utilization of capacity, the exempt volume does not directly restrict crude throughput. Nothing prevents changes in operations or sales practices (i.e. sales of diesel outside of California) so as to maximize refinery operations or the production of Phase 2 RFG.

31. Comment: The small refiners are substantial gasoline suppliers. As the implementation California's Phase 2 RFG regulations approaches, we need as much supply as possible to ensure a smooth transition to avoid the types of problems that occurred last fall. (CTA)

Agency Response: This rulemaking is not intended to have any effect on the supply of gasoline. Further, qualifying small refiners will not be fully subject to the Phase 2 RFG limits until 1998, later than the general compliance date.

32. Comment: One final issue we would like to address is market share. We are confident that the small refiners' share of the California diesel market will not increase from what it was in the late 1980's if our proposal for small refiners exempt volume is accepted. Unfortunately, we have been having difficulty obtaining the specific PIIRA data we need to present to you to support this position. (Powerine)

Agency Response: The Powerine proposal was not adopted because the basis for the volumes under that proposal would go contrary to the Board's intent in adopting the original regulations. The effect that the adopted amendments will have on the market is unknown, except that any increase is limited. We expect that the adopted amendments will virtually maintain the current small refiner market share. As a group, small refiner market share has decreased since the late 1980's. At the July 29, 1994 Board hearing, Kern stated that the small refiner market share was 83 percent of the local market in the southern San Joaquin Valley area market in 1983 and that share decreased by 17 to 26 percent by 1988. Kern indicated the current proposed small exempt volumes would further decrease small refiner market share, giving an increased market share to the large refiner located in that area. Thus, we believe that the adopted amendments are fair.

33. Comment: WIRA respectfully requests that the proposed amendments be revised to include a provision that allows small refiners to enter into a protocol with the ARB's executive officer to allow them to make motor vehicle diesel fuel meeting the 20 percent and 10 percent aromatic hydrocarbon standards simultaneously. The ARB staff members have confirmed that this is not a problem because the proposed amendments were not intended to exclude such simultaneous production. (WIRA)

Agency Response: We have added the requested amendment to section 2282(e)(1).

34. Comment: We strongly urge the Board to reject all of the staff proposals and leave the rule as is. We see absolutely no need to further mitigate the small refiners' economic challenges of complying with the low aromatic diesel fuel rule and, once again, request that the Board resist the temptation to make yet one more foray into the market.  
(Chevron)

Agency Response: The rationale for the amendments are contained in the Staff Report, the public hearing transcript and this Final Statement of Reasons. The amendments are necessary to preserve the Board's original intent to allow small refiners a fair opportunity to compete with other California refiners.

35. Comment: We are concerned that small refiners may not meet the 20 percent aromatic standard by October 1, 1994 or January 1, 1995. They will be approaching the Board indirectly through variances from the 20 percent standard to gain additional relief.  
(Chevron)

Agency Response: This does not bear on the current rulemaking. In the event that small refiners cannot comply, then the amendments to the exempt volume provisions will be moot.

36. Comment: An assumption was made by ARB staff that 10 percent aromatic diesel fuel would be available for blending in order to comply with the 20 percent standard. This is not the case today. We have had to modify our refinery at a significant investment cost in order to dearomatize to a level where we believe we can certify an equivalent 20 percent aromatics fuel. In light of this, we must be able to operate in a manner where we remain financially viable. (Powerine)

Agency Response: The staff's scrutiny of confidential cost data indicates that the small refiners' cost of compliance--including the costs of making diesel fuel to an alternative formula as proposed by Powerine--will not be unduly great. However, the small refiners should be allowed to spread their costs over more gallons than would otherwise be allowed under the original exempt volume limits. The adopted amendments provide the chance to accomplish this spread of costs and, thereby, make compliance with the regulation financially practical for the small refiners.

## **B. Comments Made During the Supplemental 15-Day Comment Period**

37. Comment: We believe that the ARB failed to comply with the California Environmental Quality Act (CEQA). The ARB did not adequately analyze the environmental effects of the amendments or properly identify other feasible mitigation measures and possible alternatives to a proposed action before the statement of overriding considerations was used. The ARB has ignored these requirements under CEQA and has issued a statement of overriding considerations based on conclusory statements and insufficient legal evidence. (ARCO, Texaco)

The ARB failed to discharge its obligations under CEQA to analyze the feasibility of mitigation measures or alternatives to its proposed action. Other alternatives the Board might have considered include: (1) Keeping the exempt volumes at 65 percent and, for the remainder volumes, requiring the small refiners to obtain an alternative certification under license; (2) for volumes above the 65 percent limit, requiring a minimum cetane number; (3) purchasing of low aromatic blend components, or (4) as a minimum precondition, requiring proof that the small refiners will meet the October 1 deadline. (Texaco)

The ARB also failed to issue an adequate statement of overriding considerations. CEQA requires that if an agency approves a project that will result in significant environmental effects that "are not at least substantially mitigated," then the agency must explain its specific reasons for balancing competing policies and factors in a "statement of overriding considerations." Further, a statement of overriding considerations must include significant assertions supporting the policy choice made by the agency, which in turn must be supported by substantial evidence in the record. The ARB's statement of overriding considerations is not supported by substantial record evidence because the ARB's analysis of alternatives and mitigation measures is inadequate and the ARB's economic analysis consists mainly of the small refiners' unsupported assertions. The ARB's record fails to include the necessary documentation or other evidence to support the factual premises underlying its choice to proceed with the proposed amendments because of its belief the significant environmental impacts are outweighed by the benefits of the proposed amendments. The ARB attempts to justify the proposed amendments on the grounds that they are procompetitive. (Texaco)

Agency Response: The ARB has sought to comply with CEQA in this rulemaking. Pages 6-10 of the Staff Report set forth the anticipated air quality impacts of the diesel aromatics regulation and the impacts of elevated levels of ozone and PM10. Page 22 identified the potential air quality impacts of the originally proposed amendments, and pages 24-25 discussed the impacts of the "no action" alternative of not amending the regulation. The Resolution identified the potential adverse environmental impacts of the modified amendments approved by the Board, and contained a statement of overriding considerations.

The ARB staff also evaluated potential mitigation measures and possible alternatives to the final amendments. Although the originally-proposed amendments would have resulted in less of an adverse emissions impact, the Board concluded that those amendments would not be adequate to effectuate the underlying goal of maintaining the

ability of the remaining small refiners to produce motor vehicle diesel fuel in an economically viable manner. The Board rejected the small refiners' proposal presented at the hearing, concluding that the adopted amendments provided an alternative with less adverse air quality impacts.

Texaco suggested that other options were available such as keeping the exempt volumes at 65 percent and, for the remainder volumes, requiring the small refiners to obtain an alternative (to the 10 percent aromatic standard) certification under license. However, small refiners are constrained by their limited processing capabilities. Their ability to produce at aromatic contents meeting any extant alternative formulation would be poor. Therefore, this option is not practical. Texaco also suggested that a minimum cetane be required for volumes over the original 65 percent volume limit. Since small refiners will comply with the 20 percent standard through alternative formulations, small refiners will already be adding cetane improvers. Requiring even more cetane additive in the diesel fuel produced above the 65 percent limit would produce little benefit because of the diminished return at such high levels. Another suggestion by Texaco involved the option to purchase low aromatic hydrocarbon content blendstocks in order to supplement the higher production rates needed by small refiners. This option is not viable due to economic constraints. Because low aromatic blendstocks are such a desired product, the costs would prohibit small refiners from purchasing the blendstocks for resale. Finally, Texaco suggests that as a minimum, small refiners should prove that they intend to make the October 1, 1995 deadline. This appears pointless because if the small refiners could not meet the 20 percent standard, the exempt volume would be moot.

In adopting the statement of overriding considerations in the Resolution, The Board considered what the effect would be if no changes were made to the regulation and small refiners were held to the low exempt volumes. Small refiners would suffer undue economic hardship if forced to comply with the unchanged regulation by being



constrained to levels which would seriously hamper the small refiners' ability to utilize their refining capacity. Evidence submitted by small refiners showed that such low production levels would not allow small refiners the ability to recover costs associated with compliance with this regulation and would preclude them from complying with the Phase 2 RFG regulations.

38. **Comment:** When adopting the amendments, the Board stated that it was unable to determine any "feasible" mitigation measures and that it found the economic arguments of the small refiners "compelling." For the following reasons, we believe that the economic analyses by the ARB were not adequate to meet legal requirements established by previous court findings and to support a statement of overriding considerations.
- A. The courts have instructed that determinations of economic infeasibility must be supported by substantial evidence in the record. Citizens of Goleta Valley v. Board of Supervisors, 197 Cal.App.3d. 1167, 1180-1181 (1988). The staff simply accepted that the small refiners would suffer fatal hardship if forced to comply with the current regulations. Such unsupported conclusions do not satisfy the test articulated in the Goleta case.
  - B. Also, in its discussion of the potential economic effects, the staff discusses the effect of the current regulations on production levels but does not provide evidence, aside from small refiners' assertions, that the presumed effect on profitability is sufficiently severe that the only practical alternative is a generous exemption for the small refiners.
  - C. The ARB's judgement about the economic justification for the proposed amendments is misguided. It is highly unlikely that the production, pricing and

supply strategies of four small diesel refiners will have a meaningful impact on the practices of larger diesel refiners. If the viability of the small refiners is doubtful for reasons other than the clean fuels requirements, the proposed amendments will prolong market inefficiencies by subsidizing the small refiners at the cost of cleaner air and at the expense of the public.

D. Finally, in stating that there were no feasible alternatives to its action, the Board apparently ignored at least one alternative--the original staff proposal--that was itself not environmentally protective and chose to make declarations rather than provide analysis of other alternatives.

(Texaco)

Agency Response: We do not agree that the economic analysis was insufficient to support the basis for the statement of overriding considerations. The ARB staff evaluated the costs which the three most directly affected small refiners, Kern, Powerine and Paramount would incur if the amendments were not adopted. For one small refiner, a linear programming model predicted that the refiner would operate at a loss if the amendments were not adopted. Powerine reported a loss in jobs to be conservatively up to 500 if they ceased operations. The ARB staff also found that even with the adopted amendments, small refiners will spend on average 7.5 cents per gallon while large refiners are spending 6 cents per gallon of diesel fuel produced to comply with the regulation.

The production of diesel fuel under the existing exempt volumes would be very low compared to what is consistent with modern economic refinery operation. To limit the profitability of a refinery to this extent would counter the Board's original intent to allow continued opportunity to compete.

Since compliance for small refiners will remain more costly than for large refiners, the current amendments will not create a subsidy as indicated by the commenter.

The Board did consider the original staff proposal at the July 28, 1994 public Board hearing. Staff presented the original proposal as well as a modified proposal to the Board. Upon hearing testimony from various interested individuals, the Board deliberated and adopted the staff's modified proposal. Since small refiners need an exemption volume which will not unreasonably restrict refinery operations, the only reasonable alternatives involved increased exempt volumes.

39. Comment: The ARB has also failed to consider the cumulative effects of its expansion of the exemption in light of its other actions. Cases such as Epic and Mountain Lion Coalition v. Fish and Game Commission, 214 Cal.App.1043 (1989) have stressed how important a cumulative impacts analysis is to regulatory actions even in certified programs. The importance of the assessment of cumulative impacts in documents prepared for certified programs under CEQA was discussed recently in Ultramar v. South Coast Air Quality Management District, 17 Cal.App.4th 689, 703 (1993). In Ultramar, the air district had prepared an environmental assessment 288 pages in length. The court reversed the agency decision, in part, because the district had failed to properly provide to the public the portion of the assessment (though only 12 of the 288 pages) that focused on the cumulative environmental impact of the rule. In the case of the small refiner exemption, a regulation with statewide applicability and effects on air quality, the ARB has chosen to provide a single page of environmental analysis in comparison to the 288 pages provided by the South Coast district for the local rule. In addition, unlike the 12-page section on cumulative impacts provided by the South Coast district, the ARB has chosen to dispense with consideration of cumulative impacts altogether. (Texaco)

Agency Response: The ARB's evaluation of the adverse environmental impacts included consideration of the cumulative impact of the amendments on all affected small refiners. We are not aware of any other projects resulting in NOx or PM emission increases that should be considered cumulatively with the present rulemaking.

40. Comment: The ARB staff unequivocally stated at the hearing that its two purposes in proposing this new windfall for the small refiners was "fairness and equity" and recognition of "the role of the small refiner in the marketplace". We search in vain for any such allowable rulemaking purpose in the California Clean Air Act or implementing regulations. (Texaco)

Agency Response: Fairness and equity are among the reasonable criteria for evaluating regulations. The Board is required by Health and Safety Code section 43018 to consider the effect of its motor vehicle fuels regulations on the economy of the state.

41. Comment: The Board is willing to bend its statutory authority to the breaking point to keep the remaining small refiners in business at the expense of pollution reduction, even though there is a similar dearth of evidence that these extensions will even effectuate that purpose. We note that the Board is allowing three or four small refiners to emit the same level of pollutants that it formerly provided for fourteen small refiners. Apparently, the Board feels that it is charged with cleaning up the air in California only if it won't adversely impact certain businesses. (Texaco)

Agency Response: We do not agree with the commenter. The small refining sector and the economics of refining have changed radically since adoption of the original regulation. Therefore, the small refiner provisions needed adjustments. The Board's

intent when it adopted special provisions for the small refining sector was the preservation of the small refiners' ability to compete in the market while complying with the regulation. The amendments adopted by the Board simply fine-tuned the details of implementing the original intent of the Board.

42. Comment: The Board's willingness to change the rules in a manner that clearly impacts the marketplace after businesses have made the required investments for compliance is simply bad policy. Because this action creates uncertainty and increases investment and shareholder risk, it discourages the regulated community from striving to meet new regulatory requirements in an expeditious manner. (Mobil)

Agency Response: No substantial effect on the marketplace has been shown. We do not believe that this action should result in uncertainty or create a disincentive to comply with future regulations. The amendments adopted by the Board are designed to better implement the original intent of the Board. That intent is to make the aromatic regulation market-neutral by making compliance financially feasible for small refiners, as well as large refiners.

43. Comment: Either the Board has been had or, through selective application of its rulemaking powers, is intentionally imposing its own views of what the marketplace for fuels in California should look like. The Board's growing involvement in market place issues is inappropriate, misguided and hazardous. (Chevron)

Agency Response: The ARB has no interest in regulating the market. The actions amendments approved by the Board are not intended do not manipulate the market.

44. **Comment:** The Board's action sends the wrong signal and invites abuses of the regulatory process. It certainly casts doubt upon the credibility of the process. (ARCO) The Board's action sends the wrong message about its commitment to ensure that its regulations are fair and equitable and do not create undue competitive dislocations. We are particularly concerned about the implications with regards to the Phase 2 RFG regulations and the uncertainties created as to whether refiners will be operating on a level playing field when these regulations become effective. (Mobil)

Agency Response: See the response to comment 29.

45. **Comment:** As the decline in the number of small refiners in California did not result from adoption of this diesel rule, the Board should not take it upon itself to try to affect the economic well being of small refiners by changing the rules in mid-stream. This is unwarranted meddling in the marketplace. It results in skewing of the market and provides a windfall to the small refiner at the expense of other refiners and of air quality. (ARCO)

Agency Response: As stated previously, no windfall is expected from these amendments because the average per-gallon cost of compliance for the small refiners will still be greater than the average per-gallon cost for large refiners. The ARB did not meddle in the diesel fuel market as no small refiner market share was guaranteed. Small refiners will still need to compete with large refiners for their market share.

46. **Comment:** If the small refiners are now capable of producing so much more diesel fuel through running crude oil in their refineries, the Board should require that they show that they can produce 75 percent or better of this fuel from crude runs. We would like to see the modified proposal further amended to require small refiners to produce 75

percent of the diesel that they supply from their refinery from distillation of crude oil at their refinery. (ARCO)

Agency Response: The regulation requires small refiners to produce 25 percent of the diesel from their crude processing. This level was mandated in the original rulemaking to allow the flexibility of purchasing low aromatic hydrocarbon content blendstocks to blend a compliant 20 percent aromatic diesel fuel product. This element of the original rule is still in place and it is not part of this rulemaking. To increase the amount from 25 percent to 75 percent would significantly restrict small refiners' flexibility in producing a complying product, counter to the Board's intent of making compliance practical.

47. Comment: The refinery utilization factor element of the calculation for small refiners 20 percent aromatic hydrocarbon content volume should be at least 95 percent. (WIRA)

Agency Response: We do not agree. A review of historical utilization data from the CEC justifies a 90 percent utilization and not a 95 percent rate.

48. Comment: One of the factors used to calculate a small refiner's exempt volume is the "operable crude capacity" of the refinery in 1991 and 1992. Powerine's operable crude capacity has been 46,500 bpd since 1987. The EIA 810 "Monthly Refining Reports" earlier submitted contained an operable crude capacity number prepared by our Accounting Department based on mistaken information and beliefs. We have corrected the EIA 810 and 820 reports to reflect the actual 1991 and 1992 crude capacity of 46,500 bpd. These corrected figures should be used to calculate our exempt volume. Unless the corrected data are directly used to calculate our exempt volume, we do not believe that the CEC can derive any data from our monthly EIA reports. In this case,

other publicly available sources should be used to establish Powerine's 1991 and 1992 "operable crude oil capacity" of 46,500 bpd. (Powerine)

Agency Response: Under the final amendments, "operable crude oil capacity" is to be identified based on data which are reported to the ARB from the CEC and are derived from "Monthly Refining Reports" (EIA) submitted to the CEC no later than June 30, 1994. Other sources may be used only if the CEC is unable to derive the data from the "Monthly Refining Reports" for a particular small refiner. This provision was included so that the values used in the calculations could be known ahead of time and could not be manipulated after the fact. Powerine's reports to the CEC consistently identified an operable crude oil capacity of 44,120 bpd for 1991-1992 and the surrounding years, and the number was not revised prior to July 1, 1994. It is therefore appropriate to use the 44,120 bpd value in Powerine's calculations.

49. Comment: The factors used in calculating the small refiner's exempt volumes are based on diesel fuel production for years subsequent to the ARB's adoption of the low aromatic diesel regulation, not the historic production period prior to the 1988 adoption date, which was the ARB's intent. (Unocal)

Agency Response: The ARB originally used data from the 1983 to 1987 period because they were the most current data then available. However, it has become evident that this period was not appropriate for current use since many of today's small refiners were then operating far below their processing capability.

50. Comment: The Health and Safety Code directs the ARB to consider the effect on the economy of the state when adopting and implementing motor vehicle fuel specifications for the control of air contaminants; it does not authorize the ARB to adopt and implement motor vehicle fuel specifications for the sole purpose of promoting a pro-



competitive force in the motor vehicle fuels market, at the expense of acknowledged significant adverse environmental impacts. (Unocal)

Agency Response See the response to comments 37, 38, 39, 41, 42 and 43.

51. Comment: The emissions benefits of the proposed amendments may be as great as those of the original regulation because nine of the original thirteen small refiners have exited the California diesel market since adoption of the original regulation in 1988. If any of these nine small refiners decide to re-enter the California diesel market the total emissions benefits would be less than those expected from the original regulation. (Unocal)

Agency Response: Most of the refining facilities of the small refiners which are out of business have either been dismantled, sold, or salvaged as parts. It is highly unlikely that many small refiners currently out of business will ever resume diesel fuel production. Over the years since 1988, the trend has been towards less small refiners. Small refiners do not have the corporate backing of large refiners and cannot withstand much financial stress before their operations become uneconomical.

52. Comment: San Joaquin Refining (SJR) has been placed at a severe disadvantage by these regulations and needs relief. While the proposed changes are a step in the right direction, SJR was apparently not considered. Unnecessary restrictions make it much more difficult for SJR to regain our place in the motor vehicle diesel market. These restrictions also pose a threat to SJR continuing to operate as a lawful business by limiting our ability to sell the natural diesel fuel portion of the crude oil processed at our refinery. (SJR)

Agency Response: SJR does not currently make appreciable amounts of motor vehicle diesel fuel. Their problem is not the amount of exempt volume, it is the lack of desulfurizing and hydrodearomatization processing capabilities, which other small refiners have installed. Without such capability, the exempt volume is moot.

53. Comment: We (San Joaquin Refining) request that you either include 1987 in the base year for calculating the exempt volume or allow the highest year out of 1988 to 1992 instead of the average of the highest two years. (SJR)

Agency Response: We have not made either of the suggested changes. The data from the year of highest production would result in an exempt volume which does not account for year-to-year variability. In addition, 1987 has been relinquished as a basis of data because of small refiners' atypical performance then.

54. Comment: The current changes proposed were made by staff prior to the hearing, but after the public notice without apparent consideration of their impact on SJR. Any changes can seriously effect our plans to return to the motor vehicle diesel market in the San Joaquin Valley. We need to be considered in all matters relating to diesel fuel. (SJR)

Agency Response: SJR has had the opportunity to present its views at the July 28, 1994 public hearing and to respond to the notice of a supplemental 15-day comment period. The staff's natural primary concern is with the existing producers of diesel fuel, not speculative entrants to the diesel fuel market. The amendments do not affect SJR's pre-rulemaking plans for resuming diesel fuel sales because the original calculation of exempt volume remains in place as an option.

55. Comment: The changes proposed unfairly favor certain small refiners that were able to commit to earlier deadlines. San Joaquin Refining couldn't commit to the deadlines due to lack of financing to construct their already permitted facility. They have spent and are continuing to spend considerable time and money to be able to make complying diesel. (SJR)

Agency Response: All small refiners have been, and will continue to be, affected the same under the small refiner provisions. Each is responsible for its own technical and financial response to those provisions. The Board cannot tailor those provisions to the special problems of individual companies.

56. Comment: San Joaquin Refining requests that the changes proposed be modified to allow San Joaquin Refining to sell 100 percent of their produced diesel at 20 percent aromatic equivalent. (SJR)

Agency Response: Such a revision would be inconsistent with the Board's original intent and would result in unnecessary emission increases.

57. Comment: The determination of the fraction of distillate production that we sold as California motor vehicle fuel during the period 1988 through 1992 presents some problems for us. We are unable to determine our fraction of distillate production sold as California motor vehicle diesel fuel during the period 1988 through 1992. (SJR)

Agency Response: Staff will need to coordinate with SJR to assist them in compliance with the new regulatory amendments.

