State of California AIR RESOURCES BOARD

Final Statement of Reasons for Rulemaking, Including Summary of Comments and Agency Response

PUBLIC HEARING TO CONSIDER THE ADOPTION OF PROPOSED AMENDMENTS TO THE HEAVY-DUTY VEHICLE GREENHOUSE GAS EMISSION REDUCTION MEASURE

> Public Hearing Date: December 17, 2010 Agenda Item No.: 10-11-3

I. GENERAL

The Staff Report: Initial Statement of Reasons for Proposed Rulemaking (Staff Report), entitled "Proposed Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer Greenhouse Gas Regulation," released October 28, 2010, is incorporated by reference herein.

In this rulemaking, the Air Resources Board (ARB or Board) approved the adoption of amendments to title 17, California Code of Regulations (CCR), sections 95300 through 95312. The amendments will provide affected fleets additional flexibility to meet the requirements of the regulation, and will improve the ability of fleets to periodically adjust their compliance plans and in some cases reduce compliance costs, while only minimally impacting the greenhouse gas (GHG) benefits from the original Tractor-Trailer GHG regulation.

On October 28, 2010, ARB published a notice for a December 17, 2010 public hearing to consider the proposed regulatory action. The Staff Report was also made available for public review and comment beginning October 28, 2010. The Staff Report provides the rationale for the proposed amendments. The text of the proposed regulatory amendments to title 17, California Code of Regulations (CCR), sections 95300 through 95312 was included as an Appendix to the Staff Report. These documents were also posted on ARB's Internet website for the rulemaking at http://www.arb.ca.gov/regact/2010/truckbus10/truckbus10.htm

On December 17, 2010, the Board conducted a public hearing and received oral and written comments. At the conclusion of the hearing, the Board adopted Resolution 10-46 that covered the amendments as initially proposed by staff and that were covered by the Notice of Public Hearing (45-Day Public Notice) and Staff Report.

In accordance with section 11346.8 of the Government Code, Resolution 10-46 directed the Executive Officer to adopt the amendments initially proposed by staff, and to determine if additional modifications to the originally proposed amendments were appropriate, and if the Executive Officer so determined, to make the modified regulatory

language available for public comment for a period of at least 15 days prior to taking final action to adopt the amendments. The Executive Officer was also directed to consider such written comments that were submitted during the public comment period, to make such modifications as may be appropriate in light of the comments received, or to present the regulations to the Board for further consideration if warranted in light of the comments.

Resolution 10-46 further directed the Executive Officer to prepare and approve written responses to comments received, including comments raising significant environmental issues, as required by Government Code section 11346.9, Public Resources Code section 21080.5(d)(2)(D), and title 17, CCR, section 60007, to determine whether there are feasible alternatives or mitigation measures that could be implemented to reduce or eliminate any potential adverse environmental impacts, while at the same time addressing the serious economic recession and its impact on industry and residents of the State. Resolution 10-46 also directed the Executive Officer to make findings as required by Public Resources Code section 21081 if the proposed amendments would result in one or more significant adverse environmental effects, and to take final action to adopt the proposed amendments to the Tractor-Trailer GHG regulation, as modified in the publicly noticed 15-day changes.

Subsequent to the hearing, staff proposed modifications to the regulatory text that largely clarify the regulation's provisions and provide regulated entities additional flexibility to comply with the regulation. The most significant of these post-hearing modifications were: (1) with Executive Officer approval, allow owners or operators to modify United States Environmental Protection Agency (U.S. EPA) SmartWay certified tractors provided they demonstrate that the modification is needed for the tractor to perform its designed job function, that there is no reasonable alternative to the modification that would involve or require a lesser degree of modification to the tractor, (2) deleting the previously proposed exemptions for empty local-haul and storage trailers and replacing those exemptions with a new provision that would now exempt all empty trailers (including local-haul and storage trailers) subject to the regulation, as well as the heavy-duty (HD) tractors pulling such trailers, and (3) extend the maximum applicable time period of a relocation pass for trailers, transfer of ownership pass for trailers, and non-compliant tractor pass from three to five consecutive days.

The text of all the modifications to the originally proposed amendments was made available for a supplemental 15-day comment period by issuance of a "Notice of Public Availability of Modified Text." This Notice and the one attachment thereto was mailed on August 4, 2011 to all stakeholders, interested parties, and to other persons generally interested in ARB's rulemaking requirements applicable to 53-foot or longer box-type trailers and the tractors that pull such trailers on California highways. The "Notice of Public Availability of Modified Text" listed the ARB Internet site from which interested parties could obtain the complete text of the regulation that would be affected by the modifications to the original proposal, with all of the modifications clearly indicated. These documents were also published on ARB's Internet web page for this rulemaking <u>http://www.arb.ca.gov/regact/2010/truckbus10/truckbus10.htm</u>. Three written comments were received during this 15-day comment period.

After considering the comments received during the 15-day comment period, the Executive Officer issued Executive Order R-11-015, adopting the amendments to title 17, CCR, sections 95301 to 95309, 95311 and 95312.

This Final Statement of Reasons (FSOR) updates the Staff Report by identifying and providing the rationale for the modifications made to the originally proposed regulatory text, including non-substantial modifications and clarifications made after the close of the 15-day comment period. This FSOR also contains a summary of the comments received by the Board on the proposed amendments and the modifications and ARB's responses to those comments.

Fiscal Impacts of Proposed Changes. Most of the proposed amendments to the Tractor-Trailer GHG regulation are intended to provide additional flexibility to fleets, but are not expected to have a major impact on the average cost of the regulation. However, fleets that elect to utilize the proposed provision to delay compliance with the low rolling resistance tire requirements would not realize the cost savings benefits resulting from the existing regulation. Nevertheless, most of the fleets are expected to utilize fuel efficient tires prior to the proposed compliance date as the existing tire casings are retreaded several times and reach the end of their life cycle and the tires get replaced with new ones. Thus, the proposed compliance delay with the low rolling resistance tires is expected to not have a significant impact on the overall cost savings and estimated costs of the existing program.

Pursuant to Government Code sections 11346.5(a)(5) and 11346.5(a)(6), the Executive Officer has determined that the proposed regulatory action will not create costs or savings to any state agency or in federal funding to the state; costs or mandate to any local agency or school district whether or not reimbursable by the state pursuant to Part 7 (commencing with section 17500), division 4, title 2 of the Government Code; or any other nondiscretionary cost or savings to local agencies.

Consideration of Alternatives. The regulatory language proposed in this rulemaking was the result of extensive discussions and meetings involving staff, motor carriers, equipment manufacturers, associations, and other interested parties. The only alternative considered by staff was to not amend the Tractor-Trailer GHG regulation. This alternative was rejected in part because it would not provide any additional flexibility to fleets that either missed the optional large fleet compliance phase-in registration date or needed to amend their compliance plans. In addition, not amending the regulation would not provide trailer fleets with guidance regarding which aerodynamic equipment modifications would or would not comply with the Tractor-Trailer GHG regulation. Finally, making no changes to the regulation could result in a significant financial burden on the owners of specific types of trailers, (e.g. storage trailers and local-haul trailers) without any corresponding GHG emission benefits.

For the reasons set forth in the Staff Report, in staff's comments and responses at the hearing and in this FSOR, the Board has determined that no alternative considered by the agency or brought to the attention of 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.

II. MODIFICATIONS MADE TO THE ORIGINAL PROPOSAL

A. MODIFICATIONS APPROVED AT THE BOARD HEARING AND PROVIDED FOR IN THE 15-DAY COMMENT PERIOD

As previously discussed, at the December 17, 2010, public hearing the Board adopted Resolution 10-46 that directed the Executive Officer to adopt the amendments initially proposed by staff, and to determine if additional modifications to the originally proposed amendments were appropriate, and if the Executive Officer so determined, to make the modified regulatory language available for public comment for a period of at least 15 days prior to taking final action to adopt the amendments.

Subsequent to the hearing, staff proposed modifications to the regulatory text that would (1) with Executive Officer approval, primarily allow owners or operators to modify U.S. EPA SmartWay certified tractors provided they demonstrate that the modification is needed for the tractor to perform its designed job function, that there is no reasonable alternative to the modification that would involve or require a lesser degree of modification to the tractor; (2) delete the previously proposed exemptions for empty local-haul and storage trailers and replace those exemptions with a new provision that would now exempt all empty trailers (including local-haul and storage trailers) subject to the regulation, as well as the heavy-duty tractors pulling such trailers; and (3) extend the maximum applicable time period of a relocation pass for trailers, transfer of ownership pass for trailers, and non-compliant tractor pass, from three to five consecutive days. These modifications were explained in detail in the Notice of Public Availability of Modified Text that was issued for a 15-day public comment period that began on August 4, 2011, and ended on August 19, 2011. In order to provide a complete FSOR for this rulemaking, the most significant modifications and clarifications are summarized below:

Applicability (Section 95301)

Staff amended the proposed exemption for "storage trailers" to also include "the tractors pulling storage trailers" in order to make that exemption consistent with the proposed modification to section 95305(e)(5). This amendment clarifies that a heavy-duty (HD) tractor that pulls a storage trailer is exempt from the requirements of section 95303(a). (95301(c)(5)).

Staff added "empty 53-foot and longer box-type trailers pulled by HD tractors" to the list of exempted trailer types to make the regulation consistent with proposed modifications in section 95305(I), *Tractor-Trailer Exemption for Tractors Pulling Empty Trailers*. (95301(c)(6)).

Definitions (Section 95302)

The definition of "Cab side extender" has been modified to clarify that such a device refers to an air flow control device placed on the rear side of a tractor. (95302(a)(4)).

The definition of "Dispatch driver" has been deleted since the term is no longer found in this regulation.

The definition of "Register" has been added to specify the meaning of the adjective "registered" when used to describe a local-haul trailer, local-haul tractor, and local-haul base in section 95305(f), *Relocation Pass for Local-Haul Trailers and Storage Trailers*. (95302(a)(49)).

The definition of "Relocation Pass" has been modified by removing the previously proposed language applicable to out-of-state trailers relocating to a local-haul base or storage location while hauling freight. That language is no longer needed because the proposed amendments to section 95305(f), *Relocation Pass for Local-Haul Trailers and Storage Trailers* now limit the issuance of a relocation pass to local-haul or storage trailers. (95302(a)(49)).

The definition of "Storage location" has been added because that term is used in section 95305(f), *Relocation Pass for Local-Haul Trailers and Storage Trailers*. (95302(a)(54)).

The definitions of "U.S. EPA SmartWay Certified Tractor" and "U.S EPA SmartWay Certified Trailer" have been modified, respectively, to mean a tractor or trailer that has been certified, "or designated", by the U.S. EPA to meet the requirements of the SmartWay Program. The term "or designated" has been added to reflect the U.S. EPA's recent change in nomenclature when describing SmartWay certified tractors and trailers. The U.S. EPA SmartWay Program now refers to these tractors and trailers as U.S. EPA SmartWay designated tractors and trailers. (95302(a)(61), 95302(a)(62)).

Requirements and Compliance Deadlines (Section 95303)

Section 95303(a)(1)(B) has been added to allow owners or operators to modify, with Executive Officer approval, U.S. EPA SmartWay certified tractors, provided they demonstrate that the modification is necessary for the tractor to perform its designed job function, there is no reasonable alternative to the modification that would involve or require a lesser degree of modification to the tractor. An applicant requesting this exemption must submit information describing the modification, the need therefor, and the lack of reasonable alternatives to the modification that would involve or require a lesser degree of modifications to the tractor. Such information describing the modification, the need therefor, and the lack of reasonable alternatives to the modification that would involve or require a lesser degree of modifications to the tractor to the Executive Officer. Such information

would include, without limitation, engineering drawings, blueprints, schematics, scientific or technical articles, contract specifications, etc. The Executive Officer would base his or her approval or disapproval on information submitted by an applicant and upon good engineering judgment.

This section has been added because it was brought to staff's attention that certain tractor-trailer combinations subject to the Tractor-Trailer GHG regulation are required to carry explosive ordnance when contracted to do so by the U.S. military. The explosive ordnance must be carried in a reinforced box mounted on the rear of the tractor. In order to access the box for loading and unloading explosive ordnance, one of the tractor's rear side extender fairings must be cut or removed, with the box occupying the space once occupied by the modified or removed fairing. Under the new proposed section 95303(a)(1)(B), this type of modification may be approved by the Executive Officer since it is necessary for the tractor to perform its designed job function and there is no reasonable alternative. On the other hand, modifying that same fairing to provide access to a spare tire carrier would not be considered for approval by the Executive Officer since the tire can be mounted elsewhere, requiring no modification to the tractor's fairings, and the location of the spare tire mount is not critical to the tractor's designed job function.

Section 95303(c), *Requirements for Drivers,* specifies requirements for the drivers of HD tractors subject to this regulation. Section 95303(c)(3) has been modified to require a driver of a HD tractor pulling an empty 53-foot or longer box-type trailer that is exempted pursuant to new section 95305(I) to allow authorized enforcement personnel to directly view the inside of the trailer. HD tractor drivers are currently required to provide such access when pulling an empty local-haul trailer beyond 100 miles from its local-haul base or when pulling an empty storage trailer. This modification is necessary to make the driver's requirements consistent with proposed modifications in section 95305(I), *Tractor-Trailer Exemption for Tractors Pulling Empty Trailers,* which broadens the applicability of the empty trailer exemption to all trailers subject to this regulation.

Exemptions (Section 95305)

Staff proposes to delete previously proposed sections 95305(c)(1)(B), 95305(c)(2)(B), and 95305(e)(1)(A); and modify previously proposed sections 95305(c)(6), and 95305(e)(5) because those sections are no longer necessary with the addition of proposed section 95305(I), *Tractor-Trailer Exemption for Tractors Pulling Empty Trailers*, which broadens the applicability of the empty trailer exemption to all trailers subject to this regulation, not just to local-haul and storage trailers.

Sections 95305(c)(6) and (e)(5) have been modified to clarify the requirements that HD tractors are exempted from when they pull local-haul and storage trailers, respectively. Section 95305(c)(6) now exempts a 2011 or subsequent model year sleeper cab HD tractor from meeting the requirement to be SmartWay certified when it is pulling a local-haul trailer. The tractor would still be required to meet the low-rolling resistance tire requirements, as does the local-haul trailer. Section 95305(e)(5) now exempts a HD

tractor from all aerodynamic technology and low-rolling resistance tire requirements when it is pulling a storage trailer.

Sections 95305(f)(1), (f)(2), (f)(8), 95305(g)(3)(H), 95305(h)(1) and 95305(h)(2) have been modified to extend the maximum applicable time period of a relocation pass for trailers, transfer of ownership pass for trailers, and non-compliant tractor pass, from three to five consecutive days. There are a number of variables, including inclement weather, traffic congestion, road construction, and limitations on driver work hours that can lengthen the time it takes to complete a planned trip. In addition, a nationwide trailer leasing company has provided ARB staff with comments suggesting that the three day period to relocate trailers is too short of a time period. The coordinating logistics between a motor carrier and shipper make the three day window to complete the trip impractical to utilize. As a result, staff is proposing to extend the previously proposed three day time periods to five day time periods. ARB staff believes the two additional days should provide an owner moving a trailer under a pass enough flexibility to deal with unexpected delays and circumstances.

Sections 95305(f)(1)(A) and (B) have been modified, removing the phrases, "where it will operate as an exempt local-haul trailer" and "where it will operate as an exempt storage trailer," respectively. Section 95305(f)(3) has been modified by removing the phrase, "operate as a local-haul trailer or storage trailer for 30 consecutive days after arrival." Requiring such trailers to operate as local-haul or storage trailers after they are relocated is unnecessarily restrictive. The owners of such trailers may wish to retrofit them after arrival and operate them as long-haul trailers, or move them empty to a new location under the provisions of Section 95305(I), *Tractor-Trailer Exemption for Tractors Pulling Empty Trailers*.

Previously proposed sections 95305(f)(2) and (3) allowed for the movement of a loaded non-compliant trailer that was not a registered local-haul or storage trailer to a local-haul base or storage location provided the trailer owner registers the trailer within 48 hours of arrival. The "within 48 hours" registration requirement and the requirement that the trailer be en route to a local-haul base or storage location have been deleted. The requirements in section 95305(f)(2) have been modified to require a non-compliant trailer that has been issued a relocation pass to meet specified requirements before it may be used to haul freight after the pass expires. Specifically, after the relocation pass for a non-compliant trailer expires, the trailer must either be registered and operated in accordance with sections 95305(c) or (e) prior to hauling freight, or comply with the equipment requirements of section 95303(b) prior to hauling freight. Eliminating the requirement to register within a 48 hour period and replacing it with the option to either register or comply with the equipment requirements prior to hauling freight, provides needed flexibility for trailer leasing companies to utilize relocation passes when receiving non-compliant leased trailers. Since trailer leasing companies lease or rent their trailers to third parties that ultimately control how the trailer is used, most would prefer that the lessee be considered the owner of the trailer for purposes of the regulation, and as a result, be the party responsible for registration and compliance. By eliminating the 48-hour registration requirement, trailer leasing companies can store

non-compliant trailers being brought into California under relocation passes for an unspecified amount of time. By eliminating the requirement to be en route to a local- haul base or storage location, trailer leasing companies can receive trailers traveling under a pass at their facilities. These changes are important because they allow for the regulated movement of loaded non-compliant trailers into California that will be made compliant through registration as local-haul or storage trailers. In the absence of these modifications, many leased non-compliant trailers earmarked for local-haul or storage use would be brought into California empty, or equipped with aerodynamic technologies and low-rolling resistance tires that provide little or no benefit based on their usage.

Section 95305(f)(3) has been modified to require owners relocating a registered local-haul trailer under a relocation pass to register the local-haul base of destination as the trailer's local-haul base prior to beginning travel under the relocation pass. This change was made to ensure the registration of the trailer's new local-haul base would occur in a timely manner.

New section 95305(f)(4)(C) has been added, requiring the owner requesting a relocation pass to provide the local-haul or storage trailer's street address where travel under the relocation pass will begin. This information will enable ARB staff to better understand where and how issued relocation passes are being used.

Previous sections 95305(f)(4)(C) and (D), which require the reporting of a new localhaul base or new storage trailer location, respectively, have been replaced with a new section 95305(f)(4)(D), which requires the location where travel under the relocation pass will end be reported. Both the former and later requirements provided the street address of where travel under a relocation pass will end, but the latter provides the flexibility to provide a location that is neither a local-haul base nor storage location, which is necessary in light of the changes to section 95305(f)(3).

Sections 95305(f)(4)(E) and (f)(8)(A) have been modified to provide the owner more flexibility in reporting the date relocation travel is to begin. Specifically, to apply for a relocation pass, the owner now must provide the "anticipated" date that the trailer will begin relocation travel, rather than the date trailer will begin travel. (95305(f)(4)(E)). If the relocation pass is approved, the owner must now confirm the date of travel prior to the Executive Officer issuing the relocation pass. (95305(f)(8)(A)). Confirmation may occur through electronic medium (e.g., TRUCRS, e-mail). These modifications will allow owners to obtain relocation pass approval well in advance of travel, and still afford them the flexibility to adjust the effective dates of the pass due to unforeseen delays and circumstances.

Section 95305(f)(5) has been modified to clarify that regardless of ownership, no trailer will be issued more than four relocation passes per year, in accordance with section 95305(f). This clarifies staff's original intent that only four passes will be issued per trailer per year, even if the trailer has multiple owners throughout the year.

New section 95305(f)(6) has been added to clarify that a registered local haul or storage trailer that has been issued a relocation pass in accordance with section 95305(f)(1) may not be issued a subsequent pass until 30 days have passed from the date the current relocation pass was issued. This will prevent an owner from abusing the relocation pass provision by repeatedly applying for consecutive passes for a single trailer to transport freight with a non-compliant trailer.

New section 95305(f)(7) has been added to clarify that a non-compliant trailer that is issued a relocation pass in accordance with section 95305(f)(2) may not be issued a subsequent pass until 30 days from the date the trailer is registered as either a local-haul trailer or storage trailer. Like the modification described in the immediately preceding paragraph, this will prevent an owner from abusing the relocation pass provision, but unlike the previous modification, it ties the issuance of another relocation pass to the date the trailer is registered as a local-haul or storage trailer. This ensures these trailers operate as local-haul or storage trailers prior to the issuance of another relocation pass.

New section 95305(I), Tractor-Trailer Exemption for Tractors Pulling Empty Trailers, has been added. This new section specifies that a HD tractor and the 53-foot or longer box-type trailer it is pulling are exempt from the aerodynamic technology and low-rolling resistance tire requirements if the trailer is empty and the driver, upon request, allows authorized enforcement personnel to directly view inside the trailer to verify it is empty. The regulation currently allows owners to relocate empty local-haul and storage trailers to a new local-haul base or storage location (95305(c)(1)(B), 95305(c)(2)(B), 95305(e)(1)(A)). Nationwide trailer leasing companies supported such exemptions as the exemptions accommodate their general business practice of delivering empty trailers to local-haul bases and storage locations. However, in order to obtain such exemptions, owners currently need to satisfy registration and de-registration requirements that can be resource intensive for both large leasing companies and ARB staff that process these requests. In order to streamline the issuance and tracking of these exemptions, the newly proposed requirements in section 95305(I) remove the registration requirements for empty local-haul and storage trailers that are relocated to new local-haul bases or storage locations, so trailer leasing companies can deliver their trailers to their customers without needing to register them. Once these trailers are delivered, the lessee would be required to register the trailer as a local-haul or storage trailer via TRUCRS, and would also be responsible for de-registration before the trailer is returned to the lessor. Allowing the movement of non-compliant empty trailers also allows leasing companies to move empty trailers between their bases as demand dictates, which is common practice. Other than leasing companies, ARB staff does not believe many trailer owners will utilize this exemption, since their businesses are based on the efficient movement of freight. Trailer manufacturers often deliver their trailers loaded with freight, but they may utilize this exemption for local trailer deliveries.

Short-Haul Tractor, Local-Haul Tractor, Local-Haul Trailer, and Storage Trailer Registration Requirements (Section 95306)

Section 95306(d)(11) has been modified to require an applicant to submit the colonia (Mexico only) and the country of the tractor's local-haul base, since the local-haul base may be located in Mexico.

Section 95306(e)(8) has been modified to delete the registration types specified: "(state, IRP, Temporary, Seasonal, Monthly or Other)" as those registration types apply to tractor registration and not trailer registration.

Optional Trailer Fleet Compliance Schedules (Section 95307)

Section 95307(d)(2)(N)8. has been modified to delete the registration types specified as: "state, IRP, Temporary, Seasonal, Monthly or Other" because these registration types apply to tractor registration and not trailer registration.

In section 95307(g)(17)(B), "trailer fleet list" was replaced with "compliance plan base list" to reflect the original intent of the section which was to identify those trailers phased-in over the applicable compliance schedule.

Section 95307(g)(21) has been modified by changing the compliance date from December 31, 2012, to January 1, 2013. January 1, 2013, is the compliance date the trailers in the compliance plan base list would have been required to meet had they not been participating in a trailer fleet compliance schedule and therefore subject to the requirements of section 95303(b)(3)(B) or (C). This section has also been modified by adding "from the compliance plan base list" to clarify what trailers the trailer owner must bring into compliance by January 1, 2013.

B. OTHER MINOR CHANGES

Staff also made minor, non-substantive modifications throughout the regulation to provide additional clarity. Other non-substantive changes include correcting formatting and grammatical errors, and minor administrative changes and corrections. These modifications were included in the double strikeout/underline version of the regulatory text that was provided for public comment with the 15-day Notice.

C. MODIFICATIONS MADE SUBSEQUENT TO THE 15-DAY PUBLIC COMMENT PERIOD

Subsequent to the 15-day public comment period, staff identified the following additional non-substantive changes to the regulation:

1. 95303 (a)(1)(B) 3.a., "...absence of" should be "...absence or"

- 2. 95303(b)(1)(B)2.b, space should be inserted between ".a," and "but"
- 3. 95305(a)(6), "sections 95306(d)" should read "section 95306(d)"

Each of the above modifications constitutes a non-substantial change to the regulatory text because each modification only clarifies the requirements or conditions as set forth in the original text (or in the original text as modified in the Notice of Public Availability of Modified Text) and does not materially alter those requirements or conditions.

III. SUMMARY OF COMMENTS MADE DURING THE 45-DAY COMMENT PERIOD AND AT THE BOARD HEARING; AND AGENCY RESPONSES

Written comments were received during the 45-day comment period in response to the October 28, 2010, public hearing notice, and written and oral comments were presented at the Board Hearing. It should be noted that this rulemaking was presented to the Board jointly with several other heavy-duty vehicle regulations, including the Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use On-Road Diesel-Fueled Vehicles (Truck and Bus regulation) and the Regulation to Control Emissions from In-Use On-Road Diesel-Fueled Heavy-Duty Drayage Trucks at Ports and Intermodal Rail Yard Facilities (Drayage Truck regulation). Written and oral comments provided for each of these rulemakings were carefully examined to determine whether they related to this rulemaking only, the Truck and Bus regulation only, the Drayage Truck regulation only, or any combination of the three. This FSOR only addresses the relevant comments related to the Tractor-Trailer GHG rulemaking.

Listed below are the organizations and individuals that provided comments during the 45-day comment period.

Commenter	Affiliation	Abbreviation
Ayala, Ruben	None	Ayala
Babich, Henry	None	Babich
Ballesteros, John	None	Ballesteros
Bengston, Wayne	None	Bengston
Broadbent, Jack	Bay Area Air Quality Management District	BAAQMD
Browne, Kelly	None	Browne
Coots, Victoria	None	Coots
Dietrich, Robert	None	Dietrich
Earnshaw, KC	None	Earnshaw
Findley, Myrtle	None	Findley
Griffith, Jim	None	Griffith
Hall, Steve	None	Hall
Hill, Gary	None	Hill

Comments Received During 45-Day Comment Period

Hulz, Brian	None	Hulz
Jerome, Donald	None	Jerome
K., Erik	None	Erik K.
Kellogg, Alan	None	Kellogg
Laman, Ann	None	Laman
Lynes, Steve	None	Lynes
Marin, Rudy	None	Marin
McTigue, Martin J.	XTRA Lease LLC	XTRA
Napier, Heidi	None	Napier
Quilter, John	None	Quilter
Randall, Christy	None	Randall
Ritchie, Cheryl	None	Ritchie
Samardich, Barbara	None	Samardich
Shapiro, Claire	Owner-Operator Independent Drivers	OOIDA
	Association, Inc.	
Skinner, Warren	None	Skinner
Stalzer, MD, Susan	None	Stalzer
Tunnell, Mike	American Trucking Associations	ATA1
Wright, Tracey	None	Wright
Yandell, John	Yandell Truckaway	Yandell1

Additional written comments were received on the day of the public hearing by the following commenters.

Written Comments Received During Board Hearing

Commenter	Affiliation	Abbreviation
Brown, Skip	Delta Construction	Delta
Edgar, Sean	Clean Fleets Coalition	CFC1
Schrap, Matt	California Trucking Association	CTA1

Oral comments were also received during the public hearing by the following commenters.

Oral Comments Received During Board Hearing

Commenter	Affiliation	Abbreviation
Bautista, Nidia	Coalition for Clean Air	CCA
Blevins, James	Mountain Valley Express	MVE
Brown, Kevin	Clean Diesel Technologies	CDT
Carmichael, Tim	Natural Gas Coalition	NGC
Edgar, Sean	Clean Fleets Coalition	CFC2
Norberg, Tracey	Rubber Manufacturers Association	RMA
Schrap, Matt	California Trucking Association	CTA2
Seivright, Susan	None	Seivright
Tunnell, Mike	American Trucking Associations	ATA2
Turner, Kathy	Enterprise Holdings	Enterprise

Weitekamp, Steve	California Moving and Storage Association	CMSA
Yandell, John	Yandell Truckaway	Yandell2

Set forth below is a summary of each comment regarding the regulatory action as well as the agency response, including an explanation of how the regulation was changed to accommodate the comment or the reasons for making no change to the regulation. Comments not involving objections or recommendations specifically directed toward this rulemaking or to the procedures followed by ARB in this rulemaking are not included.

The comments summarized below are divided into 9 sections: (A) General Comments, (B) Scope of Regulation, (C) Standards and Procedures, (D) Economic Analysis, (E) AB 32, (F) Financial Assistance/Incentives, (G) Outreach, (H) Exemptions and Temporary Passes, and (I) Technology.

A. General Comments

1. Comment: These regulations are generally bad for the economy, businesses, jobs and the trucking industry.

Please dump the strict regulations. They will kill my small business. (Findley, Dietrich)

Regarding the adverse effects of the regulation to industry, business, and jobs here in California, this regulation definitely will eliminate a fair amount of jobs here in California. (MVE)

Please do not impose the new diesel regulations! Our state economy needs help, not another increase in the cost of doing business and, therefore, living here. And honestly, if it keeps getting more and more expensive to live in the state, we will have to leave. (Randall)

I am against any further pollution regulation at this time. As long as businesses are leaving in droves and unemployment is so high, we need to stop increasing costs on businesses. (Bengston)

I believe the legislators in California have gone mad. The majority of people out here are barely making it and you would enforce insane regulations that are only going to burden the poor and middle class! The people are going to be outraged when the effects of this measure take hold and prices rise even further. You are forcing the working people and businesses out of this state. What will you do then? I have lived here my entire life but we are in the process of trying to get out of this insane state. (Browne) The global warming and air quality crusaders are a fraud, and are killing our economy in California and nationally. Disband CARB, and restore our economic stability. (Coots)

Abolish CARB. Everything they have done is wrong. And it appears everything they will do in the future will be wrong. Before they destroy countless jobs, and price us out of existence. Abolish CARB before it is too late. (Griffith)

Stop your plans to impose further regulations on diesel engines. These new regs will cost us all money and devastate the trucking industries. (Napier, Stalzer)

Why make more regulations to choke business and by direct relation cost jobs? It is not government's place to instruct us how to live our lives. (Hall)

You and other regulatory agencies have already "protected" us from ourselves by destroying the business activities that make an economy work and provide for a tax base to support the government. (Delta)

Just another Californian against the restrictive regulations you are trying to push through, which will force small trucking companies out of business and also drive up the costs of ALL goods statewide. AB 32 needs to be repealed – at least until our state can get on its economic feet again. Until then, diesel regulations like the ones you're trying to force on California will continue to drive business elsewhere and will keep our state under the water. (Erik K., Lynes)

Everything that you can see, hear, feel, touch, taste or smell came here by truck. If you impact the cost of trucking, you will impact the cost of everything! Right now, California needs jobs more than a little cleaner air. (Hill)

My entire life's monetary worth is tied up in my trucks and business. If the new laws take effect it would shut our small business. Please consider the small businesses struggling to survive in this miserable economy. (Earnshaw)

I'm a one truck owner operator that the new regulations could probably put me out of business, so I'm hoping for a change or postponement on the rules, and like me there's thousands of small fleets owner operators that will be out of business. (Marin)

During the last energy crisis you put many independent truckers out of business – now you want to destroy: jobs, the trucking industry, the farm industry, highway construction firms. We cannot do this until our economy is back to normal. (Skinner)

California is in decline because it is over taxed and over regulated. Businesses are fleeing the state so they can do business without all of this. Putting more stringent fuel standards on trucks, buses, etc. will just cause all products we depend on to rise in cost and some will not be available. There have been too many of these quick fixes that do not accomplish what they were intended but have far too many unintended consequences. In this financial climate – stop! (Laman)

Please do not enact further restrictions on the diesel fuel. The enforcement of these new proposals will affect the weak job sector, and we cannot afford any more taxes. (Ritchie)

I respectfully request the Board to reject any amendment that jeopardizes the ability to retain transportation jobs within the state. While I understand the intent of the environmental special interest groups, I believe their tenets are extreme and not business nor job friendly, thus reducing the number of potential employers to other states and thereby losing potential tax revenues to the general fund. (Ballesteros)

I am against any new regulations on the diesel transportation industry. In this time of economic crisis, any new regulations are just not warranted. (Kellogg, Wright)

We have had reports from our distributors already that when the proposals came out for these rule changes that fleets immediately stopped making purchases. And that's further destabilizing the marketplace that we have to operate in. (CDT)

Agency Response: No change was made in response to these comments. Similar comments were addressed to the original Tractor-Trailer GHG regulation rulemaking, to which ARB responded that the California Global Warming Solutions Act of 2006 (AB 32) was enacted to address the immediate need to mitigate climate change and its harmful effects. Unmitigated, climate change is expected to have significant societal and ecological impacts including, but not limited to, increased health care, firefighting, and flood prevention costs, increased public exposure to toxic air contaminants, and the destruction of existing environmental resources. Therefore, it is critical that we act now in order to avoid more serious consequences that we would otherwise encounter in the future due to our inaction. Many measures will be adopted pursuant to AB 32, but this regulation in particular is one that was designated as a discrete early action item, which means it must set forth requirements that were enforceable starting January 1, 2010. Because of this statutory mandate and the urgent need to begin reducing greenhouse gas emissions, this regulation could not and cannot be delayed. That said, while the primary goal of this regulation is

to combat climate change and its harmful effects by reducing greenhouse gas emissions, the measure is also expected to reduce energy costs and stimulate the economy. By requiring tractors and trailers to become more efficient, this regulation is expected to reduce long-term costs for the freight transportation industry. The cost of fuel is a significant expenditure in this industry and even a modest efficiency improvement will result in very substantial fuel savings. ARB realizes the capital costs needed for compliance may be difficult for many fleets in the current economic climate. As such, to help ease these costs, the regulation provides gradual compliance phase-in options for 2010 and older model year trailers, the group of vehicles expected to require the largest capital investment to bring into compliance. Moreover, the amendments proposed in this rulemaking provide additional flexibility for fleets, by offering an additional phase-in option for 2010 and older model year trailers, as well as a delay in the compliance date for low rolling resistance tires on 2010 and older model year trailers and tractors. Thus, ARB has made every effort to provide as much economic relief to fleets as possible while still adhering to the mandates of AB 32.

2. Comment: Your overbearing proposed regulations on diesel engines will drive consumer costs up and up and drive viable businesses from the state little by little. It is time to back off and allow existing federal air quality rules to achieve their goals. (Quilter)

Your policies are going to cost California dearly and I would hope that you take a closer look at what you are trying to do. (Hulz)

Agency Response: See Agency Response to Comment 1. Also, as ARB explained in the Final Statement of Reasons for the original Tractor-Trailer GHG regulation, AB 32 required ARB to adopt and enforce the original Tractor-Trailer GHG regulation by January 1, 2010. Therefore, ARB cannot follow the commenter's suggestion to "back off" and defer to federal regulations. Moreover, there are no current federal regulations that would accomplish all the goals of AB 32 or of the current regulation to which we could defer.

3. Comment: What you guys want to do is change the standards, making our current fleet noncompliant. This forces us to spend money on our existing fleet to comply, or buy new equipment to replace a unit that is a productive part of our business. I do not have to explain that these are tough economic times, and these standards will force people out of business. (Ayala)

Agency Response: See Agency Response to Comment 1. As ARB stated in response to similar comments made during the original rulemaking, for 2010 and older model year tractors, the regulation only requires the use of United States Environmental Protection Agency (U.S. EPA) SmartWay (SmartWay) verified low rolling resistance tires starting January 1, 2013 (prior to the proposed amendments this deadline was one year earlier: January 1, 2012). ARB believes this requirement provides sufficient lead time for most fleets to exhaust the usefulness of their existing tires before having to switch to SmartWay verified models. Therefore, ARB expects the incremental cost of this requirement to be small and primarily attributed to the cost difference between a SmartWay verified tire and a standard tire. Staff consulted with many fleets during the initial development of the regulation, and based on responses of those that had experience with SmartWay verified tires, the incremental cost of purchasing such tires ranged between \$0 and \$50 per tire. However, despite the additional cost of SmartWay verified tire models, the consensus was that the investment was worthwhile due to the fuel savings that were realized.

For 2010 and older model year box-type trailers, the regulation requires the retrofit of such trailers with SmartWay verified aerodynamic devices before January 1, 2013, or in accordance with one of the optional trailer fleet compliance schedules. This is because 1) SmartWay verified aerodynamic retrofits are available for trailers at reasonable cost and 2) box-type trailers can be used for many years without being replaced, so natural turnover of these trailers cannot be relied upon to obtain the greenhouse gas reductions needed to fulfill the goals of AB 32. Although retrofitting such trailers will require a substantial capital investment from affected fleets, ARB expects the technologies required by this regulation to pay for themselves over time through fuel savings. And since the optional trailer fleet compliance schedules allow fleets to gradually phase in compliance over several years, participating fleets will be able to reinvest the money they save from early retrofits into retrofits for trailers that are scheduled for later compliance years. The proposed amendments also delay the low rolling resistance tire requirements for all 2010 and older model year trailers to January 1, 2017, which should provide enough time for natural turnover of trailer tires and further ease the financial burden on affected fleets during these financially challenging times.

4. Comment: While I fundamentally agree with the green concept, I truly believe that slowing the implementation to a rate that is more in line with the rest of the United States will benefit all Californians. If you push ahead with all the plans you have, you could see the whole [sic] fail because CARB acted too quickly. (Hulz)

Agency Response: No change was made in response to this comment, which extends beyond the scope of this rulemaking action. See Agency Response to Comment 2. ARB often leads the nation in developing regulations to curtail air pollution and protect the health and welfare of the people of California. AB 32 established requirements for a comprehensive program of regulatory and market mechanisms to achieve real, quantifiable, and cost-effective reductions of GHG emissions and gave ARB responsibility

for monitoring and reducing GHG emissions. It requires ARB and other state agencies to adopt regulations and other requirements that would reduce, by 2020, statewide GHG emission levels to the equivalent of 1990 levels, representing a reduction of about 25 percent. Further, by Executive Order, the Governor directed that GHG emission levels be reduced to 80 percent below 1990 levels by 2050. The 2020 goal establishes an aggressive, but achievable, mid-term target, and the 2050 goal represents the level scientists believe is necessary to reach in order to stabilize the climate. If California were to wait until the federal government establishes similar standards, we would not be able to meet the requirements of AB 32.

5. Comment: The letter you sent us about this law is a joke. It said simply "pass the cost onto your customers." I don't have enough customers to make this happen. (Lynes)

Agency Response: No change was made in response to this comment. Similar comments were addressed during the original Tractor-Trailer GHG regulation rulemaking, which stated that the cost analysis for this regulation was computed based upon an 11-year equipment lifespan, from 2010 to 2020. Over that time span, ARB estimates a net savings of \$8.6 billion to affected stakeholders in 2008 dollar values. The net savings will be realized by truck operators because of improved fuel economy. Ultimately, the substantial operating cost savings seen by the truck haulers should result in lower costs to ship goods and result in lower cost for consumers. ARB calculated the savings based upon the projected retail price per gallon of ultra-low sulfur diesel fuel of \$3.14 in 2010 to \$3.69 in 2020.

Also as stated in the original rulemaking, businesses that own only trailers and no tractors may not be able to recover the cost of retrofitting their trailers through fuel savings. Since this regulation applies to all long-haul tractors and trailers that operate in California, regardless of where the vehicles are registered, ARB believes the upfront investment cost to comply will be recovered by haulers by passing it on to their customers, who will in turn increase the cost of their merchandise to the consumer. However, ARB estimates that the average cost to retrofit a trailer, amortized over the 11-year time span, would only be \$30 per month¹, which is negligible when divided among all the merchandise transported in an average trailer over the course of one month.

6. Comment: I don't think amendments should be made to the regulation at this point in time because companies that have already made the move to become compliant are the ones that will suffer. The companies that have dragged their feet will be rewarded by these amendments. The economy is already showing signs of improvement and by the time these new

¹ Estimate based on an average price to retrofit a trailer with aerodynamic equipment and low rolling resistance tires of \$2900, and a 6% interest rate.

amendments go into effect the economy will be well on its way to normal productivity so we need to keep the regulation in place as is. If you amend the regulation you will only be hurting companies that have already moved to become compliant and at this point put them at a disadvantage to the companies that have not made a move to become compliant by allowing these noncompliant companies to run their junk at reduced operating cost due to the fact they have minimal operating costs versus a company that has retrofitted or replaced their units to become compliant and proactive, and by doing so increased their operating cost which they will need to recover in the form of higher rates making them less competitive with their competitors that are noncompliant and putting them at a disadvantage. (Babich)

Agency Response: No change was made in response to this comment. ARB does not agree that the proposed amendments will put companies that have already begun to comply at a competitive disadvantage, for the following reasons: 1) early compliance with the regulation will help fleets save money on fuel so that early adopters will in fact gain benefits not achieved by those who chose to delay compliance; 2) the proposed amendments generally add flexibility for all fleets, even those who chose to comply early; and 3) although the added reporting flexibility for large fleets of trailers proposed in option 2 gives large fleets an additional opportunity to phase-in compliance of their trailers over several years, it was designed to preserve the advantage given to those fleets who already registered for the option 1 phase-in, by requiring that the option 2 phase-in be steeper than that required for option 1 participants – this was designed to maintain a "level playing field."

7. Comment: The return on investment for us to invest at this time in aerodynamics with two rules at this time is just not economically feasible. (Yandell2)

Agency Response: No change was made in response to this comment. Similar comments were addressed during the original Tractor-Trailer GHG regulation rulemaking, which stated that ARB recognizes that some carriers will be impacted by multiple rules promulgated by ARB. For that reason the regulation provides optional compliance phase-in opportunities. Specifically, rather than bring their entire trailer fleet into compliance on January 1, 2013, fleets may opt for the large fleet compliance phase-in or the small fleet compliance phase-in, both of which provide additional time to bring fleets into compliance. Further, for fleets with refrigerated-van trailers with model years 2003 through 2009 transport refrigeration units (TRUs), additional time to comply is provided due to the impact of the Airborne Toxic Control Measure (ATCM) for TRU and TRU generator sets. In addition, the proposed amendments provide even more flexibility for fleets, by further delaying the deadlines for retrofitting tractors and trailers with low rolling resistance tires. Specifically, the proposed amendments would provide fleets with an additional year before they would need to install SmartWay verified low rolling resistance tires on their pre-2011 model year tractors and four additional years before they would need to install the tires on their pre-2011 model year trailers. Also, compliance with this regulation will result in cost savings as a result of improved fuel economy.

B. Scope of Regulation

8. Comment: ARB lacks authority to regulate trailers under the Heavy-Duty Vehicle Greenhouse Gas Emission Reduction Measure (Tractor-Trailer GHG regulation)

"OOIDA also questions CARB's authority to regulate trailers in addition to tractors. Trailers are neither motor vehicles nor motor vehicle engines, the only two permissible mobile sources of emissions that CARB is allowed to regulate with a specific waiver under the Clean Air Act issued by EPA. See 42 U.S.C. § 7543. Indeed, trailers are not even a 'mobile source,' since they have no independent means of propulsion and do not by themselves generate any emissions of greenhouse gases." (OOIDA)

Agency Response: No change was made in response to this comment, which extends beyond the scope of this rulemaking action. ARB's authority to regulate 53-foot and longer box-type trailers in the Tractor-Trailer GHG regulation is primarily derived from AB 32 that creates a comprehensive, multi-year program to reduce GHG emissions in California (Nunez, 2002). This legislation calls for the reduction of GHG emissions to 1990 levels by the year 2020, a reduction of about 25 percent. In addition, Governor Schwarzenegger issued an Executive Order directing state agencies to reduce GHG emissions to 80 percent below 1990 levels by 2050.

To swiftly address GHG reductions in the near-term, one requirement of AB 32 directed ARB to identify a list of early action measures that could be adopted by the Board by January 1, 2011. In 2007, the Board identified 44 such early action measures, including potential regulations affecting motor vehicles, fuels, refrigerant in cars, and many other sources, including nine "discrete" early action measures, which would be adopted and enforceable by January 1, 2010 (Health and Safety Code sections 38560.5(a) through (d)). The current Tractor-Trailer GHG regulation is one of these discrete early action measures. ARB explained in the Staff Report accompanying the rulemaking record for the current Tractor-Trailer GHG regulation that it included 53 foot and longer box type trailers in that regulation because it determined that such trailers, in conjunction with the long-haul on-road tractors that pull such trailers, are sources of GHG emissions that it is authorized to regulate under the authority of AB 32.

ARB has not yet conclusively determined whether the Tractor-Trailer GHG regulation's requirements constitute standards relating to the control of emissions

from new motor vehicles or new motor vehicle engines, which requires issuance of a waiver from section 209(a) of the federal Clean Air Act (CAA). However, to the extent it is necessary, ARB will request a waiver for those requirements pursuant to section 209(b) of the CAA. In addition, this comment misstates the preemption and waiver provisions of the CAA. Section 209(a) preempts states and political subdivisions thereof from adopting or enforcing "any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines," and section 209(b) states the Administrator of EPA must waive the preemption of section 209(a) for California's standards² relating to new motor vehicles or new motor vehicle engines, unless she makes specific findings. These sections therefore establish requirements that are only applicable to California regulations that establish "any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines"; they do not, as the commenter asserts, limit California's authority to regulate mobile sources of emissions to only motor vehicles or motor vehicle engines. See e.g., section 209(e)(2) of the CAA, which directs the Administrator to grant California an authorization for standards and requirements for nonroad engines (other than new engines less than 175 horsepower used in farm and construction equipment and vehicles and new engines used in new locomotives and locomotive engines) if certain criteria are met.

9. Comment: ARB should defer to Federal efforts.

"Although California initially began the process of targeting heavy-duty trucks for greenhouse gas regulation, the federal government is now engaged. Because of the complexity of freight movement in the United States, and the nationwide scope and nature of the problem these emissions create, this effort properly should reside in Washington, D.C., not Sacramento.

Accordingly, at the President's direction, EPA and the National Highway Traffic Safety Administration ("NHTSA") are taking coordinated steps to enable the production of a new generation of clean vehicles with better fuel efficiency and reduced greenhouse gas emissions. More specifically, EPA and NHTSA have formally announced a joint rulemaking that will culminate with the adoption of comprehensive federal regulations governing greenhouse gas emissions from heavy-duty engines and vehicles. *See* 75 Fed. Reg. 74152 (Nov. 30, 2010). Under the EPA/NHTSA proposal, regulated entities will begin to comply by model year 2014, and fuel consumption standards would become mandatory by model year 2016. *Id.* Since the federal rulemaking, in many respects, covers the same subjects as CARB's GHG regulation, OOIDA believes CARB should defer or

² CAA section 209(b) provides for granting a waiver to "any State that has adopted standards (other than crankcase emission standards) for the control of emissions from new motor vehicles or new motor vehicle engines prior to March 30, 1966." California is the only State that meets this eligibility criterion for granting waivers. *See, e.g.*, S. Rep. No. 90-403, at 632 (1967) and *Motor and Equipment Manufacturers Association v. EPA (MEMA I)* (D.C. Cir. 1979) 627 F.2d 1095, 1101 fn. 1.

² See MEMA I, supra, 627 F.2d. at 1111, 1113.

sunset the relevant parts of its GHG regulation that overlap with federal efforts." (OOIDA)

Agency Response: No change was made in response to this comment, which extends beyond the scope of this rulemaking action. As ARB explained in the Final Statement of Reasons for the original Tractor-Trailer GHG Regulation, AB 32 required ARB to adopt and to enforce the original Tractor-Trailer GHG regulation by January 1, 2010. Therefore, ARB cannot follow the commenter's suggestion to defer or sunset any portion of the current regulation. That being said, ARB is aware of the EPA and NHTSA joint proposal, and is collaborating with those agencies as they proceed with that proposed rulemaking.

10.Comment: Preemption under the Federal Aviation Administration Authorization Act

"CARB's attempts to regulate greenhouse gas emission [sic] are also limited by the preemption provision of the Federal Aviation Administration Authorization Act [FAAAA], 49 U.S.C. § 14501(c), which prohibits states from adopting any law or regulation related to a price, route, or service of any motor carrier with respect to the transportation of property. *Although the FAAAA's pre-emptive effect on the GHG Regulation is not addressed in these comments*, it is worth noting that barriers to interstate operations, such as those created by the GHG Regulation in both its current and proposed form, might also run afoul of the FAAAA because they will raise the costs of long-haul operations and could accordingly cause motor carriers to raise their prices or alter routes for services provided to and from California." (Emphasis supplied). (OOIDA)

Agency Response: No change was made in response to this comment. This comment appears to be generally directed towards the original Tractor-Trailer GHG regulation rulemaking, and therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. Nevertheless, ARB disagrees that its authority to regulate emissions of greenhouse gases generated from the tractors and trailers that are the subject of the instant rulemaking action is preempted by the provisions of 49 U.S.C. section 14501(c).

As previously noted in Agency Response to Comment 8, ARB has not yet determined whether the Tractor-Trailer GHG regulation requirements are subject to the provisions of sections 209(a) and 209(b) of the federal Clean Air Act (CAA). However, for the purpose of responding to this comment, ARB is assuming these requirements are subject to those sections, and notes that although courts have not yet directly addressed whether the provisions of the FAAAA and the federal Clean Air Act conflict, under well-established principles of statutory interpretation, a court will not presume that two federal statutes conflict unless one statute expressly contradicts another statute or unless it finds a repeal is absolutely necessary. Here, the FAAAA does not contain language

expressly contradicting sections 209(a) or 209(b) of the CAA, and furthermore, interpreting the FAAAA as preempting section 209(b) of the CAA is unnecessary, because it is possible to construe both statutes in a manner that furthers their respective purposes, while also harmonizing them.

11.Comment: The regulation violates the Commerce Clause of the United States Constitution.

"California's right to regulate greenhouse gas emissions, through CARB, must be exercised consistent with constitutional limitations, including the Interstate Commerce Clause." "[T]his precludes both regulations that unduly burden interstate commerce or that discriminates against out-of-state interests via provisions that either expressly or in practice favor in-state interests." (OOIDA)

Agency Response: No change was made in response to this comment, which extends beyond the scope of this rulemaking action. As demonstrated in greater detail below, ARB believes that the Tractor-Trailer GHG regulation does not violate Article I, § 8, clause 3 of the United States Constitution.

12.Comment: The Tractor-Trailer GHG regulation discriminates against out-of-state motor carriers.

"CARB has taken great pains, in crafting the original GHG Regulation and in the proposed modifications, to minimize the burden imposed on California-based entities. Short-haul, as well as drayage and local-haul equipment, is exempted from many compliance requirements. *Raymond Motor v. Rice, supra.* In this proceeding, CARB has even proposed expanding the exemptions for local interests. Storage trailers are exempted for the first time. [§ 95305(e)]. Further, owners can obtain up to four three-day relocation passes for exempt local-haul and storage trailers. *Id.* at § 95305(f)(5). Such relocation passes are not even required for empty local-haul trailers to be moved more than 100 miles from the local base. *Id.* at § 95305(c)(1)(B).

Because of its focus on regulation of long-haul truckers, CARB did not provide any meaningful exemptions from the regulation for long-haul out-of-state truckers, even those who drive relatively few miles in California and, accordingly, do not individually make a meaningful contribution to the greenhouse gas emissions problem in the state. In fact, the current regulation has **no exemptions** that directly address the needs of those out-of-state motor carriers. CARB has gone through the motions of attempting in this proceeding to reduce the in-state/out-of-state inequity through the creation of a 'Non-compliant Tractor Pass' exemption (id. at § 95305(h)), but this exemption will not be usable by most out-of-state truckers. Under the proposal, a truck owner is entitled to only one such pass per year, whether he owns a single tractor or a fleet. The pass will not be good for more than three consecutive days, and CARB has 15 days from the date of application to notify the owner whether the pass was issued. *Id.* at \$ 95305(h)(2),(4),& (5).

A long-haul trucker with non-compliant equipment, whether he owns one or a fleet of trucks and trailers, cannot hold himself out as providing service to California on any basis if he can only expect to get one pass per year. Moreover, goods movement is a dynamic business, where truckers usually do not know their next freight offering until shortly before or on the exact day when it is tendered for pick-up with delivery expected in mere days. Thus, the proposed '15 days' allowed for a response from the Executive Officer would by itself make usage of this exemption unworkable for the vast majority of out-of-state truckers attempting to utilize this exemption." (OOIDA)

Agency Response: No change was made in response to this comment. ARB disagrees that the Tractor-Trailer GHG regulation discriminates against out-of-state motor carriers. The regulation provides a "level playing field," requiring all motor carriers involved in the long-haul transport of freight in 53 foot or longer box-type trailers to comply with the regulation's equipment requirements when traveling on California highways – whether they are based in California or out-of-state. That being said, ARB also recognizes that there are some fleets that may not be aware of the regulation's existence because they infrequently transport goods in California. To address this issue, ARB has proposed a limited-time exemption for long-haul tractor-trailer combinations.

Initially, the proposed amendments to the Tractor-Trailer GHG regulation added a "Non-compliant Tractor Pass" provision in subsection 95305(h) that would allow both in-state and out-of-state tractor owners to request and obtain a temporary exemption (pass) from the regulation, not to exceed three consecutive days. Subsequently in the 15-day proposed changes, this provision was modified to allow the pass to be valid for five consecutive days. Only one pass would be issued to an owner per year. Furthermore, only one tractor per fleet, sharing a U.S. Department of Transportation, motor carrier, or International Registration Plan number, would be granted one pass per year. In other words, if a fleet is made up of multiple owners, only one pass could be issued to a tractor in that fleet, regardless of the number of owners in that fleet. The reason only one pass would be issued per fleet is because this exemption was intended to provide temporary and limited assistance to fleets during the first few years of the regulation until fleets that do not typically operate in California become aware of this regulation. Thus, staff proposes to sunset this provision on January 1, 2015.

The regulation requires the Executive Officer to respond to a request for a pass within 15 days of receiving the request. ARB recognizes that in many instances motor carriers will need an approved pass as quickly as possible after requesting the pass. Therefore, ARB will provide an electronic pass submittal and approval system that will facilitate the approval of passes electronically within hours after receipt via email correspondence or the TRUCRS website. **13.Comment:** "Limiting the pass to a maximum three-day timeframe is also problematic. There are significant seasonal fluctuations in freight availability, mostly driven by agricultural and import availability. If goods are not available for pick-up immediately after a delivery (in industry parlance – a quick turnaround) a motor carrier utilizing a three-day pass runs the very real risk of having to leave the state empty in order not to exceed the arbitrary time allotted by the pass." (OOIDA)

Agency Response: ARB agrees with the commenter and has modified the regulation in response to this comment. The modified regulatory language, discussed in the following paragraphs, has been made available for public comment for a period of 15 days with no further comments received.

Sections 95305(f)(1), (f)(2), (f)(8), 95305(g)(3)(H), 95305(h)(1) and 95305(h)(2) have been modified to extend the maximum applicable time period of a relocation pass for trailers, transfer of ownership pass for trailers, and non-compliant tractor pass, from three to five consecutive days. There are a number of variables, including inclement weather, traffic congestion, road construction, and limitations on driver work hours that can lengthen the time it takes to complete a planned trip. In addition, a nationwide trailer leasing company has provided ARB with comments suggesting that the three day period to relocate trailers is too short a time period. The coordinating logistics between a motor carrier and shipper make the three day window to complete the trip impractical. As a result, staff is proposing to extend the previously proposed three day time periods to five day time periods. ARB staff believes the two additional days should provide an owner moving a trailer under a pass enough flexibility to deal with unexpected delays and circumstances.

14. Comment: "The lack of any meaningful opportunity for a long-haul interstate trucker to come into California without first complying with the GHG Regulation raises the costs for out-of-state motor carriers who want to do business in the state, while many in-state motor carriers are exempted from the Regulation's requirements. *Cf. Hughes v. Oklahoma, supra; Hunt v. Washington State, supra.* Whether the discrimination is express or simply the effect of the numerous useful exemptions for in-state interests without any corresponding exemptions for out-of-state motor carriers, it is clearly discriminatory. As such, it violates the Interstate Commerce Clause. (OOIDA)

Agency Response: As a threshold matter, ARB notes that to the extent that this comment raises issues concerning the constitutionality of the original Tractor-Trailer GHG regulation, it extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. However, for the reasons set forth below, ARB believes that neither the original regulation nor the proposed amendments are inconsistent with the provisions of the Commerce Clause of the U.S. Constitution.

Article I, §8, cl. 3 of the United States Constitution states that Congress has the power "[t]o regulate Commerce ...among the several States." Courts have long recognized that this affirmative grant of power also includes an implicit or "dormant" limitation on the authority of states to affect interstate commerce. *United Haulers Ass'n., Inc. v. Onedia-Herkimer Solid Waste Management Authority* (2007) 550 U.S. 330, 338. In determining whether a state law violates the Commerce Clause, a court first determines if the law discriminates against interstate commerce, either on its face or in practical effect (*Hughes v. Oklahoma (1979) 441 U.S. 322, 336*)), *i.e.*, if the law accords differential treatment of instate and out-of-state economic interests that benefits the former and burdens the latter. Such laws are virtually per se invalid. *United Haulers Ass'n at 338*, and will only survive if they "advance[s] a legitimate local purpose that cannot be adequately served by reasonable nondiscriminatory alternatives." *Oregon Waste Systems Inc. v. Department of Environmental Quality of State of Oregon* (1994) 511 U.S. 93, 100-101.

Neither the Original Tractor-Trailer GHG Regulation Nor the Proposed Amendments Expressly Discriminate Against Interstate Commerce

Neither the current Tractor-Trailer GHG regulation nor the proposed amendments facially discriminate or discriminate in practice against interstate commerce, as they do not establish requirements for interstate commerce that are qualitatively or quantitatively different than the requirements for intrastate commerce.

United Hauler's Ass'n (2007) 550 U.S. 330 involved a challenge to a "flow control" ordinance that required all solid waste in affected counties to be delivered to a state-created, public benefit corporation, and that further required private waste haulers to obtain permits to collect waste in those affected counties. The U.S. Supreme Court noted that the ordinance benefitted a public facility "*while treating all private companies exactly the same*," *id* at 342, and therefore held that the ordinance did not discriminate against interstate commerce. *Id.* at 345. The United Haulers Ass'n Court then proceeded to analyze the constitutionality of the ordinance under the *Pike v. Bruce Church, Inc.* test described below in Agency Response to Comment 19.

The Tractor-Trailer GHG regulation does not facially discriminate against interstate commerce because its requirements are applicable to all 53 foot and longer box type trailers and the long-haul on-road tractors that haul such trailers that operate in California, without distinguishing whether such tractors and trailers are based inside or outside of California. The commenter maintains that the regulation's exemptions for short-haul, drayage and local-haul equipment, and storage trailers evidences the regulation's facial discrimination against out-of-state long-haul carriers, *citing Raymond Motor Trans., Inc. v. Rice (1978) 434*

U.S. 429, but that case is inapposite. In Raymond Motor, the U.S. Supreme Court held that Wisconsin regulations limiting the length of trucks operated in that state violated the Commerce Clause. Significantly, the Court did not find that the regulations facially discriminated against interstate commerce, but instead held that the regulations were unconstitutional under the Pike v. Bruce Church, Inc. balancing test described below in Agency Response to Comment 19. The Raymond Motor Court held that the challenged regulations unconstitutionally burdened interstate commerce under that test, because Wisconsin had produced virtually no evidence to demonstrate that its regulations contributed to highway safety and because appellants had demonstrated the regulations imposed a substantial burden on interstate commerce. The Court stated that although state safety regulations are generally afforded a strong presumption of validity, the existence of numerous exemptions in the regulations undermined Wisconsin's assertion that the regulations were enacted to ensure highway safety. The Court also noted that at least one of the exceptions facially discriminated in favor of Wisconsin industries and against out-of-state industries, id. at 446, but explained that such exemptions merely served to weaken the presumption that the state law was valid, and importantly, expressed that this consideration was not decisive to its ultimate holding. Id. at 446. The Court further stated it was unnecessary to decide in that case whether the appellants would be entitled to relief based solely on the discrimination embodied in that exemption. Id. at 447.

Unlike the Wisconsin regulations at issue in the *Raymond Motor* case, the proposed exemptions for storage trailers [§ 95305(e)], relocation passes [§ 95305(f)(5)], and non-compliant tractors [§ 95305(h)] are facially neutral, and were not enacted to benefit California businesses. Instead, the Board adopted such amendments to provide compliance flexibility for owners and operators of affected tractors and trailers in circumstances involving limited operations at highway speeds and/or their limited overall annual mileage, and those exemptions are equally available to both in-state and out-of-state fleets. The Board's rationale is therefore entirely consistent with its determinations in the original rulemaking that the maximum reductions in GHG emissions result from trucks operated at highway speeds. *See* Agency Response to Comment 30 and, as stated in that Agency Response, this rationale did not consider the in-state versus out-of-state proportion of short- and local-haul tractors and trailers.

Neither the Original Tractor-Trailer GHG Regulation Nor the Proposed Amendments Discriminates In Practice Against Interstate Commerce

Neither the current Tractor-Trailer GHG regulation nor the proposed amendments discriminates in practice against interstate commerce, because they do not establish requirements for interstate commerce that are qualitatively or quantitatively different than the requirements for intrastate commerce. The commenter claims that the Board's adoption of the "numerous useful exemptions for in-state interests without any corresponding exemptions for out-of-state motor carriers ... is clearly discriminatory," citing *Hughes v. Oklahoma* (1979) 441 U.S. 322 and Hunt v. Washington State Apple Advertising Comm'n (1977) 432 U.S. 333.

Hunt (1977) 432 U.S. 333 involved a challenge to a statute that prohibited closed containers of apples sold in North Carolina from being labeled with any State graded quality standards. The *Hunt* court held that although this statute was facially neutral, it violated the Commerce Clause because it discriminated in effect against Washington state apple growers. The statute increased the costs for Washington apple growers, but not for in-state apple growers, because it forced the out-of-state growers to alter their existing marketing practices, and also effectively removed the benefits of Washington's superior apple-grading system from the out-of-state growers that benefitted the in-state growers. *Id.* at 350-352.

Hughes (1979) 441 U.S. 322 involved an Oklahoma statute that prohibited the sale or transport of minnows outside that state that were caught inside Oklahoma. The U.S. Supreme Court invalidated that statute because it facially discriminated against interstate commerce. The Court noted the statute did not limit the numbers of minnows that licensed minnow dealers could take, or limit how such minnows could be used in the State, and therefore characterized the statute as "a choice of the most discriminatory means even though nondiscriminatory alternatives would seem likely to fulfill the State's purported legitimate local purpose more effectively." Id. at 338.

The Tractor-Trailer GHG regulation and the proposed amendments are distinguishable from these cases. First, unlike the statute in *Hughes*, the Tractor-Trailer GHG regulation does not facially discriminate against out-of-state trucks, but rather establishes requirements that are uniformly applicable to affected tractors and trailers that operate in California, whether they are based within or beyond this state. Second, unlike *Hunt*, the amendments do not remove any preexisting advantage that out-of-state owners or operators enjoy over California-based owners or operators, or vice versa.

The commenter's assertion that the exemptions for short-haul, local-haul, storage trailers [§ 95305(e)], relocation passes [§ 95305(f)(5)], and non-compliant tractors [§ 95305(h)] discriminate in effect against out-of-state owners or operators by effectively exempting in-state businesses, but not out-of-state businesses from the requirements lacks merit. Each of the above exemptions is available to both in-state and out-of-state entities that meet the specific eligibility criteria, and therefore do not benefit in-state businesses at the expense of out-of-state businesses. Indeed, it is apparent that the commenter is essentially requesting the Board to broaden the exemptions to provide additional flexibility for long-haul tractors and trailers. However, as stated in the Agency Response to Comment 30, the Board adopted these exemptions to provide flexibility in circumstances where tractors and trailers are not likely to travel at the highway speeds where emissions of GHGs are most efficiently reduced. Thus, unlike the

exemptions that the *Raymond Motor* Court held undermined the asserted safety basis of Wisconsin's truck length rules, these exemptions serve to strengthen the Board's health and welfare basis of the amendments – that the Board enacted these amendments to protect the health and welfare of California's residents. Therefore, the presence of these neutral exemptions does not evidence any improper discrimination against interstate commerce. *Raymond Motor* at 447 ("Neither do we intimate that nondiscriminatory exceptions to general length, width, or weight limits are inherently suspect." *Internal citations omitted*.)

15.Comment: "When in-state versus out-of-state discrimination is demonstrated, the burden falls on the involved state to justify it both in terms of the local benefits flowing from the regulation and the unavailability of nondiscriminatory alternatives adequate to preserve the local interests at stake. *Hunt* [*v. Washington State Apple Advertising Comm'n* (1977) 432 U.S. 333] at 353. (OOIDA)

Agency Response: No change was made in response to this comment. As demonstrated in the Agency Response to Comment 14, ARB believes that neither the original Tractor-Trailer GHG regulation nor the proposed amendments facially discriminate or discriminate in practice against interstate commerce, as they do not establish requirements for interstate commerce that are qualitatively or quantitatively different than the requirements for intrastate commerce. Nevertheless, ARB will address the commenter's specific concerns below.

16.Comment: ARB "could both reduce the burden on interstate commerce and equalize the discriminatory treatment of in-state and out-of-state truckers in two different ways."

"First, CARB could refocus the short-haul exemption exclusively on miles operated in California, since this is the only factor that truly affects greenhouse emissions originating in California. Since the Regulation allows qualifying motor carriers to operate up to 50,000 miles in the state without being subjected to its strictures, there is no logical reason why out-of-state long-haul truckers should not be allowed to do the same." (OOIDA)

Agency Response: No change was made in response to this comment. ARB disagrees that the regulation and/or the short-haul exemption discriminate in any manner against either in-state or out-of-state truckers. Furthermore, as the Board explained in the FSOR for the original Tractor-Trailer GHG regulation (Agency Response to Comment 32), because aerodynamic equipment functions most optimally at highway speeds, it enacted provisions to exempt trucks that generally do not operate at those speeds, and would only marginally benefit from the aerodynamic equipment requirements; namely, trucks that operate primarily within a local area with mostly urban driving, or for trucks with low annual mileage. This rationale does not extend to out-of-state long-haul trucks that on average travel at high enough speeds to realize significant fuel efficiency savings from using aerodynamic devices.

ARB also wishes to point out that the proposed amendments now clarify the definition of a short-haul tractor as a heavy-duty tractor that travels less than 50,000 miles per year, including mileage accumulated both inside and outside of California. Title 17, Code of California Regulations, section 95302(a)(29). The original definition did not explicitly specify the annual mileage limit to be mileage accrued both inside and outside of California.

As explained in the Agency Response to Comment 17, short-haul tractors are exempted from the requirements, not because they travel fewer miles and as a result produce less GHG emissions than long-haul tractors, but because, at the speeds they are operated, the aerodynamic devices installed on these vehicles provide minimal or zero GHG emission benefits. Moreover, the proposal to base the short-haul exemption's availability solely on miles traveled in California would not establish a nondiscriminatory alternative to the proposed amendments, but would instead effectively discriminate in favor of out-of-state truckers at the expense of California based truckers. Specifically, California based long-haul trucks will likely be operated in California only a fraction of the time compared to their out-of-state counterparts, and would consequently be precluded from utilizing this exemption as compared to out-of-state long-haul trucks.

17.Comment: "Alternatively, CARB could keep the short-haul exemption as it is now and instead make the non-compliant tractor pass exemption more readily available. OOIDA would suggest that it be made applicable to multiple single vehicles in a fleet as are the local and short-haul exemptions, instead of being the only exemption that is available and limited to one vehicle in a fleet. In addition, since relocation passes are available for a single trailer up to four times a year, non-compliant tractor passes should similarly be available up to four times per year for single vehicles.

While either of these suggested modifications to the currently-proposed exemptions would allow non-compliant out-of-state vehicles to operate more miles in California than would be allowed by the proposed once yearly three-day pass exemption, the trucks making use of the exemption would not contribute any more greenhouse gas emissions than local and short-haul vehicles already exempted from coverage." (OOIDA)

Agency Response: No change was made in response to this comment. Relocation passes provide fleets that operate local-haul trailers the flexibility to relocate their trailers loaded with freight to a new local-haul base. Note that fleets do not need relocation passes to relocate trailers to a new local-haul base if the trailers are pulled empty. However, hauling empty trailers reduces freight transportation efficiency. Thus, to reduce the inefficiency that may result from moving empty trailers, ARB has provided a limited number of relocation passes per year per trailer to enable fleets to relocate trailers loaded with freight to a new local-haul base. limited to out-of-state fleets only, was created mainly for out-of-state fleets that infrequently operate in California to enable them to operate a non-compliant tractor and trailer without being in violation of the regulation. ARB limited this provision to only one tractor pass per year per fleet because allowing multiple passes per tractor per fleet would go counter to the goals of the regulation of significantly reducing GHG emissions.

Short-haul tractors are exempted from the requirements, not because they travel fewer miles and as a result produce less GHG emissions than long-haul tractors, but because, at the speeds they are operated, the aerodynamic devices installed on these vehicles provide minimal or zero GHG emission benefits. On the other hand, long-haul out-of-state tractors would benefit from installing the low rolling resistance tires and aerodynamic devices since most of the vehicle miles traveled both inside and outside of California are accrued at highway speeds. As a result, long-haul out-of-state tractors are required to comply with the low rolling resistance tire and aerodynamic requirements of the regulation.

Also, as stated in the Agency Response to Comment 14, ARB does not believe that the regulation or the non-compliant tractor pass discriminates in any manner against either in-state or out-of-state truckers, because they do not establish requirements for interstate commerce that are qualitatively or quantitatively different than the requirements for intrastate commerce.

18.Comment: Whether intentionally or unintentionally, the Tractor-Trailer GHG regulation improperly regulates transportation that is provided totally out-of-the state by motor carriers.

[A] state and its various agencies may only regulate conduct within their own state's boundaries. Laws or regulations that impose liability on or otherwise regulate conduct occurring wholly outside of the state go beyond the inherent limits on the state's authority and may not be allowed to stand. *Healy v. Beer Inst. Inc.*, 491 U.S. 324, 336 (1989); *Edgar v. MITE Corp.*, 457 U.S. 624, 642-643 (1982). This is so regardless of whether or not the extraterritorial reach was intended. *Id.*

The OOIDA Foundation surveys OOIDA membership and those results indicate our members who are primarily long-haul truckers average 108,072 miles per year. Thus, as CARB intended, they do not qualify for either the short or localhaul exemptions. This means that they will have to equip the tractors and trailers they use with the requisite aerodynamic equipment and low-rolling resistance tires for the miles operated outside of California transporting freight for shippers and receivers also located outside of California. They are forced to comply with this regulation if they want to hold themselves out to provide even intermittent and irregular transportation services in California with the same equipment. California's regulatory regime is therefore improperly being projected into other states. See Healy v. Beer Inst., supra; 491 U.S. 324, 336 (1989); Edgar v. MITE, supra. (OOIDA)

Agency Response: No change was made in response to this comment. To the extent that this comment raises issues concerning the constitutionality of the original Tractor-Trailer GHG regulation, it extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. Nevertheless, for the reasons set forth below, ARB believes that neither the original regulation nor the proposed amendments are inconsistent with the provisions of the Commerce Clause of the U.S. Constitution.

As the commenter notes, the U.S. Supreme Court has held in certain situations that a state law that directly regulates commerce outside of that state's boundaries violates the Commerce Clause. This principle has been referred to as the extraterritoriality branch of the dormant Commerce Clause. In *Healy v. Beer Institute* (1989) 491 U.S. 324, the U.S. Supreme Court held that a Connecticut price affirmation statute for beer violated the Commerce Clause because it regulated out-of-state commerce by controlling prices and marketing practices in other states. Specifically, that statute effectively required interstate beer sellers to forego available promotional and volume discounts in other states, which deprived those sellers of any competitive advantages that might exist in bordering States. The *Healy* Court also found that the statute facially discriminated against interstate commerce. *Healy* (1989) 491 U.S. 324, 340.

In *Edgar v. MITE Corp.*, (1982) 457 U.S. 624, a plurality of the U.S. Supreme Court would have invalidated a statute regulating corporate takeovers on extraterritoriality grounds. The plurality found the statute would allow Illinois to regulate out-of-state transactions that had no significant connections to Illinois (i.e., the statute could be applied to regulate tender offers that would not affect a single Illinois shareholder). However, a majority of the Court ultimately invalidated the statute under the *Pike* balancing test discussed below at Agency Response to Comment 19.

The U.S. Supreme Court has not held, however, that the extraterritoriality doctrine per se invalidates state regulations that incidentally or indirectly regulate out-of-state commerce, but has upheld a state's ability to regulate extraterritorial commerce that has a direct nexus to that state and that substantially impacts that state. In *CTS Corp. v. Dynamics Corp. of America* (1987) 481 U.S. 69, the Court upheld an Indiana corporate takeover statute against a Commerce Clause challenge. The Court distinguished that statute from the Illinois statute in *MITE* in that the Indiana statute only applied to corporations with substantial numbers of shareholders in Indiana and would therefore affect a substantial number of Indiana residents. *Id.* at 93. The Court notably did not hold that the statute was invalid simply because it could also possibly regulate out-of-state transactions (i.e., non-Indiana corporations seeking to purchase shares from non-Indiana

shareholders). Federal Courts of Appeal have similarly rejected assertions that state regulations that only incidentally affect out-of-state transactions are per se invalidated by the extraterritorial doctrine. *Alliant Energy Corp v. Bie* (7th Cir. 2003) 336 F.3d 545.

Neither the current Tractor-Trailer GHG regulation nor the proposed amendments raise the same issues that concerned the *Healy* and the *MITE* Courts. Unlike the price affirmation statute in *Healy*, the Tractor-Trailer GHG regulation does not practically regulate commercial activity beyond California's borders; because the regulation only applies to tractors and trailers that operate on California highways, it does not and cannot dictate tire or equipment requirements for out-of-state tractors and trailers. Unlike the *MITE* statute, the regulation was specifically developed to reduce greenhouse gas emissions from the tractors and trailers that travel on California's highways – emissions which directly affect California's economic well-being, public health, natural resources, and environment. The Tractor-Trailer GHG regulation is therefore more akin to the statute in *CTS* in that it affects a substantial source of GHG emissions that California has an indisputable interest in reducing, and is therefore consistent with the extraterritoriality doctrine.

Pike balancing test comments

19. Comment: The regulation unduly burdens interstate commerce. New Energy v. Limbach, supra; United Haulers Ass'n, Inc. v. Oneida-Herkimer, supra. "The burden is undue when a balancing of national and local interests reveals that the costs of complying are disproportionate (i.e., clearly excessive) when compared to the demonstrable local benefits that cannot otherwise be obtained by the state. United Haulers Ass'n, Inc. v. Oneida-Herkimer Solid Waste Mgmt Auth., 550 U.S. 330,339 (2007); Pike v. Bruce Church, Inc., 397 U.S. 137, 142 (1970).

Motor carriers operating in interstate commerce must either avoid California altogether or expend substantial funds to purchase new compliant equipment or retrofit old equipment.^{FN} That expense is difficult to justify for those motor carriers who only occasionally make trips into California. As shown in the table of IRP data on page 8 above, once vehicles from states near California are eliminated, the average mileage in California is quite low and gets lower as the base state gets further away.'

[* Footnote] - The expenditure is not insignificant in spite of CARB's contention that there will be a financial payback to the truck owner from fuel savings. First, CARB has ignored the difficulty that financially stressed small-business motor carriers will have in coming up with thousands of dollars in the upfront capital for the required technologies. Second, OOIDA would argue that many smallbusiness motor carriers are acutely aware of their fuel mileage and, since, fuel represents their single largest cost, they are already operating their equipment as efficiently as practicable. Indeed, many have made large investments in anti-idle technology. Thus, the hypothesized payback for the capital investment required under by [sic] this Regulation may well be illusory and overstated in CARB justifications.

Accordingly, the expenditures for the equipment required by the GHG Regulation cannot be justified based upon the mileage traveled in the state. More distant motor carriers are likely to avoid California altogether. On the other hand, the benefit to California in terms of reduced greenhouse gas emissions will be minimal if the Regulation keeps out only those truck operators who are not likely to drive many miles or consume much fuel in the state. Thus, as with the various transportation cases invalidating state laws banning certain trucks on safety grounds, the ban here on certain tractors and trailers places a burden on interstate commerce that outweighs any demonstrable local benefits *Cf. Raymond Motor v. Rice, supra; Kassel v. Consolidated Freightways, supra.*" [¶] *Bibb v. Navajo Freight Lines, 359 U.S. 520 (1959)* (invalidating state law requiring mudflaps that could not be used in adjacent states); *Southern Pacific Co. v. Arizona,* 325 U.S. 761 (1945) (invalidating state law restricting length of trains). (OOIDA)

Agency Response: No change was made in response to this comment. To the extent this comment raises issues concerning the constitutionality of the original Tractor-Trailer GHG regulation, it extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. However, for the reasons set forth below, ARB believes that neither the original regulation nor the proposed amendments are inconsistent with the provisions of the Commerce Clause of the U.S. Constitution.

As a threshold matter, ARB notes that the commenter's concerns regarding the anticipated economic impact of the regulation have been previously addressed in the Final Statement of Reasons for the original Tractor-Trailer GHG regulation.

* See Agency Response to Comments 1 through 3 in the original FSOR (pp. 19-23) in response to the comment that small business motor carriers may have difficulty in obtaining capital for compliance costs.

* See Agency Responses to Comment 81 (p, 66) and to Comment 123 (pp. 91-93) in the original FSOR, in response to the comment that the anticipated payback period is overstated because it overlooks the fact that operators are already operating their equipment in a fuel efficient manner or have invested in anti-idle technology. As ARB stated in the Agency Response to Comment 123,

"Thus, ARB's use of fuel efficiency improvements of 10 percent for a SmartWay certified tractor and trailer with side skirts and front trailer fairings, and the use of low rolling resistance tires on both the tractor and the trailer is not simplistic addition but based on tests, modeling, and input from the industry. Therefore, the fuel savings in the Staff Report are not overestimated for the tractor and trailer. Furthermore, it should be noted that unlike many regulations that do not have a cost savings, this regulation will result in fuel savings such that an owner can recover his/her initial costs."

In addition, the comment incorrectly asserts that ARB overlooked the fact or contribution of other fuel reduction measures that may already be present on tractors or trailers, such as idle-reduction measures. The GHG reductions resulting from the regulation were calculated solely from the minimum aerodynamic and tire rolling resistance performance required by the regulation. See Appendix C to Initial Staff Report for the Tractor-Trailer GHG regulation. Therefore, those GHG reductions (and any associated fuel reductions) are not dependent upon nor affected by any other fuel reduction measures.

* See also Agency Responses to Comments 103 – 152 in the original FSOR (pp. 79 -109) responding to economic-related issues raised in the original Tractor-Trailer GHG regulation.

With regards to the comment's constitutional concerns, if a court determines that a state law does not discriminate against interstate commerce or directly regulate commerce outside of the state's boundaries, it then balances the law's local benefits against its burdens on interstate commerce to determine if the law violates the federal Commerce Clause. *Pike v. Bruce Church* (1970) 397 U.S. 137, 142. The Supreme Court has stated that state regulations frequently pass muster under the Pike test. *Department of Revenue of Ky. v. Davis* (2008) 533 U.S. 328, 339. Under this test the state law will be upheld unless it imposes a burden on interstate commerce that is clearly excessive in relation to the putative local benefits. "If a legitimate local purpose is found, then the question becomes one of degree. And the extent of the burden that will be tolerated will of course depend on the nature of the local interest involved, and on whether it could be promoted as well with a lesser impact on interstate activities." *Ibid.* Furthermore, courts will accord a greater presumption of validity to a state's laws in the field of safety. *Pike* 397 U.S. 137, 143.

Courts recognize that preventing air pollution is and has been a traditional local safety concern. *Huron Portland Cement Co. v. Detroit* (1960) 362 U.S. 440, 445-446. This recognition is also expressed in the federal Clean Air Act section 101(a)(3), where the U.S. Congress declared that states and local governments are primarily responsible for preventing air pollution, and in California Health and Safety Code sections 39000 and 39001, where the California legislature declared a strong public interest in controlling air pollution to protect the "health, safety, welfare, and sense of well-being" of Californians.

Moreover, the California legislature has declared in the California Global Warming Solutions Act of 2006 (AB 32) that global warming "poses a serious threat to the economic well-being, public health, natural resources, and the environment of California", and has accordingly directed ARB to monitor and regulate sources of GHG emissions. As documented in the rulemaking record for the original Tractor-Trailer GHG Regulation, 53-foot and longer box-type trailers, and the tractors that haul such trailers on California highways are significant sources of GHG emissions in California, and this regulation is therefore an important component of ARB's strategy to reduce such emissions. These considerations establish that this regulation serves the legitimate public purpose of protecting the health and welfare of California's residents, which purpose "clearly falls within the exercise of even the most traditional concept of what is compendiously known as the police power." *Huron Portland Cement Co.* (1960) 362 U.S. 440, 442.

If a court determines that the justifications for a state safety based regulation are not illusory, as it would likely find in this case, it will accord the regulation significant deference. Raymond Motor Transportation v. Rice (1978) 434 U.S. 429, 449 (Blackmun, J., concurrence). The court will then assess the regulation's burden on interstate commerce. This regulation does not unduly burden interstate commerce. First, the regulation spreads the total cost of compliance for fleets over several years, which helps mitigate any financial impact on fleet owners. Tractor aerodynamic requirements apply only to new 2011 and later model year tractors beginning in 2010 and low-rolling resistance tires are required on older tractors three years later. Trailer aerodynamic and tire requirements begin in 2010 only for new 2011 and later model trailers. Trailer owners have the flexibility to comply with the 2010 and older trailer requirements over a period of six years. In addition, the amendments will provide additional compliance flexibility by providing additional exemptions for storage trailers, local-haul trailers, fleets that infrequently travel in California, trailers involved in a transfer of ownership, and for open shoulder drive tires; by providing compliance delays for trailers with no currently available SmartWay verified technologies, for 2009 model year refrigerated van trailers, and for trailers that are configured differently than dry van trailers; and by extending the compliance dates for low rolling resistance tires (pre-2011 model year tractors would have one more year to comply, and pre-2011 model year trailers would have up to four additional years to comply).

Second, the regulation will ultimately result in a fuel savings from compliant trucks. An average of 7 to 10 percent fuel savings is expected on a compliant tractor-trailer combination, which translates to approximately \$4,000 to \$5,700 per year on a truck with average long-haul mileage (see the Initial Staff Report for the Tractor-Trailer GHG Regulation, page ES6). Depending on the ratio of tractors to trailers, the owner may be able to recover the initial cost in less than 1.5 years to several years. Thereafter, the owner will actually save money in fuel when operating the compliant tractor trailer, compared to a noncompliant tractor trailer. Third, some financial assistance and grant programs are available to assist tractor and trailer owners, such as the ARB Providing Loan Assistance for California Equipment Program and the U.S. EPA SmartWay Clean Diesel Fuel
Finance Program. Fourth, the rulemaking record for both the original regulation and the proposed amendments amply demonstrate that the initial compliance costs for the equipment required by the GHG regulation can be justified by the miles that both California and non-California based tractors and trailers travel in the state. In fact, ARB has estimated that in 2020, non-California based tractors will contribute 65.5 percent of the total vehicle miles traveled (VMT) on California highways. See Appendix C to Staff Report to the original Tractor-Trailer Greenhouse Gas Regulation. Fifth, the comment presumes that every out-ofstate affected tractor or trailer in the nation's fleet must install low-rolling resistance tires or aerodynamic equipment if they want to provide transportation services in California, which disregards the fact that trucking fleets utilize advanced technologies, such as global positioning systems, to track the locations of individual trucks on a real-time basis. Trucking fleets are therefore aware of the location of each of their vehicles, and can easily direct only compliant trucks into California. Furthermore, many trucks may never enter California because of its geographic location.

These considerations demonstrate that this regulation does not impose a burden on interstate commerce that clearly exceeds its benefits of protecting the health and welfare of California's residents from global warming, and would likely be held not to unconstitutionally burden interstate commerce under the *Pike* balancing test. This conclusion also necessarily follows because a state law violates the *Pike* balancing test only if it imposes a burden on interstate commerce that is "qualitatively or quantitatively different from that imposed on intrastate commerce." *National Elec. Mfrs. Ass'n v. Sorrell* (2001) 272 F.3d 104, 109, *National Solid Waste Management Ass'n v. Pine Belt Regional Solid Waste Management Authority* (2004) 389 F.3d 491, 502. The Tractor-Trailer GHG Regulation does neither – it establishes requirements that are equally applicable to both California-based and non-California based trucks and trailers operating in the state.

The comment attempts to create a distinction in regulatory burdens by stating that the regulation imposes the same compliance costs on "[interstate] motor carriers who only occasionally make trips into California," as compared to California based motor carriers (which the comment implies operate substantially more miles in the State). This argument is erroneous because it assumes that GHG emissions from out-of-state trucks and trailers are much less than the GHG emissions from California- based trucks and trailers, which is flatly contradicted by ARB's data. In fact, as previously discussed, ARB has estimated that in 2020, *non-California based tractors will contribute 65.5 percent of the total vehicle miles traveled (VMT) on California highways. See Appendix C to Staff Report to the original Tractor-Trailer Greenhouse Gas Regulation.* Furthermore, the regulation will likely impose greater initial compliance costs on California based tractors and trailers than on out-of-state tractors and trailers because the California based long-haul trucks will likely be operated in California only a fraction of the time compared to their out-of-state counterparts. Accordingly, because the regulation

does not impose larger burden on interstate commerce than it does on interstate commerce, it will not violate the *Pike* balancing test.

The commenter attempts to analogize this regulation to the cases of *Raymond Motor Trans., Inc. v. Rice* (1978) 434 U.S. 429, *Kassel v. Consolidated Freightways Corp.*, (1981) 450 U.S. 662, *Bibb v. Navajo Freight Lines* (1959) 359 U.S. 520, and *Southern Pacific Co. v. State of Arizona* (1945), 325 U.S. 761 (1945), but those cases are distinguishable. As discussed above in the Agency Response to Comment 14, the U.S. Supreme Court held in *Raymond Motor* that Wisconsin regulations limiting the length of trucks operated in that state violated the Commerce Clause under the *Pike v. Bruce Church, Inc.* balancing test because the record in that case contained *virtually no evidence* to demonstrate that its regulations contributed to highway safety, and because appellants had demonstrated the regulations imposed a substantial burden on interstate commerce. *Raymond Motor* at 444.

Kassel v. Consolidated Freightways Corp. involved a challenge to Iowa's law that prohibited trucks longer than 60 feet from operating on that state's highways. The Kassel Court found that law unconstitutional under the Pike v. Bruce Church, Inc. balancing test for essentially the same reasons the Raymond Motor Court struck down the Wisconsin regulations – Iowa did not present persuasive evidence that its law increased highway safety, and the motor carrier demonstrated that the law substantially burdened interstate commerce, by requiring trucking companies to either route trucks around the state, detach trailers and ship them separately, or use shorter tractor-trailer combinations. The Court also noted the Iowa law could result in decreased highway safety (by increasing the number of trucks traveling through the state), and also contained exemptions that evidenced Iowa's intent in passing the law was not to enhance highway safety, but rather to discourage interstate traffic.

In *Bibb v. Navajo Freight Lines, supra*, the Court invalidated an Illinois law that required trucks to use contour mud flaps. At least 45 other states allowed trucks to use conventional flat mud flaps, and Arkansas required trucks to use flat mud flaps. The Court noted that Illinois had not presented evidence that the contour flaps would offer any safety advantages over conventional flat flaps, and that the evidence actually indicated that safety would be compromised. The Court also found that the Illinois law significantly burdened interstate commerce especially since it conflicted with Arkansas' law, so trucks that operated in both Arkansas and Illinois would need to interchange mud flaps to comply with both laws.

In Southern Pacific Co. v. State of Arizona, 325 U.S. 761 (1945), the U.S. Supreme Court held that an Arizona law limiting the number of railroad cars in trains within the state violated the Commerce Clause. The Court found that the law would *increase* the number of train-related accidents as well as substantially burden interstate commerce by requiring trains to break up or reassemble railroad cars before entering and after leaving the State.

All of these cases are distinguishable. First, as discussed above in the Agency response to Comment 19, the record for the original rulemaking and the proposed amendments establishes that California enacted this regulation under its police powers to protect the economic well-being, public health, natural resources, and the environment of California from the harms resulting from emissions of GHGs. Second, unlike the laws at issue in Kassel, Raymond Motor, Bibb and Southern Pacific Co., which were found to have substantially burdened interstate commerce, the Tractor-Trailer GHG Regulation will ultimately benefit affected owners and operators by generating fuel savings from compliant trucks. An average of 7 to 10 percent fuel savings is expected on a compliant tractortrailer combination, which translates to approximately \$4,000 to \$5,700 per year on a truck with average long-haul mileage (see the Initial Staff Report for the Tractor-Trailer GHG regulation, page ES6). Depending on the ratio of tractors to trailers, the owner may be able to recover the initial cost in less than 1.5 years to several years. A court would therefore not likely find that the regulation substantially burdens interstate commerce. Fourth, as discussed in the Agency Response to Comment 14, the exemptions contained in the regulation serve to strengthen ARB's basis in enacting the regulation. Each and every one of the exemptions is based on circumstances where tractors and trailers are not likely to travel at highway speeds (where GHG emissions are most efficiently reduced), and each and every one of the exemptions is equally available to both California and non-California based trucks. The fact that California-based trucks will likely incur higher initial compliance costs than non-California based trucks further evidences that neither the regulation nor the proposed amendments was enacted to impermissibly discriminate against interstate commerce. Finally, unlike the mud flap law at issue in *Bibb*, neither the present Tractor-Trailer GHG regulation nor the proposed amendments establish requirements that are violative of the laws of any other state.

Finally, New Energy Co. of Indiana v. Limbach (1988) 486 U.S. 269 or United Haulers Ass'n., Inc. v. Onedia-Herkimer Solid Waste Management Authority (2007) 550 U.S. 330 do not support the commenter's proposition that the Tractor-Trailer GHG regulation unduly burdens interstate commerce. The New Energy Court invalidated an Indiana tax subsidy that facially discriminated against interstate commerce, and the United Hauler's Ass'n Court sustained a "flow control" ordinance that established uniform requirements for private waste haulers. Neither the Tractor-Trailer GHG regulation nor the proposed amendments discriminate against interstate commerce, and are therefore distinguishable from the New Energy Co. case. Instead, as fully highlighted above, the regulation and proposed amendments establish uniform requirements that are applicable to all affected tractors and trailers operating in the California, and under the reasoning of the United Hauler's Ass'n Court, are consistent with the provisions of the Commerce Clause of the U.S. Constitution.

C. Standards and Procedures

20.Comment: We believe it's critical that the regulatory standards be fixed and predictable so our purchasing and re-selling decisions can be made with some degree of certainty. We support the proposed revisions, and we commit to working with you in any manner possible to fully integrate our company's practices with your clean air and the greenhouse gas reduction rules. (Enterprise)

Agency Response: No change was made in response to this comment. The proposed amendments to the Tractor-Trailer GHG regulation would not substantially change the requirements of the regulation, but rather have been proposed to provide additional flexibility to fleets so that they may better comply with its requirements during these difficult economic times.

D. Economic Analysis

21.Comment: ARB's cost effectiveness analysis is not credible.

ARB staff's cost-effectiveness calculations have not reflected the reality of the costs that regulated entities are likely to face. Staff has offered an oversimplified analysis that distorts the economics of its proposal. The staff analysis posits that the average regulatee is a tractor and trailer that will travel 100,000 miles per year, achieve 8% to 11% in fuel savings and recover costs in less than two years. This analysis, however, ignores important facts.

 The ratio of trailers to tractors is, according to ARB, at least 2.5 to 1. Thus, a tractor that travels 100,000 miles will average only 40,000 miles per trailer per year. However, ARB data developed for the private fleet rule shows that the average California registered Class 8 tractor travels less than 40,000 miles per year. This means that the typical California registered trailer will travel no more than 16,000 miles per year. (CTA1)

Agency Response: No change was made in response to this comment. The commenter submitted an identical comment, to which ARB fully responded during the original Tractor-Trailer GHG regulation rulemaking. (See Comment 157 and Agency Response thereto in the original FSOR). Thus, this comment extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments.

• The rule will put California registered trucking companies at a competitive disadvantage vis-à-vis out-of-state trucking companies because it will take the lower mileage California companies significantly longer to recover their costs. The cost effectiveness

analysis must include an estimate of the number of California registered companies that will be forced out of business by the rule as well as the impact of that loss to the state. (CTA1)

Agency Response: No change was made in response to this comment. ARB first notes that the commenter submitted an identical comment, and that it fully responded to that comment during the original Tractor-Trailer GHG regulation rulemaking. (See Comment 132 and Agency Response thereto in the original FSOR). To the extent that the comment asserts that the proposed amendments will competitively disadvantage California registered trucking companies, ARB disagrees, since the amendments will provide affected fleets with additional compliance flexibility from the current regulation, and the amendments are uniformly available to all fleets regardless if they are registered within or without California.

 Companies that own trailers but no or few tractors will have no way of recovering their costs since any savings will only accrue to the tractor owner. Moreover, the actual presence and amount of savings will depend upon factors, such as speed at which a trailer is hauled, that are beyond a trailer owner's ability to use to base charges for the use of their equipment. (CTA1)

Agency Response: No change was made in response to this comment. The commenter submitted an identical comment to which ARB fully responded during the original Tractor-Trailer GHG regulation rulemaking, and this comment therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. ARB notes that it responded to this comment in the Final Statement of Reasons for the original Tractor-Trailer GHG regulation (see Comment 133 and Agency Response thereto).

The certified savings associated with SmartWay aerodynamic technologies assume a speed of 62.5 mph. However, Caltrans data for I-5, the main north-south truck route, show that the average speed for four and five axle truck and trailer combinations is less than 60 mph and the median speed is about 55 mph. Moreover, many tractors are governed to go no more than 55 mph, the posted speed limit for trucks. There is nothing in ARBs calculations that takes these facts into consideration. Instead, ARB staff dismisses trucking companies' claims that they observe the posted limits. (CTA1)

Agency Response: No change was made in response to this comment. The commenter submitted a similar comment to which ARB fully responded during the original Tractor-Trailer GHG regulation

rulemaking, and this comment therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. ARB notes that it responded to this comment in the Final Statement of Reasons for the original Tractor-Trailer GHG regulation (see Comments 155 and 158 and Agency Responses thereto).

• There is no test evidence from SmartWay that the individual aerodynamic benefits of SmartWay technologies can be simply added together. Thus, there is no scientific basis for ARB staff's projected savings percentages. (CTA1)

Agency Response: No change was made in response to this comment. The commenter submitted a similar comment to which ARB fully responded during the original Tractor-Trailer GHG regulation rulemaking, and this comment therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. ARB notes that it responded to this comment in the Final Statement of Reasons for the original Tractor-Trailer GHG regulation (see Comments 123 and 134 and Agency Responses thereto).

• There is no analysis of the costs and loss of efficiencies that will be borne by companies who would have to create and dispatch a separate fleet of compliant trailers for their California business. (CTA1)

Agency Response: No change was made in response to this comment. The commenter submitted an identical comment to which ARB fully responded during the original Tractor-Trailer GHG regulation rulemaking and this comment therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. However, ARB notes that it responded to similar comments in the Final Statement of Reasons for the original Tractor-Trailer GHG regulation (see Comment 131 and Agency Response thereto).

 SmartWay does not test for or certify safety. ARB staff has not signaled any recognition of the potential safety problem from side skirts that can fall off a truck and pose a significant danger to highway traffic and life and limb; or tires that may cause additional safety hazards due to softer compounds used for low rolling resistance technology. The insurance costs associated with having to install equipment that has no safety certification need to be taken into account. ARB must also factor in the public safety consequences of requiring the mounting of equipment whose safety has not been certified. (CTA1) **Agency Response:** No change was made in response to this comment. The provisions requiring trailers to be equipped with SmartWay approved aerodynamic equipment such as trailer side skirts were established in the rulemaking for the original Tractor-Trailer GHG regulation, and this comment therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. However, ARB notes that it responded to similar comments in the Final Statement of Reasons for the original Tractor-Trailer GHG regulation (see Comments 51, 98-102, and Agency Responses thereto). In addition, large fleets have already begun complying with the originally adopted Tractor-Trailer GHG regulation for almost two years. No concerns regarding the safety of trailer skirts have been reported to ARB to date from fleets, the California Trucking Association or any other association.

The provisions requiring tractors and trailers to be equipped with SmartWay approved low rolling resistance tires were also established in the rulemaking for the original Tractor-Trailer GHG regulation, and this comment therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. However, as ARB stated in its response to comment 97 in the Final Statement of Reasons for the original Tractor-Trailer GHG regulation, low rolling resistance tires have been researched and developed over several decades, tire manufacturers have improved both SmartWay verified tire casings and tread designs over the years, and current low rolling resistance tires may perform and last as long as conventional tires such that stopping distances and handling impacts are not any different from conventional tires. In fact, low rolling resistance tire casings, by design, are subjected to less heat and fatigue, thereby improving the likelihood that the casings of SmartWay tires will be good candidates for multiple retreading and thus may have a longer overall life than conventional tires.

 Despite a pledge to assess the cumulative impacts of other ARB programs that are or will affect the trucking industry, ARB staff has not included the cost impacts that will be attributable to the low-carbon fuel standard rule or including transportation under the proposed cap-andtrade program. The costs of these other ARB programs and regulations must be included in any cumulative impact analysis. (CTA1)

Agency Response: No change was made in response to this comment. The commenter submitted a similar comment to which ARB fully responded during the original Tractor-Trailer GHG regulation rulemaking, and this comment therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. Moreover, the programs to which the commenter refers were not adopted at the time of the original rulemaking's adoption. The current amendments do not add any new requirements but provide additional compliance flexibility to fleets. Additionally, although the low carbon fuel standard and the cap and trade regulation may raise the cost of fuel at the pump, compliance with this regulation would help fleets save money on fuel.

E. AB 32

22. Comment: What these heavy-duty rules don't accomplish is they don't reduce our dependence on petroleum. And they don't really do much for reducing greenhouse gases. Starting now with every regulation that this staff brings to you, including amendments to regulations that you've already adopted, not only should they report on the economic impacts, not only should they report on the health/SIP/criteria pollutant impacts, but also be reporting to you on what are the greenhouse gas impacts of these changes or this new regulation, as well as how does this play into our petroleum reduction goals that we've adopted as a state. (NGC)

Agency Response: No change was made in response to this comment, which extends beyond the scope of this rulemaking action. Staff disagrees that this regulation does not contribute to reducing GHG emissions and our dependence on petroleum. As reported in the October 2010 Staff Report, staff estimates the GHG benefits from implementing the Tractor-Trailer GHG regulation would be approximately 0.7 million metric tons of CO2-equivalent (MMT CO2e) in California by 2020, and approximately 4.8 MMT CO2e cumulatively statewide between 2010 and 2020. These GHG benefits would translate into potential cumulative diesel fuel savings between 2010 and 2020 of 500 million gallons in California (and 3 billion gallons nationwide).

23.Comment: AB 32 needs to be repealed – at least until our state can get on its economic feet again. (Erik K.)

Just give you a few more years to "regulate" the abhorrent carbon dioxide emissions that will most undoubtedly result in our complete demise all by itself without your valuable regulation. (Delta)

AB 32: If this is enacted with all of the new regulations regarding diesel fueled farm equipment and trucks, will the last person leaving this state please turn out the lights. Where has common sense gone? (Samardich)

Agency Response: No change was made in response to these comments, which are beyond the scope of this rulemaking. However, the proposed amendments were designed to help fleets comply with the regulation and

reduce the costs of compliance (see Agency Responses to Comments 1, 3, 5, and 7)

F. Financial Assistance/Incentives

- **24.Comment:** The Air District is requesting that the ARB consider the following recommendations, should the Board decide to proceed with the proposed amendments to the regulations.
 - Implementation of the recommendations from the advisory committee headed by ARB Board member, Sandra Berg, by streamlining State grants programs that would make it possible to mitigate any increased emissions that may occur based on the proposed rule amendments in the event of improved economic activity. This would allow the Air District to continue to address its health risk concerns via a simplified and less cumbersome State grant processes. This new streamlined process would retrofit and replace on- and off-road vehicles during the period before the proposed start dates of regulatory mandates.
 - Support air districts in efforts to seek streamlined legislation and extension of State grants programs, through the year 2024. This would allow air districts to continue to achieve emissions reductions over and above what is required by the proposed amendments to the regulations.
 - Allow increased participation by medium sized fleets in State grants programs to address reducing the emissions from on-road fleets in the 3 to 20 vehicle size range.
 - Providing additional funding and larger percentages to loan guarantee programs associated with equipment replacement to increase grant program participation. The economic downturn has had a severe impact on the ability of those affected by the proposed regulations to obtain credit or loans to replace equipment. (BAAQMD)

Agency Response: These comments are beyond the scope of this rulemaking action because they do not raise any objections or recommendations directed to the proposed amendments. Moreover, staff believes the majority of these comments pertain more to the Truck and Bus regulation and the Drayage regulation. That being said, specific changes to ARB funding programs are considered separately from the regulatory process. As described in Chapter VII, Section D of the October 2010 Staff Report: Initial Statement of Reasons for Proposed Rulemaking, funding program changes were planned to occur after Board action and direction on the regulatory changes. For example, the most recent modifications to the Goods Movement Emission Reduction Program and Carl Moyer Program incorporate changes resulting from the regulatory amendments. These changes were implemented after funding workshops in January and Incentive Program Advisory Group meetings to ensure that public comments were considered. In general, the extended compliance deadlines for

many trucks enable greater potential funding opportunities by allowing more time for applicants to apply for funding before regulatory compliance dates. In addition, February 2011 modifications to ARB's Providing Loan Assistance for California Equipment (PLACE) program, which is implemented through the California Capital Access Program (CalCAP), expanded eligibility criteria to allow more trucking fleets to participate in the program.

As noted in comments above, the Incentive Program Advisory Group, led by ARB Board Member Sandra Berg, provides a forum for discussing policy level issues relating to the development and ongoing implementation of the ARB incentive programs. In recent years, California's portfolio of incentive programs has expanded beyond the Carl Moyer Program and Lower-Emission School Bus Program to include the Goods Movement Emission Reduction Program, the AB 118 programs, the PLACE program, and other locally run air district programs, among others. We anticipate that the group will continue to provide a useful venue for policy level coordination among agencies and programs. All interested stakeholders are invited and encouraged to participate. ARB's funding program staff will continue to work together to implement near term and long term solutions identified by the Incentive Program Advisory Group, the California Air Pollution Control Officers Association (CAPCOA) Grants Committee, and other stakeholders.

25.Comment: I'd like to request that your staff dedicate ample time to reevaluate the effectiveness of the Cal Cap Program, which provides a tremendous amount of relief to fleets that are affected by these rules as well that may have already missed their window to qualify for grant programs. (Seivright)

Agency Response: These comments are beyond the scope of this rulemaking action because they do not raise any objections or recommendations directed to the proposed amendments. However, ARB offers the Providing Loan Assistance for California Equipment (PLACE) program for new, used and retrofitted aerodynamic equipment that has been SmartWay certified or verified. The program targets borrowers that do not fit within conventional loan standards and are "nearly bankable," meaning they fall just outside lenders' standard loan criteria or are unable to obtain a loan due to today's more conservative credit climate. The funding is available through California Capital Access Program (CALCAP) participating lenders located statewide. Qualified borrowers must be small businesses (less than 100 employees, less than \$10 million annual revenues), have no more than 20 heavy-duty tractors, and the company must have their primary economic effect in California (51% or more of their total annual mileage generated in California). Additional information about the PLACE program is available through the ARB website http://www.arb.ca.gov/ba/loan/on-road/on-road.htm. In addition, ARB staff continues to evaluate the effectiveness of all programs that provide financial opportunities to fleets. As regulations are developed, amended, and implemented, ARB staff develops guidelines for each of the

funding programs and evaluates programs continually. If necessary, ARB staff makes recommended changes to program guidelines.

G. Outreach

26.Comment: I'd like to request that your staff continue endeavors to implement outreach as diligently as they have done for the modifications. (Seivright)

I also want to acknowledge the work of TRAC and the outreach that ARB has committed itself to do on diesel rules. I think these efforts want to continue to support those and ensure they continue. (CCA)

Agency Response: ARB is committed to providing outreach to stakeholders within the trucking industry. Prior to the Board Hearing, numerous workshops and meetings were held to provide information and solicit comments from affected stakeholders regarding the proposed amendments. An overview of all these outreach efforts is provided in section I of the Staff Report for this rulemaking. Since the time of the Board Hearing, outreach efforts including meetings, presentations, training sessions, fact sheets, post cards, posters and the Truck Stop web-based portal have been conducted or developed to inform stakeholders about the regulation and the proposed regulatory amendments and solicit their comments. Part of the outreach effort has also included conducting the Truck Regulations Advisory Committee (TRAC) meetings, which include a Greenhouse Gas Subcommittee dedicated to addressing issues concerning the Tractor-Trailer Greenhouse Gas regulation (GHG subcommittee). The GHG subcommittee is comprised of ARB staff and representative stakeholders (associations, large fleets, small fleets, trailer manufacturers, tractor manufacturers, aerodynamic technology manufacturers, low rolling resistance tire manufacturers, leasing companies, shippers, and staff with the U.S. EPA SmartWay Program); the subcommittee has reviewed and commented on outreach materials and strategies, provided feedback on regulatory issues and technical issues.

H. Exemptions and Temporary Passes

Short-Haul and Local-Haul Exemptions

27.Comment: I would ask that the Board change the radius for 53 foot trailers and greater that is proposed in the GHG regulation. I would ask this change parallel the DOT standard that is a 150 mile radius and not as stated a 100 mile radius. Many carriers have excess trailing equipment meaning they have three trailers for one power unit. These "mobile" warehouse trailers sometimes move only two or three times a month. For a short haul/regional

carrier, there is little or no payback on the aerodynamic devices. Please give this serious consideration. (Yandell1)

Agency Response: No change to the defined operating radius for local-haul trailers was made in response to this comment since the comment extends beyond the scope of the amendments that the Board approved on December 17, 2010. The comment is substantially similar to issues that ARB extensively addressed in the Final Statement of Reasons for the 2008 rulemaking (see Agency Responses to Comments 22, 23, and 24 in the 2008 FSOR). The Board also considered and extensively addressed concerns to expand the operating radius to 150 miles during the December 2010 public hearing when it considered the adoption of the proposed amendments to the regulation. Further, the local-haul exemption radius of 100 miles is consistent with industry practice. For example, some insurance companies use 100 miles as the local-haul operating radius when setting insurance premiums for commercial trucks. Based on these considerations, ARB does not believe that expanding the operating radius from 100 miles to 150 miles is warranted.

Regarding trailers that operate as "mobile warehouses", ARB suggests the commenter consider applying for a storage trailer exemption. These trailers are exempt from the aerodynamic technology and low-rolling resistance tire requirements. However, as registered storage trailers they are not allowed to haul freight on California highways. They are permitted to be moved empty from storage location to storage location. In addition, on the occasion that a loaded storage trailer must be moved to another storage location, the owner can apply for a relocation pass. Up to four relocation passes may be granted per storage trailer per year. The commenter might also consider registering one or more of the tractors that pull these trailers as short-haul tractors. Registered short-haul tractors and the trailers they pull are exempt from both the aerodynamic technology and low-rolling resistance tire requirements. However, a registered short-haul tractor may not travel more than 50,000 miles per year.

28. Comment: Expanding the local-haul exemption to a 150 mile radius would help to address situations where the use of aerodynamic technologies is not cost effective. As stated in the FSOR, the primary purpose of allowing a short-haul or local-haul exemption is to exempt vehicles that will only marginally benefit from aerodynamic equipment, where the use of them will not be cost effective. According to a recent study published by the Transportation Research Board,

"Caution is necessary in the use of these fuel consumption estimates since they apply to a 60 to 65 mph average speed. If these trucks are used principally in a pickup/delivery duty where average speed is about 40 mph, the fuel consumption benefit of the aerodynamic component will shrink by 70 percent. At speeds below 40 mph, the benefit becomes insignificant."

Using Bakersfield as a base location, trucks traveling to Los Angeles will reach the most congested areas just beyond the limits of the current localhaul exemption. Trucks traveling beyond this limit will need to be equipped with aerodynamic technologies even though the benefits will be insignificant. There are also trucking companies throughout the State that operate primarily at lower speeds on non-interstate highways and other roadways that will only accrue marginal benefits from the current aerodynamic requirements. (ATA1, ATA2)

The mileage restrictions for the local-haul exemption should be less restrictive. For example, the trip between Los Angeles and Bakersfield is 115 miles, but features only 25 miles at freeway speeds since trucks can only go 35 miles per hour over the Grapevine before descending into or emerging from congested Los Angeles traffic. A 100 mile radius would close off Bakersfield to all but side skirt-equipped trucks despite the fact that only a small proportion of travel would occur at freeway speeds. (CTA1, CTA2)

Agency Response: No change to the defined operating radius for local-haul trailers was made in response to these comments. The comments are substantially similar to issues that the Board extensively addressed in the Final Statement of Reasons for the 2008 rulemaking (see Agency Responses to Comments 22 and 45 through 50). The Board also considered and extensively addressed requests to expand the operating radius to 150 miles during the December 2010 public hearing when it considered the adoption of the proposed amendments to the regulation. Based on these considerations, ARB staff does not believe that the suggested expansion of the operating radius for local-haul trailers from 100 miles to 150 miles is warranted, and furthermore, the comment extends beyond the scope of the amendments that the Board approved on December 17, 2010.

29.Comment: Proposed mileage and territory exemption standards under the GHG regulation should be less restrictive.

The mileage restrictions appear to be based upon an assumption that trucks and trailers work five, ten hour days. In fact, trucks and trailers commonly work seven-day weeks with service hours reaching up to 20 hours per day, when multiple drivers are used. For example, grocery trucks regularly total 150,000 miles per year within a 150 mile radius.

An extremely common truck trip is between Los Angeles and Bakersfield, a 115 mile trip that features only 25 miles at freeway speeds since trucks can only go 35 mph over the Grapevine before descending into or emerging from congested Los Angeles traffic. A 100 mile radius would close off Bakersfield

to all but sideskirt-equipped trucks despite the fact that only a small proportion of travel would occur at freeway speeds. For example, a truck making a round trip to Bakersfield only once each day of the year would accrue over 80,000 annual miles, but spend less than 25 percent of its mileage at freeway speeds.

It is not clear that staff conducted any interviews with California based carriers who typically engage in "short-haul" with 53 foot or greater trailers. Many California fleets have speed data that clearly indicates average speeds are well below 50 mph. In fact many fleets have governed tractors where optimal 62 mph will never be achieved. (CTA1, CTA2)

Agency Response: No change was made in response to this comment. The commenter submitted similar comments to which ARB fully responded during the original Tractor-Trailer GHG regulation rulemaking, and these comments therefore extend beyond the scope of this rulemaking action because they do not raise any objections or recommendations directed to the proposed amendments. ARB notes that it responded to these comments in the Final Statement of Reasons for the original Tractor-Trailer GHG Regulation (see Comments 22, 23, 24, and 153 and Agency Responses thereto).

30.Comment: CARB's justification for the local- and short-haul exemptions in the Tractor-Trailer GHG Regulation is fundamentally flawed.

"CARB has simply ignored the fact that the tens of thousands of in-state heavyduty trucks being exempted from the Regulation, like their long-haul counterparts, for the most part also are not using the technologies that improve fuel efficiency. Further, a study performed for CARB placed accountability for only 30 percent of annual heavy-duty vehicle miles traveled in California on outof-state trucks. See Assessment of Out-of State Heavy Duty Truck Activity Trends in California, UC Davis, Institute of Transportation Studies (2008). Obviously, any model justifying this Regulation must account for the in-state vehicles that are responsible for the bulk of the annual vehicle miles traveled inside California." [OOIDA]

Agency Response: No change was made in response to this comment. The provisions exempting local and short-haul tractors and trailers were established in the rulemaking action for the original Tractor-Trailer GHG regulation, and this comment therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. Nevertheless, ARB wishes to clarify that it clearly set forth its rationale for excluding local and short-haul tractors and trailers in the rulemaking record accompanying the original regulation. In the Agency Response to Comment 22, Final Statement of Reasons for Adoption of the Regulation to Reduce Greenhouse Gas Emissions from Heavy-Duty Vehicles, ARB explained

that "[s]ince aerodynamic equipment functions optimally at highway speeds, the regulation contains exemptions for trucks that operate primarily within a local area with mostly urban driving, or for trucks with low annual mileage. These exempted trucks, defined as local-haul or short-haul trucks, must operate exclusively within a 100 mile radius from their local haul base or drive less than 50,000 miles per year, respectively." ARB therefore exempted local- and short-haul tractors and trailers because it determined that such vehicles would not achieve similar reductions in GHG as those resulting from long-haul tractors and trailers equipped with the required aerodynamic technologies – this rationale did not consider the in-state versus out-of-state proportion of short and local haul tractors and trailers.

31.Comment: CARB bases the local and short-haul exemptions on its assumptions that such trucks "do not operate a sufficient amount of time at highway speeds to justify being required to meet the same stringent requirements placed on motor carriers operating in interstate commerce. Staff Report: Initial Statement of Reasons for Proposed Rulemaking. Proposed Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation, and the Tractor-Trailer Greenhouse Gas Regulation (Oct, 2010) ("SOR"), Appendix F, at p.1. While it is true that 'the technologies required by the regulation are most effective at highway speeds. ...,' there is no concrete evidence, as CARB contends, that the exempted tractors and trailers have 'limited operation at highway speeds. . .' Id. So far as OOIDA is aware, CARB did not conduct any studies to demonstrate that local or short-haul tractors are not operating at highway speeds. That assumption was based upon pure conjecture about the nature of goods movement within California. But California has many highways with truck-only 55 mile-per-hour speed limits, located in urban, suburban, and rural areas. There is no logical reason to believe that these highways are not used on a regular basis by those same motor carriers operating heavy-duty vehicles driving less than 50,000 miles per year who qualify for the short-haul exemption as well as those going short distances from their urban local bases. [OOIDA]

Agency Response: No change was made in response to this comment. The Agency Responses to Comments 27 through 30 above are incorporated by reference herein. The provisions exempting local- and short-haul tractors and trailers were established in the rulemaking action for the original Tractor-Trailer GHG regulation, and this comment therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments.

32. Comment: Finally, to the extent that the short and local-haul exemptions are also justified by their "limited overall annual mileage" (see ISOR, Appendix F, at p.1), the California highway mileage accrued by exempt trucks will be higher for these exempted operations than for interstate long-haul motor carriers who put on relatively few miles in California. A cursory examination of that IRP data for 28 geographically scattered states shows that, with the exception of vehicles

from states that border or are close to California, the average mileage in California is quite low and gets lower as the base state gets further away.

Alabama	2,891	Arizona	32,143	California	42,243	Delaware	910
Georgia	2,388	Idaho	6,658	Iowa	1,956	Illinois	2,985
Kentucky	980	Maryland	424	Mass.	231	Michigan	2,016
Montana	5,184	Mississippi	4,718	Missouri	3,323	Nebraska	3,379
Nevada	8,568	New Jersey	2,160	New Mexico	4,446	New York	944
N. Carolina	2,177	Oregon	15,404	Ohio	2,005	Oklahoma	7,386
S. Dakota	3,344	Tennessee	3,092	Vermont	2,496	Washington	15,041

Source: IRP Estimated mileage/distance charts from each jurisdiction's respective motor carrier licensing division.

For all these reasons, the stated justifications for focusing nearly exclusively on long-haul motor carriers, while exempting many in-state motor carriers, simply do not support CARB's actions. (OOIDA)

Agency Response: No change was made in response to this comment. The Agency Response to Comment 31 is incorporated by reference herein. The provisions exempting local and short-haul tractors and trailers were established in the rulemaking action for the original Tractor-Trailer GHG regulation, and this comment therefore extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments.

Relocation Pass

33. Comment: While XTRA is pleased the Board has decided to propose the relocation pass concept, XTRA believes the three day effective period of the relocation pass should be modified. As currently drafted, the three day period will in many circumstances make it logistically impossible to coordinate the movement of freight on relocated trailers. Given the logistical difficulty of coordinating freight transportation in such a limited window, we believe that in many cases fleet owners will have no choice but to relocate empty trailers into and out of California. This is an unintended inefficiency which is contrary to the stated goal of the Regulation.

As a solution, we suggest that the Board modify the amended Regulation to permit a fleet owner to specify a broader range of days during which a relocation trip might occur. We suggest that at the time the fleet owner applies for a relocation pass, the Board permit the fleet owner to designate a period of 30 days during which the relocation trip could occur. This would give the fleet owner more flexibility to coordinate the freight and transportation logistics associated with the relocation. The Board could then issue the relocation pass, contingent on the fleet owner providing the Board with formal notice of the initiation of the relocation trip within the 30 day period via e-mail, the Board's website, or otherwise. Upon providing such notice, the fleet owner would then have a certain number of days to complete the relocation trip.

We also suggest that the time period for completing a relocation trip be lengthened to a period of at least five days from the commencement of the relocation trip. For the reasons specified above, in most cases a fleet owner will not be able to predict the three day window in which a relocation trip can be completed. The multiple variables that can affect the timing of an individual trip, not the least of which are concerns over coordinating logistics between a motor carrier and shipper, make the three day window impractical. A five day window would give the fleet owner more flexibility to deal with unanticipated delays and circumstances. (XTRA)

Agency Response: ARB agrees with the commenter that more flexibility should be afforded relocation pass applicants when establishing the date when relocation travel is to begin. In response, ARB has modified the regulatory language as reflected in the 15-day Notice.

Sections 95305(f)(4) and (f)(8)(A) have been modified to provide the owner more flexibility in reporting the date relocation travel would begin. Specifically, to apply for a relocation pass, the owner would now provide the "anticipated" date the trailer will begin relocation travel, rather than the date on which the trailer actually begins travel. (95305(f)(4)(E)). If the relocation pass is approved, the owner would now "confirm" the date of travel prior to the Executive Officer issuing the relocation pass. (95305(f)(8)(A)). Confirmation may occur electronically via email or the TRUCRS database. These modifications would allow owners to obtain relocation pass approval well in advance of travel, and still afford them the flexibility to adjust the effective dates of the pass due to unforeseen delays and circumstances. ARB believes these changes have an advantage over the suggestion proposed by the commenter in that the confirmed travel date is not limited to a 30-day window.

Sections 95305(f)(1), (f)(2), and (f)(8) have been modified to extend the maximum applicable time period of a relocation pass for trailers from three to five consecutive days.

34. Comment: XTRA is concerned that the current amendments do not take into account the need for relocating non-compliant trailers or the need of equipment lessors to utilize the relocation pass exemption. Trailer lessors are not generally deemed owners of trailers regulated under the Regulation, so long as they properly notify their lessees of the requirements of the Regulation. In doing so, the Regulation takes into account the unique position held by equipment lessors in the marketplace and the need to provide clarity as to the lessee operator's ultimate responsibility for operating leased equipment in compliance with the Regulation. In order to utilize the

relocation pass exemption, trailer lessors would be required to register a portion of their fleet as a storage fleet or their facilities as local haul bases. As drafted, the relocation pass exemption will require a lessor to make multiple periodic registrations of facilities and equipment that do not ultimately help the Board achieve its regulatory goals. We believe that granting the Executive Officer authority similar to that granted in the non-compliant tractor context to address the need for relocation pass provision, similar to the Board include a non-compliant trailer relocation pass provision, similar to the non-compliant tractor pass provision, which will also provide flexibility for lessors to relocate non-compliant trailers. This exemption should be permanent, so as to allow lessors to have the ability to add or remove trailers to their California inventory of local haul or storage use trailers following full implementation of the Regulation. (XTRA)

Agency Response: ARB agrees with the commenter that more flexibility should be afforded trailer lessors to allow the relocation of non-compliant trailers. In response, ARB has modified the regulatory language as reflected in the 15-day Notice.

The commenter suggests creating a non-compliant trailer relocation pass provision, similar to the non-compliant tractor pass provision, which would provide flexibility for lessors to relocate non-compliant trailers. ARB believes such an approach is too limited in its scope and applicability and therefore proposes to add a new section 95305(I), *Tractor-Trailer Exemption for Tractors Pulling Empty Trailers.* This new section would specify that a HD tractor and the 53-foot or longer box-type trailer it is pulling are exempt from the aerodynamic technology and low-rolling resistance tire requirements if the trailer is empty and the driver, upon request, allows authorized enforcement personnel to directly view inside the trailer to verify it is empty.

The regulation currently allows owners to relocate empty local-haul and storage trailers to a new local-haul base or storage location (95305(c)(1)(B), 95305(c)(2)(B), 95305(e)(1)(A)). Nationwide trailer leasing companies supported such exemptions since the exemptions accommodate their general business practice of delivering empty trailers to local-haul bases and storage locations. However, as the commenter stated, in order to obtain such exemptions, owners currently need to satisfy registration and de-registration requirements that can be resource intensive for both large leasing companies and ARB staff that process these requests. In order to streamline the issuance and tracking of these exemptions, the proposed requirements in section 95305(I) would remove the registration requirements for empty local-haul and storage trailers that are relocated to new local-haul bases or storage locations, so that trailer leasing companies can deliver their trailers that meet the local-haul or short haul exemption requirements to their customers without the requirement to register them. Once these trailers are delivered, the

lessee would be required to register the trailer as a local-haul or storage trailer via TRUCRS, and would also be responsible for de-registration before the trailer is returned to the lessor. ARB believes allowing the movement of non-compliant empty trailers also allows leasing companies to move empty trailers between their bases as demand dictates, which is common practice. Other than leasing companies, ARB staff does not believe many trailer owners will utilize this exemption, since their businesses are based on the efficient movement of freight. Trailer manufacturers often deliver their trailers loaded with freight, but they may utilize this exemption for local trailer deliveries.

Non-compliant Trailer Pass

35. Comment: XTRA also recommends that the non-compliant trailer pass exemption provide the EO with a tool to address other unique circumstances that may arise with respect to regulated trailers that warrant a specific and limited exemption but do not otherwise neatly fit in the exemptions already included in the regulation. By empowering the EO with general authority to grant a Non-compliant Trailer Pass exemption in those circumstances that the EO deems appropriate to warrant a tailored exemption, the Board would avoid having to modify the existing regulation to address unintended consequences for very specific scenarios that can and should not be dealt with in the broader context of the regulation. We believe it advisable for the EO to have general authority to make decisions, without having to seek new Board approval, to provide exemptions from the regulations based on investigation and an understanding of particular circumstances by the EO. (XTRA)

Agency Response: ARB agrees with the commenter that more flexibility should be afforded relocation pass applicants when establishing the date relocation travel is to begin. In response, ARB has modified the regulatory language as reflected in the 15-day Notice, as follows.

Sections 95305(f)(4) and (f)(8)(A) have been modified to provide the owner more flexibility in reporting the date when relocation travel is to begin. Specifically, to apply for a relocation pass, the owner would now provide the "anticipated" date the trailer will begin relocation travel, rather than the date on which the trailer actually begins travel. (95305(f)(4)(E)). If the relocation pass is approved, the owner would now "confirm" the date of travel prior to the Executive Officer issuing the relocation pass. (95305(f)(8)(A)). Confirmation may occur electronically via email or the TRUCRS database. These modifications would allow owners to obtain relocation pass approval well in advance of travel, and still afford them the flexibility to adjust the effective dates of the pass due to unforeseen delays and circumstances. ARB believes these changes have an advantage over the suggestion proposed by the commenter in that the confirmed travel date is not limited to a 30-day window.

Sections 95305(f)(1), (f)(2), and (f)(8) have been modified to extend the maximum applicable time period of a relocation pass for trailers from three to five consecutive days.

Although ARB agrees that providing the Executive Officer broad authority to issue non-compliant trailer pass exemptions based on circumstances that are not expressly specified in either the current regulation or the proposed amendments would be beneficial, it believes that the Office of Administrative Law would likely determine such a provision violates the consistency standard of California Government Code section 11349.1(a). Specifically, allowing the Executive Officer to issue an exemption "for another purpose which the Executive Officer deems appropriate prior to granting the Noncompliant Trailer Relocation Pass," would likely not pass OAL's muster, as it fails to sufficiently specify the criteria the Executive Officer to base his decisions upon the criteria "good engineering or scientific judgment", which OAL disapproved in the Board's adoption of the Small Containers of Automotive Refrigerant regulation,

http://www.arb.ca.gov/regact/2009/hfc09/oal%20disapproval.pdf .

I. Technology

<u>Tires</u>

36. Comment: We would like to ensure that fleets do not have to prematurely change out tractor tires in order to comply with the greenhouse gas regulation. Due to the fact that SmartWay verified fuel efficient retreads are not currently available and SmartWay verified open shoulder tires have limited availability, fleets are not able to purchase the compliant technologies they need. Ideally, the situation changes sometime next year, but this will still leave fleets with slightly more than a year to wear out noncompliant tires. This is not enough time, so we ask that you extend the deadline to 2014 for pre-2011 tractors and for those needing open shoulder tires. At the very least, we ask that you monitor the status of these technologies and ensure they're available well ahead of the tire deadlines. (ATA1, ATA2)

Agency Response: See Agency Responses to Comments 38 and 39 below.

37.Comment: With SmartWay, the retread program is still under development. We ask that staff continue to be involved and in touch as this proceeds,

because, while we are all optimistic, as with other multi-stakeholder programs one never knows. (RMA)

Agency Response: ARB appreciates the Rubber Manufacturers Association's willingness to work with ARB staff, U.S. EPA and other stakeholders toward the development of a SmartWay verified retread. ARB staff continues to participate and stay in contact with the tire working group responsible for the development of SmartWay verified retread tire specifications.

38. Comment: Under the Tractor-Trailer Greenhouse Gas regulation, pre-2011 tractors must use SmartWay verified tires beginning January 1, 2012. CARB staff is proposing to extend this start date by one year to allow time for: (1) non-SmartWay tires to wear out and be replaced and (2) the development of SmartWay verified retreads. ATA believes an additional two years, rather than one, is needed to ensure that fleets will not have to prematurely change out and dispose of their non-SmartWay tractor tires and retreads.

CARB staff has indicated that under the proposed deadline, fleets will still have the leeway to move non-compliant tires or retreads from tractors to trailers. Moving a tire or retread that is well into its useful life is not cost effective nor does it provide environmental benefits. In many instances, the remaining life would not justify the cost of a short-term move; forcing fleets to either prematurely retread these tires or, if the casing is worn, add them to the scrap tire population. (ATA1, ATA2)

Agency Response: No change was made in response to this comment. ARB staff believes that the proposed one year extension of the tire compliance deadline for pre-2011 tractors from January 1, 2012 to January 1, 2013 would provide sufficient time for non-SmartWay tires to wear out, thereby avoiding premature replacement. Moreover, SmartWay retread tire specifications are currently being developed by the U.S. EPA in cooperation with retread tire manufacturers, and are expected to be finalized within this calendar year. Thus, ARB believes that SmartWay verified retread tires will become available before the January 1, 2013 deadline and extending the compliance deadline an additional year to comply with the low rolling resistance tire requirements is not necessary.

39. Comment: Open shoulder tires are used by fleets for added traction. They tend to be used in regional haul situations where roads may be more challenging or where adverse conditions are more common. An exemption for the use of open shoulder tires on 2011 and subsequent model year tractors is currently proposed until January 1, 2013. ATA believes an additional year is warranted to allow manufacturers time to verify additional open shoulder tires through the SmartWay program. As noted in the Staff Report, only three open shoulder drive tire models are currently verified under

the SmartWay program. Of these, one is manufactured in Europe with limited availability in the United States while another has only recently gone through the verification process. In addition, two of these tires may no longer qualify for future verification due to changes in the SmartWay verification procedure. (ATA1)

Agency Response: No change was made in response to this comment. As, noted in the Staff Report (ISOR, Appendix F, page F-6), ARB is currently aware of at least three open shoulder drive tire models that are SmartWay verified. ARB believes that more open shoulder drive tire models will be verified by the January 1, 2013 deadline and therefore it is not necessary to extend the deadline for using open shoulder drive tires that are not SmartWay verified. Nevertheless, ARB will continue to monitor the status of the development and SmartWay verification of retread and open shoulder drive tire models to ensure that they become available for fleets to use before the applicable regulatory deadlines.

Belly Boxes:

40. Comment: Belly box trailers commonly used in the moving and household goods storage industry already provide significant increased aerodynamic advantages and present the same challenges as drop-frame trailers (which are exempt from the regulation) to modify to make them more aerodynamic. Consider exempting belly box trailers from the regulation. (CFC1, CFC2)

Request that the greenhouse gas regulation exempt trailers with belly boxes. (CMSA)

Agency Response: No change was made in response to this comment. Drop-frame trailers were exempted from the regulation because SmartWay designated aerodynamic technologies and low-rolling resistance tire models are not designed for the low-deck height, smaller diameter wheels, and larger rear doors of drop-frame trailers. Belly box trailers are standard dry van trailers with belly boxes attached to their undersides. As such, belly box trailers are compatible with all verified rear trailer fairing technologies designed for standard dry-van trailers with swing doors. In addition, since belly boxes can vary greatly in size, the impact on the aerodynamic efficiency of the trailer is highly variable. Wind tunnel test data submitted to ARB staff of a typical tractor-trailer combination using a SmartWay designated tractor and trailer with a large belly box has shown that the belly box provides some aerodynamic benefit over the standard dry-van, but the benefit is less than the 5% benefit in fuel savings required by the regulation. Staff assumes that a smaller belly box would provide an even smaller fuel economy benefit.

Owners of trailers with belly boxes have the following options for compliance with the regulation. First, a trailer owner can install a modified SmartWay

designated aerodynamic technology that has been modified to accommodate the belly box, provided the modification does not significantly increase the aerodynamic drag of the technology, and the owner has prior approval by the Executive Officer before installation. (95303(b)(1)(B)2.b, 95303(b)(2)(B)2.b, and 95303(b)(3)(C)2.b).

The second option for compliance is the owner can apply for a trailer aerodynamic equipment delay (section 95305(i)), which would provide the owner with a limited term exemption from the aerodynamic technology requirements of the regulation for trailers that are configured such that none of the SmartWay designated aerodynamic technologies can be effectively installed on them. The exemption requires Executive Officer approval, and must be renewed annually.

IV. SUMMARY OF COMMENTS MADE DURING THE 15-DAY COMMENT PERIOD AND AGENCY RESPONSES

Written comments were received during the 15-day comment period in response to the August 4, 2011 notice of public availability of modified text and availability of additional documents. Listed below are the organizations and individuals that provided comments pertinent to the changes proposed during the 15-day comment period.

Commenter	Affiliation	Abbreviation
Lund, Kenneth	Allen Lund Company	Lund
Shimoda, Chris	California Trucking Association	CTA3
Yandell, John	Yandell Truckaway	Yandell3

Written Comments Received During the 15-day Period

Set forth below is a summary of each comment regarding the regulatory action as well as the agency response, including the reasons for not making a change to the regulation. Comments not involving objections or recommendations relevant to the modified regulatory text in this rulemaking are not included.

1. **Comment:** I would again ask that the Board consider increasing the Short Haul Exemption to mirror the DOT to 150 mile radius versus the 100 mile radius as stated and/or consider that trailers hauled by tractors that return to their local haul base within a 24 hour period are exempt from the rule. As a short haul/regional with excess trailing equipment (3 trailers for every 1 tractor), there is no return on investment or fuel savings due to the limited miles hauled. Our tracking devices will support that our average miles per hour per day are approximately 45 mph. (Yandell3)

Agency Response: No change to the defined operating radius for local-haul trailers was made in response to this comment. This comment extends beyond the scope of this rulemaking action because it does not raise any objections or recommendations directed to the proposed amendments. Staff is assuming that this comment applies to the local-haul exemption, not the short-haul exemption, since the local-haul exemption establishes an operating radius of 100 miles while the short-haul exemption establishes an annual miles traveled limit of 50,000 miles. Regarding the request to increase the local-haul tractor or local-haul trailer operating radius from 100 to 150 miles, see Agency Responses to Comments 27 and 28 in the summary of comments made during the 45-day period.

Regarding the request to define a local-haul tractor or trailer as one that returns to its registered local-haul base within a 24 hour period, ARB does not believe this to be an appropriate criterion upon which to define local operation. For example, a tractor-trailer combination located in Bakersfield, California could travel from Bakersfield to Sacramento and back in a 10 hour period, traveling in excess of 560 miles round trip (280 miles each way), most of that travel driven at highway speeds at which benefits would be gained from use of aerodynamic technologies and low rolling resistance tires.

The comment that there is no return on investment because of excess trailing equipment was addressed in the FSOR for the original Tractor-Trailer GHG regulation (see Agency Response to Comment 118). As stated in the earlier FSOR, assuming a trailer-to-tractor ratio of 2.5 to one, a tractor-trailer owner would be able to recover the initial costs of compliance in less than 1.5 years, while an owner who had more trailers relative to tractors would require additional time for the payback of the initial costs. The FSOR for the original Tractor-Trailer GHG regulation also addressed the comment that there is no return on investment because the commenter's tractors travel an average speed of 45 miles per hour per day (See Agency Response to Comment 48). As stated, tractor-trailers that travel a lower percentage of their time at highway speeds will realize a return on their investment, but it will take longer to recoup their costs.

2. Comment: This GHG rule for the 53' trailers coupled with simultaneously complying with the Truck Bus Rule is impossible in today's economic climate. Your amending this regulation is imperative for our continued operation. (Yandell3)

Agency Response: See Agency Response to Comment 7 in the summary of comments made during the 45-day period.

3. Comment: The provisions to extend the parties, beyond trucking companies/carriers, which are fined when a 53 foot trailer is not in compliance with SmartWay is unfair, unworkable, and will certainly result in increased transportation costs. Under the new proposal anyone involved in the transaction including the carrier, the driver, the shipper, the receiver, the transportation broker, and the

warehouse will be fined up to \$1000 each. These provisions cannot be extended to parties other than the trucking company or carrier. (Lund)

Agency Response: These comments are beyond the scope of this rulemaking action because they do not raise any objections or recommendations directed to the proposed amendments. However, as was explained in the Staff Report for the initial 2008 rulemaking, since California-based shippers and brokers are not typically responsible for the tractors and trailers they use, they would not initially be held liable for tractors and trailers found in violation. However, enforcement action could be taken on a California based shipper or broker in situations meeting the following criteria:

- The shipper or broker is involved in a shipment where the tractor or trailer is found operating in violation of the proposed regulation, and
- The motor carrier, tractor owner, or trailer owner involved in the shipment has an unsettled NOV that was issued for a previous shipment in which the shipper or broker was also involved, and
- The shipper or broker has received a notification from ARB regarding the delinquent status of the motor carrier, tractor owner, or trailer owner.
- 4. Comment: "Short and local haul exemptions should not capture regional trucks and trailers. The standards used in the Environmental Protection Agency/National Highway Traffic Safety Administration joint fuel efficiency rulemakings further demonstrate how CARB staff has missed the mark in identifying regional haul trucks and trailers:
 - "Truck tractors operating as regional-haul trucks are tractor trailer combination vehicles used for routes less than 500 miles, and tend to travel at lower average speeds than long-haul trucks."
 - "Long-haul combination tractors typically travel at least 1,000 miles along a trip route. Long-haul operation occurs primarily on highways and accounts for 60 to 70 percent of the fuel used by Class 7 and 8 combination tractors."
 - Class 8 long-haul combination tractors are typically sold after the first three to five years of ownership and operation by large fleets... these newest trucks travel between 150,000 – 200,000 miles per year, and 50 percent of the trucks in this Class 8 segment use 80 percent of the fuel."

Source: Final Rulemaking to Establish Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicle, Joint EPA/NHTSA Rulemaking

Comparison Between Rulemaking Regional/Long Haul Distinctions							
	EPA/NHTSA GHG	CARB GHG					
Annual Miles	150,000-200,000	50,000					
Distance Traveled	1000 miles per trip	Travels within 100 mile radius					

The table below compares the two rules.

(CTA3)

Agency Response: No change was made in response to these comments, which extend beyond the scope of this rulemaking action. ARB's regulation provides definitions only for local-haul and short haul vehicles since these vehicles mainly operate in urban congested areas at relatively lower speeds and require a special consideration in the rulemaking. The regulation did not provide definitions for regional haul or even long-haul vehicles because such vehicles did not require any special consideration in the rulemaking. ARB believes that tractor-trailer combinations that frequently travel more than 100 miles from their home base, irrespective of their classification as regional or long-haul accrue the majority of their VMT at highway speeds and therefore benefit from installing low rolling resistance tires and aerodynamic devices. Furthermore, the long-haul and regional-haul definitions in the Joint U.S. EPA/NHTSA rulemaking document are provided for the purposes of characterizing the trucking industry (for example to distinguish trucks that may or may not be equipped with sleeper berths) and not for characterizing trucks that may or may not benefit from installing aerodynamic technologies. In fact, the Joint U.S.EPA/NHTSA GHG rulemaking considers aerodynamic technology improvements as enabling technologies to meet the GHG standards for Class 7 and 8 day-cab and sleeper-cab tractors, which includes vehicles that are considered outside the U.S. EPA definition of long-haul tractors.

- **5. Comment:** Cost effectiveness estimates should reflect reality or rule should be amended to reflect estimates. The original staff Economic Impact Analysis calculated average fuel savings resulting from this rule where "84 percent of the vehicle miles traveled at highway speed that benefit fully from the aerodynamic devices" and tractors travel 125,000 miles annually. We have forwarded two letters to Board which have highlighted the following:
 - There is no evidentiary support for the estimate of 84 percent vehicle miles traveled (VMT) at highway speeds.
 - Despite claims made by staff that "speed distribution data for the fleet that is impacted by the proposed regulation were not available" (source: http://www.arb.ca.gov/regact/2008/ghghdv08/ghgisor.pdf), we have provided a source for this data to Board Staff.
 - Inaccurate estimate of VMT done at highway speeds could swing cost of \$11.2 billion regulation by \$4-6 billion. (CTA3)

Agency Response: These comments are beyond the scope of this rulemaking action because they do not raise any objections or recommendations directed to the

proposed amendments. In general, the overall VMT and the percentage of VMT at highway speeds used in ARB's Economic Impact Analysis are industry average estimates from both out-of-state and California tractor-trailers. ARB understands that different fleets will realize different benefits depending on the aerodynamic technologies used, and how and where the fleet operates (e.g., typical vehicle speed, annual miles per year, road conditions, weather conditions, and area of operation). While aerodynamic technologies provide the greatest fuel consumption savings at highway speeds, data show that some fuel savings will also be achieved at lower speeds. Thus, vehicles that accrue less VMT and spend less time at highway speeds will still benefit from aerodynamic improvements but will need a relatively longer time to recover their initial installation costs of the aerodynamic technologies. For those fleets that operate locally or infrequently, they will not likely benefit from the aerodynamic technologies, but the regulation provides exemptions for these applications.