UTILITY TRAILER MANUFACTURING CO.
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The First Name In Trailers

Via Certified Mail RRR

July 16, 2008

Mr. Stephan Lemieux, Section Manager
California Air Resources Board
Mobile Source Control Division
9530 Telstar Avenue
El Monte, CA 91731

Re: Comments to Proposed Discrete Early Action
ID No. EJAC-4/ARB 2-14
Title: Smartway Truck Efficiency

Dear Mr. Lemieux:

Please accept the following comments on behalf of Utility Trailer Manufacturing Company ("Utility") to the California Air Resources Board's ("CARB") May 21, 2008 Draft Heavy-Duty Vehicle Greenhouse Gas Reduction Measure (the "Draft Measure"). For the reasons set forth below, Utility urges CARB to reclassify the Draft Measure as a non-regulatory early action under the 2008 Scoping Plan to allow for further studies examining the technological feasibility and cost effectiveness of the requirements of the Draft Measure.

I. Company Background

Based in City of Industry, California, Utility is America's oldest privately owned, family-operated semi-trailer manufacturer. Founded in 1914, Utility is the largest producer of refrigerated semi-trailers in the United States and the third largest semi-trailer manufacturer in the country. Utility currently operates five regionally placed semi-trailer factories, located in Virginia, Utah, Alabama and Arkansas, and employs over three thousand people nationwide. Utility's historical position as America's largest producer of refrigerated semi-trailers is a direct result of its management's focus on designing road safe semi-trailers in an environmentally responsible manner.

Utility representatives recently attended the June 12, 2008 workshop session for the Draft Measure held at CARB's offices in El Monte. While Utility supports the federal Environmental Protection Agency's ("EPA") *voluntary* SmartWay program to increase fuel efficiency while reducing greenhouse gas emissions, there are numerous issues in the Draft Measure relating to technological feasibility and cost-effectiveness, the analyses of which have not progressed to the point where the impacts of same can be conclusively defined at this early time. Utility offered some suggestions as to how to address some of these outstanding issues during the workshop. As a follow up to the workshop, Utility hereby respectfully submits the following comments to the Draft Measure to urge CARB to reclassify the Draft Measure as a non-regulatory early action under the 2008 Scoping Plan to further examine the issues identified herein.

II. California Global Warming Solutions Act of 2006 (the "Act")

As you know, Section 38560 of the Act requires that all greenhouse gas reduction rules and regulations adopted and implemented by CARB be technologically feasible and cost-effective. However, the mandated time frame for implementing the Act's requirements has resulted in CARB itself stating that:

> While staff has advanced its understanding with respect to key requirements that must be addressed for most of the proposed strategies, the analyses have not progressed to the point where all impacts (e.g., technical feasibility, cost-effectiveness) can be defined conclusively at this time. . . If additional information of analysis reveals that a particular measure cannot meet one or more of these requirements, it will not be put into effect.

EXPANDED LIST OF EARLY ACTION MEASURES TO REDUCE GREENHOUSE GAS EMISSIONS IN CALIFORNIA RECOMMENDED FOR BOARD DECISION, California Air Resources Board (October 2007).

Indeed, there are numerous sub-categories of issues relating to the technological feasibility and cost-effectiveness of the Draft Measure which require further analysis prior to CARB adopting same as a discrete early action. A discussion of these issues is set forth below.

III. Technological Feasibility

The technological feasibility of the aerodynamic devices that trailer manufacturers will need to append to their products will depend on such as issues as the completion of laboratory and field tests studying the compatibility of the aerodynamic devices with trailer bodies, and national standards governing the specifications of other fuel-saving devices.

A. Adequate Testing

The primary reason Utility is urging CARB to reclassify the Draft Measure as a non-regulatory early action is that the implementation date of the Draft Measure is premature due to the lack of adequate testing needed to fully develop the required aerodynamic devices. More tests are required on these devices not only for confirming their claimed efficiencies, but for safety reasons.

1. Gap Reducers

One such device, the front mounted "gap reducer," was developed some time ago by a west coast company called Nose Cone. To qualify its product for the SmartWay program, Nose Cone needed to achieve a fuel economy gain of at least one percent (1%). To demonstrate this gain, Nose Cone ran a SAE J1321 type 2 test. Another company, Freight Wing, also manufactures a gap reducer and was approved by SmartWay by conducting similar testing. However, neither of these companies' qualifying tests were performed in conjunction with other potentially fuel saving devices such as side and roof fairings and in situations where a tractor is "close coupled" to a trailer. In the event a tractor is tested with a trailer, with and without the gap reducer, there would likely be no appreciable benefit from the gap reducer, thus rendering them ineffective in achieving the Draft Measure's stated purpose.

Moreover, a primary aerodynamic principle in running efficiency is to situate the back end of the tractor within 28" or less of the trailer. If such placement is achieved, the need for a "gap reducer" to save fuel is mitigated. Therefore, the significant cost associated with adding gap reducers does not provide the benefit the Draft Measure is intended to provide.

2. Side Skirts

Other aerodynamic devices such as side skirts are made from either injection molded plastic or aluminum sheet construction. During normal driving conditions these devices can be damaged while crossing railroads and drive ways, and during loading and unloading at docks with tapered ramps. Once damaged, the operator typically has to remove the device or risk it falling off during transit. Notwithstanding such safety issues, if the operator does not remove the damaged device, it will not achieve its intended fuel savings. Moreover, these devices have to perform in all weather conditions, including but not limited to rain, snow, ice, and combinations thereof. Additional testing is necessary to ensure these devices are durable and have predictable failure modes that will not cause catastrophic failure during high speed highway transport.

Additional development is currently underway from manufacturers to develop sturdier, more operator friendly devices. However, subsequent generations of these products will require SAE testing. Adopting regulations requiring the use of such untested products is therefore premature.

3. Fairings and Boat Tails

The newest devices to qualify for the SmartWay program are rear trailer fairings and boat tails. Once such approved device claims it improves fuel economy by 5.1% at 62 MPH. This device is currently undergoing "crash" testing for DOT approval. As such, this device is still in the prototype development phase of design and is not being used in commercial applications. Again, adopting regulations requiring the use of such untested devices is premature.

4. Performance and Safety

The common concern regarding all of the aforementioned devices is the need for additional testing, whether due to performance or safety issues. With respect to performance, there is a significant difference between running a controlled test and proving a device achieves the fuel savings it claims. Significantly, none of the tests that claim such aerodynamic devices save fuel have been verified by independent third parties who do not have a vested commercial interest in the premature adoption of the Draft Measure. Moreover, tests performed to date involve just one test with one tractor on one day. It is also important to recognize that each of the approved devices was tested individually. As mentioned above, there is currently a dearth of studies testing the above aerodynamic devices in combination, i.e., side skirts and gap reducer, gap reducer and trailer tail, etc. The SmartWay program tends to cumulatively add the fuel saving benefits of multiple aerodynamic devices. Unfortunately, none of these cumulative benefits have been proven in the field. Indeed, a device that initially indicates a benefit may not have the same result when combined with another device. For these reasons, Utility urges CARB to reclassify the Draft Measure as a non-regulatory early action under the 2008 Scoping Plan to allow for further testing of the issues identified herein.

With respect to safety issues, as previously mentioned, aerodynamic devices are often damaged while crossing railroads and drive ways, and during loading and unloading at docks with tapered ramps. They also have to perform in all weather conditions such as rain, snow and ice. Once damaged, the operator typically has to remove the device or risk it falling off during transit. Additional testing is necessary to ensure these devices are durable and have predictable failure modes that will not cause catastrophic failure during high speed highway transport.

In the event CARB proceeds with classifying the Draft Measure as a discrete early action, it appears that Utility, other trailer manufacturers, and aerodynamic device manufacturers will be forced to place products on the market that may not be able to withstand the rigors of heavy duty transportation. One potential consequence of this situation may be a significant increase in the costs associated with satisfying customers' warranty claims. Such claims would increase not only the actual costs of replacing and/or repairing unsatisfied customers' trailers, but also the administrative costs of coordinating and responding to such claims as well as potential consequential costs in the loss of unsatisfied customers. Moreover, Utility and other trailer manufacturers may see an increase in the number of product liability claims filed against them. The increased costs associated with defending, and potentially satisfying unfavorable verdicts rendered against Utility and other trailer manufacturers for using untested aerodynamic devices on their trailers would again significantly increase the cost of doing business. Such increased costs will provide yet another significant hurdle to overcome to remain competitive in a global marketplace. For these reasons, Utility urges CARB to reclassify the Draft Measure as a non-regulatory early action under the 2008 Scoping Plan to allow for further testing of these products.

B. Need for National Standards

Section 2800(d) of the Draft Measure sets forth requirements and compliance deadlines for new and in-use tractors and trailers. One of these requirements is for these vehicles to be fitted with low-rolling resistance tires. As discussed in the June 12 workshop, tire manufacturers set their own standards to determine rolling resistance. By unilaterally defining "low-rolling resistance" tires, tire manufacturers can alter the intended benefits of the fuel efficiencies the Draft Measure seeks to achieve. As such, a federal standard for defining "low-rolling resistance" tires is necessary prior to requiring new and in-use tractors and trailers to use such tires. This process, allowing for petitions for rule making and notice and comment periods, will take time. Moreover, in the event such a rule is adopted, a phase-in period will be required to allow tire manufacturers to comply with the new requirements. For these reasons, Utility urges CARB to reclassify the Draft Measure as a non-regulatory early action under the 2008 Scoping Plan to allow for such rulemaking to run its course.

C. Technologically Limiting Definitions

Section 2800(e) of the Draft Measure sets forth "Good Operating Condition" criteria for the maintenance of tractors and trailers. Sections 2800(e)(1)(B)(1) and (2) further describe the specifications for side skirt fairings and front and rear trailer fairings. Based on the language used to describe these devices, it is evident that these specifications were strictly based on the patents for those devices. By utilizing language appropriate for a single, unique, patentable product, rather than a broader, generalized concept, the Draft Measure may preclude innovation. Indeed future research and development may result in devices that offer much greater fuel efficiency than is available today. Under the current "Good Operating Condition" standard, such new products would fail to comply with CARB's requirements and thus would be precluded from being introduced into the marketplace. For

these reasons, Utility urges CARB to reclassify the Draft Measure as a non-regulatory early action under the 2008 Scoping Plan to allow for revisions to the Draft Measure.

IV. Cost-Effectiveness

As noted above, the Act mandates that all greenhouse gas reduction rules and regulations adopted and implemented by CARB be, *inter alia*, cost-effective. Two factors that determine the cost-effectiveness of compliance with a particular regulatory program include maintenance costs and their effect on competition.

A. Maintenance Costs

Like any industry, the transportation business is very competitive. Often, the difference between success or failure is determined by a company's cost per mile. Proven technologies that can lower transportation companies' cost per mile would likely be embraced by the industry. However, lowering the cost per mile must inherently address reducing initial costs, potential lower payloads due to the additional weight of aerodynamic devices, and necessary maintenance costs for the aerodynamic devices. Adopting the Draft Measure without fully analyzing these issues will likely prevent the Draft Measure from achieving its intended effect. Indeed, in Europe, where fuel prices are substantially higher than in the United States, regulations similar to the Draft Measure were adopted and ultimately repealed because, once implemented, proved not to be cost effective.

Currently, side skirts carry significant maintenance costs. Such costs are associated with damages incurred during normal use, including crossing railroads and drive ways, loading and unloading at docks with tapered ramps, and the elements. Once damaged, the operator typically has to remove or repair the device, which might result in down time. Although manufacturers are currently developing additional designs to lower the aforementioned costs, none are currently commercially viable. At some point in the future, these manufacturers may have commercially viable devices that will provide fuel savings without significant maintenance costs that raise a company's cost per mile instead of lowering it. However, that time has not yet arrived. For these reasons, Utility urges CARB to reclassify the Draft Measure as a non-regulatory early action under the 2008 Scoping Plan to allow for such product development to occur.

B. Effect on Competition

There are currently only two (2) aerodynamic device manufacturers with products that are certified by the SmartWay program. Both manufacturers are relatively small, and would not have the capacity to manufacture the volume of devices necessary if fifty percent (50%) of 2010 model year trailers needed their products to comply with the Draft Measure. Based on a projected volume of 220,000 trailers to be produced in 2010, aerodynamic device manufacturers would need to manufacture 110,000 devices to meet this demand. It is doubtful these small companies have the capacity to handle such demand.

In addition, a limited number of suppliers of certified SmartWay products required for compliance with the Draft Measure could increase production costs for Utility and other trailer manufacturers by the suppliers' ability to unfairly determine the price of their products. This will likely be caused by an increase in demand for their products due to the expedited adoption of the Draft Measure. It will also take some time before other manufacturers will be able to bring alternative products to market to present viable options to tractor and trailer manufacturers, thereby eliminating the ability of natural market forces to keep prices in check. In sum, by failing to reclassify the Draft Measure as a non-

regulatory early action under the 2008 Scoping Plan, CARB could subject a portion of its regulated community to the scrutiny of the Federal Trade Commission.

V. Regulation-Specific Comments

In the event CARB chooses not to reclassify the Draft Measure as a non-regulatory early action under the 2008 Scoping Plan, Utility offers the following specific comments related to the language of the Draft Measure:

A. Section 2800(b)(1)

The Draft Measure should not be limited in its applicability to just 53-foot trailers. Although the majority of trailers Utility sells are 53 feet in length, there are existing populations of varying lengths of trailers that could also benefit from the aerodynamic devices required by the Draft Measure. Moreover, the burdens imposed by the Draft Measure to achieve its purpose and goals should be jointly borne by all Californians, not just the trucking industry. CARB should focus on every vehicle that travels on California's highways, not just the heavy-duty tractors and trailers that deliver products necessary for millions of peoples' every day lives. If the regulation of the transport of these necessities becomes too restrictive, the result will be an increase in the cost of those products at a time when the transportation industry can not absorb such increased costs. While Utility supports the Draft Measure's purpose, the latter fails to reflect the understanding that the burdens of its requirements outweigh its benefits.

B. Section 2800(c)(3)

Delete the language, ". . . or curtain-side trailer that is not a drop-frame trailer." Utility does not have designs for a side skirt for a curtain side trailer. If one was produced or modified for installation on a curtain sided trailer, it surely would not provide the 4% fuel efficiency savings that the same skirt would have on a box trailer due to its inboard mounting location.

C. Section 2800(c)(8)

This section should be deleted in its entirety for the same reasons as set forth in the comments relating to subsection (c)(3) above.

D. Section 2800(c)(12)

Delete the language, ". . . that can only be loaded/unloaded through the rear doors." Some trailers have side doors through which unloading can be completed.

E. Section 2800(c)(21)

As you likely know, California and several other western states allow 14'0" tall trailers. Most of the factory produced roof fairings are designed for the more standard 13'6" tall trailers. Utility is currently unaware of how it would design roof fairings for particular hauls with 14' trailers. Based on the foregoing, Utility suggests the last line of this subsection's language be amended to provide that the roof fairings be of a height "that matches the height of a 13'6" height trailer."

F. Section 2800(c)(29)

The word "transportable" should be amended to read "transport."

G. Section 2800(c)(31)

Utility is not aware of any aerodynamic drag or friction between the tire and rim. As such, the language "and between the tire and the rim" should be deleted.

H. Section 2800(c)(36)

As you likely know, according to the California Motor Vehicle Code, a trailer is not part of a truck. Rather, the trailer is the vehicle that carries the cargo pulled by the motorized tractor. This subsection should be re-drafted to reflect this difference.

I. Section 2800(c)(37)

The language, ". . . between the support legs and the forward most axle" should be added to the end of the definition of "Trailer Side Skirts."

J. Section 2800(c)(38)

As products are generally not transported in tractors, the words, ". . . tractors and" should be deleted.

K. Section 2800(d)(1)(B)

Since one requirement for obtaining SmartWay certification is the utilization of low resistance tires, it appears that subsections (d)(1)(A) and (d)(1)(B) are redundant. As such, subsection (d)(1)(B) can be deleted.

L. Section 2800(d)(1)(C)

The applicability of this subsection should be extended to tractors that haul containers and "short haul" tractors. This would necessitate a national standard to determine which tires qualify as "low rolling resistance tires."

M. Section 2800(d)(3)

The requirements of this subsection may be premature as the EPA has not yet established refrigerated van trailer requirements as part of its SmartWay program.

N. Section 2800(d)(4)

This subsection should be deleted in its entirety for the reasons set forth above in the comments to Section 2800(c)(3).

O. Section 2800(d)(5)

The language, ". . . and subsections (d)(4) for curtain-sided trailers" should be deleted for the reasons set forth above in the comments to Section 2800(c)(3).

P. Section 2800(d)(11)(A)(1)

The words "of freight" after the word "transported" should be deleted.

VI. Conclusion

Pursuant to the Act, all rules and regulations enacted by CARB are required to be technologically feasible and cost efficient. As noted in the discussion above, there are numerous outstanding issues pertaining to performance, safety, maintenance costs and anti-competitive effects that should preclude CARB from enacting the Draft Measure under the Act. Therefore, Utility urges CARB to reclassify the Draft Measure as a non-regulatory early action under the 2008 Scoping Plan to allow for further studies examining the technological feasibility and cost effectiveness of the requirements of the Draft Measure.

Thank you for the opportunity to comment on this issue. If you have any questions regarding Utility's submission, please do not hesitate to contact the undersigned.

Very truly yours,

UTILITY TRAILER MANUFACTURING COMPANY

Rajiv A. Tata
General Counsel

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