



Air Transport Association

May 23, 2007

**BY ELECTRONIC SUBMITTAL**

Clerk of the Board  
California Air Resources Board  
1001 I. Street  
Sacramento, California 95814  
<http://www.arb.ca.gov/lispub/comm/bclist.php>

**Re: Initial Comments Concerning Proposed Regulation for In-Use Off-Road Diesel Vehicles**

Dear California Air Resources Board:

I write to provide the initial comments of the Air Transport Association of America, Inc. (ATA)<sup>1</sup> on the California Air Resources Board's (ARB's) Proposed Regulation For In-Use Off-Road Diesel Vehicles (ORD Rule or Rule).<sup>2</sup> This provides ATA's preliminary views on the proposed Rule as the Board begins its deliberations on May 25, 2007. Given ARB's decision to carry over its deliberations and keep the record open until the Board's meeting on July 26, 2007, ATA will provide its final written comments in advance of that date.<sup>3</sup> ATA anticipates that its final written comments will be extensive and will present numerous legal and factual issues not included in these initial comments. Moreover, ARB staff has informed ATA that staff intends to recommend that the Board adopt significant changes to the proposed Rule at the May 25 hearing. ATA expressly reserves the right to raise different or additional issues in its final written comments, and to supplement, modify, or withdraw any of the points raised in these initial comments.

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<sup>1</sup> The members of the Association are: ABX Air, Inc., Alaska Airlines, Inc., Aloha Airlines, American Airlines, Inc., ASTAR Air Cargo, Inc., Atlas Air, Inc., Continental Airlines, Inc., Delta Air Lines, Inc., Evergreen International Airlines, Inc., FedEx Corporation, Hawaiian Airlines, JetBlue Airways Corp., Midwest Airlines, Inc., Northwest Airlines, Inc., Southwest Airlines Co., United Airlines, Inc., UPS Airlines, US Airways, Inc.; associate members are: Air Canada, Air Jamaica Ltd., Mexicana.

<sup>2</sup> See Notice of Public Hearing to Consider Adoption of the In-Use Off-Road Diesel-Fueled Fleets, April 6, 2007.

<sup>3</sup> See ARB off-road diesel listserve e-mail dated May 18, 2007, available at [www.arb.ca.gov/lists/ordiesel/ordiesel.2007](http://www.arb.ca.gov/lists/ordiesel/ordiesel.2007), and [www.arb.ca.gov/msprog/ordiesel/ordiesel.htm](http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm); see also [www.arb.ca.gov/lispub/comm/bclist.php](http://www.arb.ca.gov/lispub/comm/bclist.php) (confirming extension of written comment deadline to July 25, 2007, or submission at the Board hearing).

## **INTRODUCTION**

ATA is the principal trade and service organization of the U.S. scheduled airline industry, and ATA's airline members transport more than 90 percent of all U.S. airline passenger and cargo traffic. In this capacity, ATA often comments on federal and state regulatory developments that may affect the airline industry.

ATA has a long history of cooperating with ARB to achieve air quality standards, despite serious doubts regarding ARB's authority to regulate emissions from airport ground support equipment (GSE). The ORD Rule is no exception. ATA has been working with ARB staff for nearly two years in an effort to help achieve ARB's emission reductions goals and improve the ORD Rule. We look forward to continuing to work productively with staff to address the remaining problems with the ORD Rule's approach.

## **SUMMARY OF ATA POSITION ON THE ORD RULE**

To be clear, ATA *strongly supports ARB's ultimate air quality goals for off-road diesel vehicles*. ATA recognizes the need for dramatic reductions in emissions of diesel particulate matter (PM) and oxides of nitrogen (NOx) from off-road diesel vehicles by 2014 and by 2020 if federal air quality standards and the Board's Diesel Risk Reduction Plan objectives are to be met. To be sure, many of ATA's concerns with the proposed Rule's approach would also be addressed if, as urged by others in the regulated community, the Board determines to extend the compliance deadlines proposed in the ORD Rule by a few years to allow additional time to implement the necessary emission reductions. Such additional time would allow ATA member airlines to achieve the emission reductions in a more efficient and cost-effective manner. At the same time, however, we are committed to doing our part to achieve ARB's emission reduction goals for off-road diesel vehicles, and to further improve air quality for all Californians. Thus, these comments focus on helping ARB find a workable and more efficient approach to achieving the ultimate emission reductions targeted by ARB, within the timeframe set forth in the proposed ORD Rule.

ATA believes that the basic regulatory mechanism of the Rule (regulation of end-use consumers of diesel vehicles) is fundamentally flawed, and that it has been dictated largely by ARB's decision, just a few years ago, not to impose Tier 3 particulate matter (PM) standards on manufacturers of new engines. Nonetheless, ATA has been working with ARB staff as it undertakes an unenviable task: crafting a reasonable regulation based on fundamentally unreasonable precepts, made necessary by ARB's decision to forgo imposing a Tier 3 PM standard. ATA recognizes and applauds staff's dedication and effort.

However, ATA cannot support the approach set forth in the proposed ORD Rule as currently structured. Most fundamentally, the proposed regulation is so complex, and its requirements so variable and unpredictable, that effective compliance planning becomes impossible. The proposed Rule seeks to impose fleet average requirements that

vary every year based on the horsepower composition of each fleet on the compliance date -- which cannot be predicted in advance with any certainty due to factors beyond the fleet operator's control. This level of uncertainty is unacceptable and ATA suggests below one straightforward example of how the Rule can be restructured to achieve ARB's air quality goals while providing fixed emission requirements known well in advance of compliance deadlines. In addition, the Rule fails to provide appropriate credit for cleaner and better emission reduction options, and its "retrofit" and "turnover" (the so-called "Best Available Control Technology" or BACT) compliance paths and 2021 retrofit mandate are needlessly burdensome and inflexible.

Moreover, as ATA will explain in detail in its final written comments, the unique flaws in the proposed ORD Rule render it particularly problematic from a legal perspective, and vulnerable to challenge. For example, the Rule's failure to provide reasonable certainty or advance notice of the emission requirements a fleet must achieve, and the Rule's other overly intrusive requirements, render the Rule arbitrary and capricious and contrary to California laws governing agency rulemaking. These flaws also make it particularly clear that the ORD Rule as proposed is preempted by the Federal Aviation Act (FAA) and Airline Deregulation Act (ADA), as it would profoundly impact the ability to plan and maintain the reliable GSE fleet critical to the safe and efficient operation of the National Airspace System. In addition, the Rule's heavy reliance on forcing end-use consumers of diesel vehicles, rather than the original engine manufacturers, to engineer emission solutions by integrating retrofits into existing equipment is also inconsistent with the federal Clean Air Act.<sup>4</sup>

The Rule is particularly burdensome and problematic as applied to diesel GSE, due to its highly specialized nature and critical role in the safe and efficient functioning of the National Airspace System (and thus disproportionate importance to the California economy).<sup>5</sup> The Rule will require our members to spend over \$100 million and replace or retrofit virtually every diesel unit of GSE in California. Given the magnitude of this task, the Rule must, at the least, allow fleet operators to plan effectively and achieve a level of certainty that this effort will result in compliance.

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<sup>4</sup> As ATA has discussed in previous comments concerning other ARB proposed regulations, ATA believes that ARB is preempted from regulating GSE. See, e.g., ATA comments in response to ARB's "Notice of Public Hearing to Consider Adoption of Emission Standards and Test Procedures for New 2007 and Later Off-Road Large Spark-Ignition ("LSI") Engines and Fleet Requirements for Users of Off-Road LSI Engines," dated June 17, 2005, at: [www.arb.ca.gov/lists/lore2006/24-2006-05-24\\_atr\\_comments\\_re\\_lsi\\_rule\\_with\\_attachments.pdf](http://www.arb.ca.gov/lists/lore2006/24-2006-05-24_atr_comments_re_lsi_rule_with_attachments.pdf); ATA's Response to Request for Alternative Regulatory Proposals for ARB's Off-Road Diesel Equipment Measure, dated November 15, 2005 (posted by ARB on November 17, 2005, at [www.arb.ca.gov/msprog/ordiesel/whatsnew.htm](http://www.arb.ca.gov/msprog/ordiesel/whatsnew.htm)). The federal preemption arguments set forth in these previous ATA comments are fully applicable to the ORD Rule, and these comments are hereby incorporated by reference herein.

<sup>5</sup> Given this, ATA expressly reserves the right to bring suit to challenge the ORD Rule as preempted by federal law, or on any other ground, regardless of whether the final regulation adopted by ARB incorporates the changes outlined in these initial comments.

The modifications outlined below will provide environmentally superior and more practical options, without compromising the ultimate emission reductions targeted in the proposed ORD Rule, *allowing us to achieve the same or better emission reductions at lower cost*. In short, the modifications will allow achievement of ARB's air quality goals while providing added certainty and flexibility and without requiring wasteful expenditures on inferior and unworkable control technology. We look forward to working with ARB staff in the coming weeks to discuss these and other necessary modifications to the proposed ORD Rule. However, without changes that address at least these issues, ATA must strongly oppose the ORD Rule notwithstanding its agreement with ARB's underlying air quality goals.

### **KEY PROPOSED MODIFICATIONS TO THE ORD RULE**

#### **1. Provide Fixed Fleet-Average Emission Requirements with Adequate Lead-Time**

##### **A. The Rule is Unnecessarily Complex and Unpredictable**

The ORD Rule is extremely complex. *See, e.g.*, ISOR at 25. Moreover, the proposed Rule's requirements are unpredictable and will not allow our members to know the Rule's emission requirements reasonably in advance of each year's March 1 compliance deadline. As of March 1 each year, each fleet must ensure that its fleet's unique emissions index is at or under the fleet's unique fleet average emissions target. Each fleet's emission target and index are calculated based on a complex formula that assigns frequently-changing emission targets and emission factors to each vehicle that exists in the fleet on the March 1 compliance deadline, based on that vehicle's horsepower rating.

Thus, from a planning standpoint, the fleet can only determine what its emissions and emissions targets will be for that year based on a prediction of the future composition of the fleet on the next March 1 deadline. To our knowledge, ARB has never before adopted an emission requirement that requires the regulated entity to predict future facts in order to know with certainty what the law requires and to plan accordingly.

Every GSE fleet evolves and changes over time, for a variety of reasons, including changes in aircraft ground support requirements, the need to support different types or numbers of aircraft, equipment failures, and replacements. The precise timing and fleet-composition impacts under the Rule cannot be accurately determined in advance, and inadequate allowance is made for changes that occur beyond the operator's control.

As one example, manufacturers control the horsepower of new equipment, not the consumers who purchase and use the vehicles and who are subject to regulation under the Rule. As ARB staff is aware, due to a phenomenon called "horsepower creep," new versions of equipment, previously provided for many years at a certain horsepower (HP), may only be available from the manufacturer at a different-than-expected horsepower. This may significantly change a fleet's horsepower composition, and thus a fleet's average emissions and targets under the Rule. For example, if a unit provided at 150 HP

is changed by the manufacturer in model year 2016 and only made available at 200 HP, this would change the unit's PM target for that year from 0.14 to 0.08 g/bhp-hr, a 43% more stringent emissions requirement (which would also receive more weight in calculating the fleet's overall emissions target, because it is HP-weighted). *See Proposed § 2449(d)(1)(A)(2).* At the same time, however, the new 200 HP unit would still be deemed to emit the same amount of PM and NOx in g/bhp-hr as a 150 HP unit of the same model year. *See Proposed Rule, Attachment A.*

In addition, the Rule does not account for the real possibility that new equipment (Tier 3 and Tier 4) will fail to operate properly or as expected, necessitating increased use of existing equipment or other changes that cannot be predicted sufficiently in advance to allow any assurance that a fleet operator can plan for, achieve, and maintain compliance with the regulation. Similarly, the technical challenges and likely delays in obtaining and integrating new retrofit and engine technologies into the GSE fleet make fleet planning to achieve a moving target virtually impossible.

In sum, the ever-changing and unpredictable emission targets of the Rule fail to accommodate the need for careful planning to ensure no interruption to the safe and efficient operation of the National Airspace System, while ensuring compliance with all applicable laws and regulations.

B. Suggested Alternative Approach to Achieve the Same Ultimate Emission Reductions as the Proposed Rule

The fleet average approach of the ORD Rule should provide fixed fleet average targets well in advance of compliance. ARB has repeatedly adopted such fleet average regulations before, and can readily devise any number of alternatives for the ORD Rule that achieve the same or better emission reductions more efficiently and effectively by removing the extreme uncertainty of the current proposal.

As one straightforward example, ATA suggests that instead of imposing unpredictable requirements each year, the Rule should impose two fleet average targets -- one reflecting California's need to achieve emission reductions by 2014 to meet the 2015 SIP target, and one reflecting ARB's final 2020 emission reduction targets to satisfy the Diesel Risk Reduction Plan goals.

In 2010, each fleet would calculate a "fixed" 2014 fleet average emissions target based on the fleet's 2010 horsepower mix. The target would be set to require the same level of emission reductions by 2014 as under the current proposed Rule. The fleet would then adopt an ORD compliance plan for achieving the emission reductions by 2014. This would give the fleet four years to achieve a known level of emission reductions (with an opportunity to "cure" minor shortfalls by 2016 to avoid civil penalties). Each fleet would prepare another ORD plan in 2015, to achieve the same final fleet averages reflected in the proposed ORD Rule by 2020. Fleets would be allowed to modify their ORD plans to reflect any improved technologies that may develop, or to accommodate any substantial fleet changes.

This approach will allow ARB and local air districts to have in place by 2014 the emission reductions needed to meet the state's 2015 SIP deadline, and allow ARB to

satisfy its 2020 Diesel Risk Reduction Plan goal, while providing operators with critical flexibility and planning certainty. It will also:

- Dramatically reduce double conversions of the same equipment, which is a stated ARB goal. *See ISOR at 59.*
  - Because final Tier 4 vehicles are not anticipated to begin to become available for most horsepower categories until model years 2013 and 2014, allowing flexibility in attaining the 2014 SIP reductions will allow operators to invest in the cleanest new Tier 4 equipment instead of mandating unworkable retrofits of older equipment and purchases of inferior engines just a few years before Tier 4 is available.
- Allow operators to avoid the infeasible BACT compliance path and the uncertainties and operational problems associated with retrofits.
- Allow meaningful planning and reduce operational problems associated with executing unnecessarily frequent, and repeated, GSE fleet turnovers to meet ever-shifting requirements.

In crafting a Rule it recognizes as extraordinarily burdensome, ARB must make clear well in advance the precise emission requirements that fleet operators must meet. As it has done with previous regulations, we are confident that ARB staff can develop a proposal that sets forth clear prospective requirements for the regulated community to achieve. ATA stands ready to work with ARB staff, and to identify and develop any additional alternative approaches for achieving the state's air emission reduction goals while providing the necessary certainty for equipment operators.

## **2. Provide Appropriate Credit for Electric Equipment**

While the April 6 proposal allows credit for electric equipment based on the horsepower (HP) of any diesel vehicle that it replaced, it provides inadequate credit for new electric equipment that is added and does not "replace" an identifiable existing diesel vehicle. For such "new" electric, the Rule requires using the HP of the electric motor -- a figure which is essentially meaningless, usually not readily available to the end-user, and not comparable to the HP ratings given to internal combustion engines. The Rule should provide credit for all electric GSE based on the average HP for all diesel GSE in a given category (which is consistent with the approach taken by ARB in its recently-adopted regulation of large spark-ignition GSE), or using other reasonable default values that assign an HP figure to electric that is similar to the HP rating of a comparable diesel vehicle.

More generally, every effort should be made to ensure that the Rule provides appropriate credit to fleet operators who install, or have already installed, electric equipment -- which emits zero diesel PM and NOx. Every appropriate electric unit should be counted and fully credited, including both units installed to achieve compliance with the Rule, and units installed previously. In particular, fleet operators who have already installed electric should not be effectively punished for achieving early emission

reductions on a voluntary basis. ATA stands ready to work with ARB staff to address these issues.

### **3. Allow Credit for Clean LSI Replacements**

In March, we discussed with ARB staff the need to provide credit where emission reductions are achieved by replacing “old” diesel GSE with “clean” large spark-ignition (LSI) vehicles. We understand that staff will recommend to the Board at the May 25th hearing that the Rule be modified to credit such LSI replacements. There is no reason to deny credit for clean LSI replacements (e.g., 1.5 g/bhp-hr NOx or better), which will reduce diesel PM to *zero* and provide NOx emissions about 3 or 4 times lower than any diesel option available during the early years of the Rule, and at a lower cost. We therefore seek to confirm that the use of clean LSI will be allowed under the Rule.

### **4. The PM BACT Option Should Not Mandate Retrofit of Old Vehicles, But Should Credit Replacements With New Tier 4**

The PM BACT compliance option requires that retrofits be installed on 20% of the fleet (by horsepower) every year. As proposed on April 6, the Rule disallows credit for operators who prefer to buy new Tier 4 replacement vehicles that already incorporate emission controls, rather than trying to install and integrate retrofit emission controls on existing vehicles. ARB staff also has indicated that it will recommend to the Board that the ORD Rule be revised to allow Tier 4 vehicles used to replace older diesel vehicles to be counted in calculating compliance with the PM BACT retrofit requirements.

ATA urges the Board to approve staff's recommendation and allow PM BACT credit for Tier 4 replacements. It would make no sense to mandate that end-users must try to solve the technical problems of integrating emission controls into old vehicles, while denying them the benefit of the fact that original equipment manufacturers (OEMs) have already solved those problems in their design of new vehicles that incorporate virtually the same emission controls. Such an approach is also contrary to the federal Clean Air Act, which contemplates that OEMs will develop and integrate new emission control technologies, and not end-users who lack the technical expertise and resources for the task. It would be particularly inappropriate to mandate that the consumers attempt to retrofit existing engines given that ARB declined, just a few years ago, to impose added Tier 3 PM emission requirements on OEMs -- evidently based on OEM arguments regarding technical feasibility or cost.

### **5. Delete the 2021 Retrofit Mandate**

Under the April 6 proposed Rule, in 2021 virtually all remaining GSE units except Tier 4 must be retrofit, immediately after the final 2020 fleet average standard has been achieved. We believe this requirement does not make sense, particularly in the context of ARB's stated goals for the regulation. The retrofit mandate eliminates much or all of the flexibility of the fleet average approach -- which ARB staff has used to support and justify the Rule.

The purpose of a fleet average approach, which ARB staff has endorsed, is that ARB sets the emission reduction goal and industry finds the most efficient and least burdensome way to meet it. ARB has provided no legitimate explanation for the 2021 post-compliance retrofit mandate -- which is completely unwarranted once ARB's final 2020 emission standards have been achieved for both NOx and PM. This requirement appears to be an attempt to subsidize the companies that make retrofits, at the expense of the consumers and intended-users of diesel vehicles, who are already being asked to carry the burden for what ARB staff recognizes is an extraordinarily expensive and intrusive regulation, made necessary largely because ARB elected not to impose a Tier 3 PM requirement on engine manufacturers. The retrofit mandate will require large expenditures with no corresponding environmental benefit, and should be eliminated.

### **CONCLUSION**

Please contact me at 202-626-4216 if you would like additional data or analysis concerning any of the points raised in these initial comments. As noted above, ATA will submit its final written comments in advance of the Board's consideration of the Rule at its meeting scheduled for July 26, 2007.

Sincerely,



Timothy Pohle  
Assistant General Counsel – Environmental  
Affairs  
Air Transport Association of America, Inc