November 14, 2012

Clerk of the Board
Air Resources Board
1001 I Street
Sacramento, California 95814

Subject: GHG "Deemed to Comply" Regulatory Changes and Minor Revisions to LEV III

Air Resources Board Members:

I am writing on behalf of the Alliance of Automobile Manufacturers (Alliance), a trade association of 12 car and light-truck manufacturers representing over 75 percent of the new vehicle market. The Alliance supports changes to harmonize the federal and California GHG regulations as well as the minor revisions to LEV III. This letter contains recommendations that either streamline the harmonization of GHG regulations, or improve the LEV III criteria emission regulations by reducing costs and testing burden without impacting the environmental benefits of the LEV III program.

Owing to the scope, costs, and environmental impact of these regulations, the Alliance and our member companies have spent the past several years working closely with the Air Resources Board (ARB) staff and those of the U.S. Environmental Protection Agency (U.S. EPA) and the National Highway Traffic Safety Administration (NHTSA) on the different components of this regulation. Notwithstanding this work, it is impossible to accurately predict the pace of invention and innovation, the future fuel supply and pricing, or, most importantly, consumer purchasing behavior. The success of this regulatory package ultimately rides on these and other factors. Consequently, mid-term reviews are essential to assess the pace of invention, innovation, and consumer acceptance.

The regulatory changes being considered will harmonize the federal and California greenhouse gas (GHG) regulations between U.S. EPA and ARB such that a manufacturer complying with the federal regulations will be deemed in compliance with the ARB regulations. The Alliance supports harmonizing the GHG regulations and also supports harmonizing the Federal and California criteria emission regulations after EPA adopts Tier 3, which we expect to mirror the LEV III criteria emission requirements.

The remainder of this letter provides our recommendations on the greenhouse gas and criteria pollutant regulations.

1. **GHG Reporting Requirements**: The revision to the §1961.3 adds "Optional Compliance with 2017 through 2025 National Greenhouse Gas (GHG) Program," which allows manufacturers to demonstrate compliance with the California GHG program by complying with the national GHG program. Thus, a manufacturer's compliance is based on national sales and GHG emissions rather than state-by-state values. This is consistent with the agreement reached by ARB, EPA, NHTSA, and automakers. However, the proposed changes also require manufacturers to report

state-by-state sales volumes, footprint data, and GHG emissions for California and the Section 177 States.

We recommend that ARB delete the reporting requirement in §1961.3(c)(3). We do not believe this is in the spirit of the One National Program commitments, since it imposes an unnecessary requirement and burden in California and the Section 177 states. For manufacturers electing to comply with the national program, state-specific volumes and emissions data are not relevant to a determination of compliance. In effect, manufacturers are given the right to select one compliance option, and then forced to file reports as though they had selected a different compliance option. There is no compelling need for these reports, which require extra employee time to compile and submit. The regulations should simply require that manufacturers preserve all information necessary to assess their compliance in California and the Section 177 states; in the event that a manufacturer falls out of compliance with the federal program, California can request the state-specific information at that time.

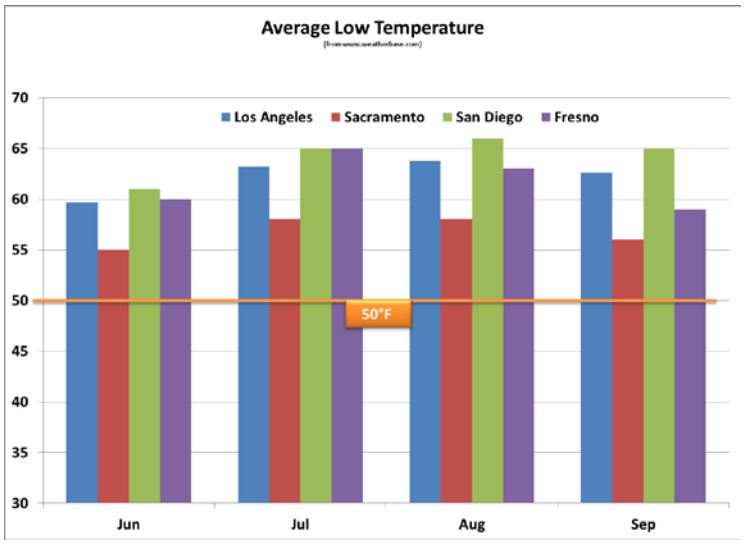
If ARB moves forward with this proposal in spite of our objections, we recommend the following changes that delete the requirement to provide the calculated fleet average CO2 value for "footprint values," since the calculated fleet average CO2 value is not calculated by footprint values.

> *(3) The manufacturer must provide to the Executive Officer separate values for the number of vehicles in each model type and footprint value produced and delivered for sale in California, the District of Columbia, and each individual state that has adopted California's greenhouse gas emission standards for that model year pursuant to Section 177 of the federal Clean Air Act (42 U.S.C. § 7507), the applicable fleet average CO2 standards calculated for ~~each of~~ these model types and footprint values, the calculated fleet average CO2 value for ~~each of~~ these model types ~~and footprint values~~, and all values used in calculating the fleet average CO2 values.*

2. **Eliminate 50°F Testing on E85 for FFVs**: There are currently about 50 stations selling E85 in California compared to about 9,500 stations selling gasoline. Thus, E85 fueling stations represent only about 0.5% of the market. However, even 0.5% overstates the significance of E85, since each E85 location dispenses far less fuel than each gasoline station. According to the California Energy Commission, in 2010 the average gasoline location dispensed almost 17 times as many gallons as the average E85 location. This would indicate that E85 accounts for less than 0.03% of fuel usage.[1] Nonetheless, the regulations currently require all FFVs to certify to the 50°F standards using E85.

   A review of the average temperatures in California's major ozone non-attainment areas (e.g., Los Angeles, Sacramento, Fresno, and San Diego) shows that the average lows are well above 50°F during the summer ozone season (Jun-Sep) (see below). Thus, these vehicles are unlikely to experience a start at 50°F during the time when criteria emissions are most important.

[1] See http://www.energy.ca.gov/2011_energypolicy/documents/2011-11-14_workshop/presentations/Yowell_Weng-Gutierrez_Historic_Demand.pdf, Page 21, Infrastructure Comparison.

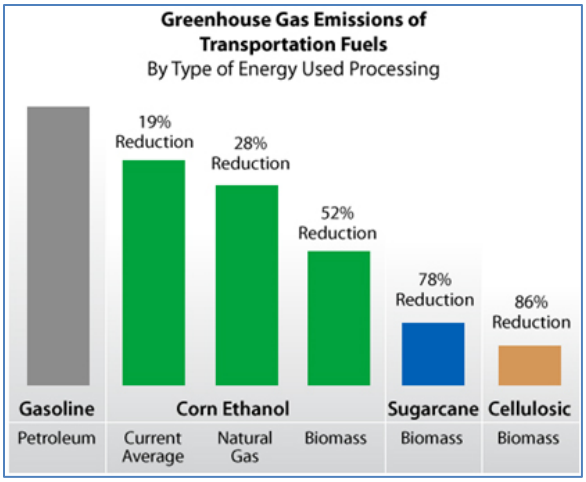


In truth, of the 20+ million vehicles in California, there are probably fewer than 12 vehicles each day that are started when the temperature is 50°F and the tank contains 85% ethanol (i.e., E85). Even those starts are probably not occurring on a high-ozone day. Nonetheless, every flexible fuel vehicle (FFV) is required to certify at 50°F using E85. This results in not only unnecessary testing, but also unnecessary emission control hardware on every FFV at a cost of millions of dollars annually.

The practical effect is that manufacturers are left with three options: (1) eliminate FFV introductions in California; (2) add costly hardware that is unnecessary; or (3) certify vehicles to a higher emission standard in California (this latter choice has negative environmental consequences).

We understand and appreciate that manufacturers can and will certify some vehicles to lower federal exhaust bins (i.e., Bins 3 and 4) that do not require E85 50°F testing, but these Tier 2 Bins will be phased out assuming EPA adopts Tier 3 regulations that harmonize the federal certification bins with California's. Under the LEV III regulations, manufacturers introducing new engine families in 2015 or later will again be forced to consider the three options above.

In fact, FFVs operated on E85 produce real GHG benefits. In the worst case, FFVs operating on E85 reduce GHG by almost 20% and in the best case 86%. Consequently, ARB should adopt policies that both encourage the production of FFVs and the fueling infrastructure for these vehicles. However, until the fueling infrastructure is in place, testing FFVs at 50°F using E85 is a distinct disincentive to the production of FFVs, particularly as emission standards approach SULEV levels.



Source: Life-cycle energy and greenhouse gas emission impacts of different corn ethanol plant types (http://iopscience.iop.org/1748-9326/2/2/024001/pdf/erl7_2_024001.pdf)

Since the number of FFVs that will be started using E85 at 50°F will be infinitesimally small, given the current number of fuel stations in California, we recommend eliminating the 50°F test on E85 until ARB determines that E85 accounts for at least 10% of the total gasoline plus E85 sold in California for a consecutive 12 month period, i.e.:

$$E85\ \% = \frac{E85\ vol}{(E85\ vol + E10\ Vol)} > 10\%\ for\ a\ 12\ month\ period$$

This threshold would indicate that E85 is being used in sufficient quantity to justify the additional testing and hardware required. Manufacturers would be required to comply with the 50°F testing requirements starting one full model year after the 10% trigger is reached.

Of course, throughout this time, FFVs would still be certified on E10 at 50°F, and on E85 at 75°F.

3. **PZEV anti-backsliding:** We appreciate the attempt to address our concerns with respect to compliance with the PZEV anti-backsliding provisions. However, the changes do not provide the flexibility that we were seeking. Instead of requiring a manufacturer's SULEV (both SULEV20 and SULEV30) percentage in 2018-2020 to equal or exceed the percentage in 2015-2017, the revised regulations would apply a three year rolling average with the PREVIOUS two years. For example, if a manufacturer sold 100 PZEVs in 2015, 2016, and 2017, it would be out of compliance if it sold 99 SULEVs in 2018. This, even if it sold 1,000 SULEVs in 2019 and 2020.

   We recommend revising the PZEV anti-backsliding, similar to the Evaporative Emissions regulations, such that compliance is based on the average number of SULEVs produced and delivered for sale in 2018-2020. No anti-backsliding requirements should be necessary beyond 2020MY since the fleet average will drive SULEV production. The following changes would implement this proposal:

> *1. PZEV Anti-Backsliding Requirement. In the 2018 and subsequent model years, a manufacturer must produce and deliver for sale in California a minimum percentage of its passenger car and light-duty truck fleet that certifies to SULEV30 and SULEV20 standards. This minimum percentage must be equal to the average percentage of PZEVs produced and delivered for sale in California for that manufacturer for the 2015 through 2017 model year. A manufacturer may calculate this average percentage using the projected sales for these model years in lieu of actual sales. The percentage of a manufacturer's passenger car and light-duty truck fleet that certifies to SULEV30 and SULEV20 standards averaged across the the 2018 through 2020 model years ~~applicable model year and the two previous model years~~ shall be used to determine compliance with this requirement.*

4. **LEV II Criteria Requirements**:

   a. **LEV II and ULEV II NMOG+NOx Exhaust**: There is some confusion about the implementation of NMOG+NOx for LEV II vehicles for the short period before LEV III is fully implemented (i.e., 2015-2019).

> (1) *"LEV III" Exhaust Standards.* The following standards are the maximum exhaust emissions for the full useful life from new 2015 and subsequent model year "LEV III" passenger cars, light-duty trucks, and medium-duty vehicles, including fuel-flexible, bi-fuel and dual-fuel vehicles when operating on the gaseous or alcohol fuel they are designed to use. 2015 – 2019 model-year LEV II LEV vehicles may be certified to the NMOG+NOx numerical values for LEV160, LEV395, or LEV630, as applicable, in this subsection (a)(1) and the corresponding NMOG+NOx numerical values in subsection (a)(4), in lieu of the separate NMOG and NOx exhaust emission standards in subsections 1961(a)(1) and the corresponding NMOG numerical values in subsection 1961(a)(4)~~;~~ and

   The section highlighted in green above, applicable to the LEV standard category (and specifically the words, "NMOG+NOx numerical values…in this subsection…"), specifies that all of the criteria for LEV II in §1961(a)(1) applied, EXCEPT the vehicle certifies to combined NMOG+NOx, rather than separately certifying to NMOG and NOx. However, there has been an unofficial suggestion that LEV II vehicles certified to combined NMOG+NOx would be required to certify to 150,000 mile durability. As this section is currently written, the 150,000 mile durability is not required.

   For the short period before LEV III is fully phased in, requiring 150,000 mile durability would significantly add to the burden of certifying LEV II vehicles for a manufacturer choosing to certify to the combined NMOG+NOx. These same comments apply to the ULEV Category standard.

   If our reading of this section is incorrect and LEV II vehicles cannot certify to combined NMOG+NOx at 120,000 miles, we recommend ARB revise this section accordingly.

   b. **SULEV Strikeout:** Section 1961.2(a)(1) allows LEV II vehicles certified to LEV and ULEV to use the combined NMOG+NOx. However, the allowance to certify SULEV30 to a combined NMOG+NOx under the LEV II Standard has been eliminated. Thus, both PZEVs and SULEVs would be required to certify to separate NMOG and NOx standards.

   We do not believe this was ARB's intent and recommend reinserting this section.

5. **<u>SFTP PM Standards for MDVs (FTP in lieu of SC03)</u>**: This is a technical correction to the LEV III regulations that was not modified by the current 45-Day Notice (i.e., it is in the regulations adopted in January). The SFTP NMOG+NOx and CO Composite standards in §1961.2(a)(7)(C) (table Footnote 5 on page A-51, copied below) allow the manufacturer to substitute FTP values for SC03 when determining the composite emission values.

> [5] If a manufacturer provides an engineering evaluation for a test group showing that SC03 emissions are equivalent to or lower than FTP emissions, the FTP emission value may be used in place of the SC03 emission value when determining the composite emission value for that test group.

However, this provision is not provided in the SFTP PM table (§1961.2(7)(a)(D), page A-52). We believe this is an oversight, and request that ARB add this footnote to SFTP PM Table.

We also wanted to comment on one issue not specifically reflected in the regulations. As noted in the ISOR, California's July 28, 2011 commitment letter stated that California reserves the right "to contest final actions taken or not taken as part of or in response to the mid-term evaluation." Elsewhere, the letter states California's commitment to revise its standards to provide that compliance with the EPA's 2017-2025 motor vehicle GHG standards, "even if amended after 2012," shall be deemed compliance with California's motor vehicle GHG standards. The Alliance understands these commitments to mean that if California is dissatisfied with the outcome of EPA's mid-term evaluation process, it has the right to seek judicial review of EPA's determinations and thereby attempt to change the final outcome of the mid-term evaluation. On the other hand, California may not unilaterally decide to eliminate the "deemed to comply" provisions and begin enforcing its own program, simply because it does not like the outcome of EPA's mid-term evaluation process. In other words, manufacturers' option to comply with the federal program will continue through 2025, whatever the final outcome of the mid-term evaluation.

We appreciate your consideration of our comments and look forward to working with you and the ARB staff to implement these ambitious regulations.

Sincerely,

Steven Douglas
Senior Director, Environmental Affairs

CC: Tom Cackette
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