  

**SMALL VOLUME MANUFACTURER**

**JOINT COMMENT ON ADVANCED CLEAN CAR CARB PROPOSAL**

**LEVIII AND GHG**

**January 18, 2012**

This comment is submitted on behalf of Aston Martin Lagonda Limited, Lotus Cars Limited and McLaren Automotive Limited. Each of these companies is classified as a “small volume manufacturer” under CARB regulations and is a manufacturer of a very limited number of high performance sports cars. See [www.astonmartin.com](http://www.astonmartin.com); [www.lotuscars.com](http://www.lotuscars.com); [www.mclarenautomotive.com](http://www.mclarenautomotive.com)

1. **THE CARB PROPOSAL : SMALL VOLUME MANUFACTURER (SVM) PASSENGER CAR REQUIREMENTS [[1]](#footnote-1)**

For LEV III, CARB is proposing to provide specific requirements for Small Volume Manufacturers (SVM) category. This approach was also followed by CARB in LEV II.

Staff has explained that the proposed SVM requirements arose out of the need to recognize limited model lines that SVMs had available to comply with fleet average requirements as well as the limited investment and engineering resources needed to meet more stringent emission standards. We support both the staff proposal as well as the reasoning behind it.

All three manufacturers also understand the need to control mobile source pollution and GHG, and support the regulatory efforts of CARB. The three companies further believe that small manufacturers must do their fair share to reduce vehicle pollution and GHG.

1. **BACKGROUND**

Independent vehicle manufacturers with a California three-year sales volume average of 4,500 units per year or less of new PCs, LDTs, MDVs and heavy-duty vehicles / engines are defined by CARB as SVMs. Manufacturers meeting this sales volume criterion (approximately a half dozen) are primarily those with very low volume sales (less than a thousand units per year) of high performance vehicles. In LEV II, compliance with the fleet average NMOG requirement for SVMs was deferred until 2007, the end of the phase-in period, Beginning in 2007, SVMs were required to meet a fleet average requirement approximately 53% less stringent than the fleet average requirement for larger manufacturers.

In general, we support postponing SVM compliance until the end (or near the end) of any phase-in. Doing so levels the playing field for SVMs vis a vis the specialty models of large volume manufacturers, since those large volume manufacturer models are permitted to comply with the new requirements only at the very end of the phase-in. The CARB proposal provides this necessary SVM lead-time flexibility.

We also fully support the staff conclusion that SVMs are doing their “fair share.” Staff explained that.

* SVMs are on the leading edge in developing vehicles using advanced vehicle construction/ design and lightweight materials.
* SVM vehicles demonstrate in very real terms the potential for innovative approaches to vehicle design and material use to achieve vehicle weight reduction without compromising safety (especially important for reducing GHG emissions).
* SVMs are at a competitive disadvantage (in terms of both investment and engineering resources) in that they must compete with full line manufacturers who are able to offset the emissions of their low volume high performance vehicles with higher volume, lower emission vehicles.
* Periodic reviews of these manufacturers’ emission capability should assure that they will continue to improve the emissions of their vehicles.

Accordingly, with agree with and support staff’s proposal that the effective date for compliance with the LEV III requirements be deferred.

1. **WE URGE CARB TO ADOPT LEVIII SVM POLLUTANT EXHAUST PROVISIONS AS FOLLOWS:**

Besides addressing lead-time, the staff SVM proposal also has specific SVM **standards**. We fully support this part of the proposal. We set forth below our understanding of the SVM proposed requirements. Portions in blue indicate an issue needing confirmation or a requested modification

1. **PROPOSED EXHAUST LEVIII STANDARDS**

* **PROPOSED FTP FLEET SVM STANDARDS NMOG+NOx (g/mi)**

|  |  |  |  |
| --- | --- | --- | --- |
| *Model Year* | *NOx+NMOG* | *DURABILITY (FULL USEFUL LIFE)* | *CERTIFICATION FUEL* |
| **Through 2019** | **0.160 (current req.)** | **120k miles** | **Existing** |
| **2020-24** | **0.125 -ULEV 125** | **150k** | **E10 start MY 2022** |
| **2025 and +** | **0.070**  **(ULEV 70)** | **150k** | **E10** |

***Particulate Standards for Small Volume Manufacturers.***

* + - *2021 - 2027 model years* -- certify 100 percent of its passenger car vehicle fleet to the 3 mg/mi particulate standard. Change start date to MY 2022 to align with proposed changes to other standards and test fuel in order to avoid burdensome SVM certification in consecutive years
    - *2028 and subsequent model years* -- certify 100 percent of its passenger car vehicle fleet to the 1 mg/mi particulate standard

**CARB must revise and keep updated assigned DFs**

* **PROPOSED SFTP II STANDARDS** [[2]](#footnote-2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Model Year* | *SVM Requirements* | | *DURABILITY* | *CERTIFICATION FUEL* |
| **Through 2021** | **SFTP I LEVII existing level** | | **4k miles** | **Existing** |
| **2022 and +** | **SFTP II ULEV/ULEV70/ULEV50 level** | | **150k miles** | **E10** |
| **US06** | **SC03** |
| ***NMHC+NOx* 0.120 g/mi**  ***CO***  **9.6 g/mi**  ***PM***  **10.0 mg/mi** | ***NMHC+NOx* 0.070 g/mi**  ***CO***  **3.2 g/mi** |

**CARB must revise and keep updated assigned DFs**

1. **PROPOSED EVAPORATIVE LEVIII STANDARDS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Model Year* | *SVM REQUIREMENT* | | *DURABILITY* | *CERTIFICATION FUEL* |
| **Through 2021** | **LEVII standard** | | **120k** | **existing** |
| **2022 and +** | **LEVIII standard** | | **150k** | **E10** |
| **Option 1** | | | |
| **Running Loss**  **g/mi** | **3 day and 2 day Diurnal / Hot Soak** | | |
| **Whole vehicle g/test** | **Fuel Only**  **g/test – see note below** | |
| **0.05** | **0.350** | **0.0** | |
| **Option 2** | | | |
| **Running Loss**  **g/mi** | **Highest Whole Vehicle Diurnal + Hot Soak g/test** | **Canister Bleed Test**  **g/test** | |
| **0.05** | **0.300** | **0.020** | |

**Note --** In lieu of demonstrating compliance with the fuel-only emission standard (0.0 grams per test) over the three-day and two-day diurnal plus hot soak tests, a manufacturer may, with advance Executive Officer approval, demonstrate compliance through an alternate test plan.

**CARB must revise and keep updated assigned DFs**

* **Procedure for deduction of background evaporative emissions from full vehicle testing (mirror image of rig testing) continue to be accepted; an important issue to SVMs given SVM usage of composites, leather and larger tires**

1. **WE URGE CARB TO ADOPT THE SVM *GHG* REGULATIONS AS PROPOSED**

Existing CARB regulations state that compliance with the National GHG Program (EPA) for MYs 2012–2016 will be deemed compliance with the CARB program. In this regard, should an SVM receive an exemption from the federal GHG standards during such period, the SVM will also be exempt from GHG requirements in California.

As regards MY 2017-2025, CARB has proposed to mirror the EPA proposal for SVM GHG requirements during this second timeframe. We wholeheartedly support both CARB’s decision as well as the underlying EPA proposal.

The essence of the EPA/CARB SVM GHG proposal is for each eligible SVM to petition both EPA and CARB for a case by case SVM-specific GHG standard. Small volume manufacturers with nationwide sales of fewer than 5,000 vehicles per year may petition CARB for alternative GHG emission standards. Consideration of alternative standards would be based on a review of the manufacturers’ engineering and economic resources and other relevant data. If determined appropriate, alternative emission standards would be granted for a period of up to 5 years and reconsidered at future 5-year intervals.

We do have one observation on the CARB GHG case-by-case program which we feel is significant. Given that an SVM must separately petition EPA and CARB for a case-by-case standard, we believe that all parties would wish to avoid a situation where a case-by-case standard determined by EPA ends up being different from the CARB case-by-case standard for the same SVM covering the same time period. We believe that close cooperation between EPA and CARB, as well as simultaneous filings with both agencies by the SVM, should essentially eliminate the risk of two different standards for a given SVM. However, we wish to bring this issue to the Board’s and staff’s attention.

1. **CONCLUSION**

We respectfully request that the Board adopt SVM provisions as discussed above.

Thank you.

Sincerely,

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1. This comment only addresses SVMs and **passenger cars.** Other vehicle categories (e.g. LDTs) and other manufacturer size categories (e.g. ILVMs) have other issues that are not addressed here. We also take no position as regards changes to any CARB definitions. [↑](#footnote-ref-1)
2. Composite standards may also be adopted but typically with few test groups, SVMs would tend not to use such [↑](#footnote-ref-2)