ROUSH

September 18, 2023

The Honorable Steven S. Cliff, Ph.D. Executive Officer
California Air Resources Board
1001 I Street
Sacramento, CA 95814
ATTENTION: Clerk's Office

RE: Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus Regulation

Dear Dr. Cliff,

Roush appreciates the opportunity to submit the following comments on the proposed amendments to the Heavy-Duty Low NOx Omnibus Regulation ("Omnibus Rule"). Roush applauds the efforts that the Air Resources Board (the "Board" or "ARB") and staff continue to put into the development of this rule to ensure that the requirements are workable for manufacturers while achieving significant emission reductions.

Roush participates in the heavy-duty vehicle industry as an engineering, testing, and mechanical services provider under our Roush Industries division, and as a manufacturer of heavy-duty spark ignited engines and BEV and alternative fuel conversion systems under our ROUSH CleanTech division. ROUSH CleanTech is very proud to have been a leading provider of low-NOx LPG and CNG engines in the school bus industry, as well as leading the production use of gasoline refueling emissions controls for Blue Bird school buses. Over the last decade, over 2,500 unique customers have deployed nearly 40,000 of our vehicles in every state in the US and province in Canada and accumulated over 1 billion miles in every driving condition.

Given the activities leading to the recent amendments to the Omnibus Rule, it is important to point out that Roush was not invited to, and therefore did not, participate in the discussions that resulted in the "Clean Truck Partnership" (the "CTP") agreement between ARB and members of the Engine Manufacturers Association ("EMA") as well as a separate equivalent agreement with Ford Motor Company. Accordingly, Roush is not a signatory to that agreement and is not bound by its terms and conditions.

Roush recognizes that the original Omnibus Rule package approved by OAL in December 2021 presented a number of challenges for manufacturers. Overall, Roush does not object to the specific modifications being proposed in the new amendments. That said, we believe these challenges should have been addressed through the simple and straightforward approach of (1) eliminating the 0.10 NOx FEL cap for all relevant engines for the 2024-26 model years ("MY"), and (2) allowing any manufacturer (not just so-called "legacy" diesel engines) the additional compliance flexibilities proposed here. As ARB states in support of these proposed amendments, such flexibilities are emissions-neutral, with no negative outcomes of any kind, suggesting that these flexibilities should be part of any future emissions package. It is unclear what justification remains for making these flexibilities available only to "legacy" engines—as ARB clearly states, there is no environmental or health impact from selling more high-emitting engines so long as those excess emissions are offset elsewhere:

As discussed above, similar to the existing legacy engine provisions, manufacturers would be required to offset any excess NOx and/or PM emissions deficits generated from legacy

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engine sales by using the same pathways currently existing in the Omnibus regulation. As a result, the proposed amendments are emissions-neutral; that is, they are not projected to provide any additional emission reductions, nor are they expected to result in any emissions increases. Emissions and health benefits expected from the Omnibus regulation as initially adopted would remain the same.¹

Notwithstanding the substantive changes to the Omnibus Rule, Roush objects to the process used to revise the rule. As the Board is aware, concerns relating to insufficient lead time for the 2024-26MY standards were raised repeatedly during the development of the initial Omnibus Rule. During the regulatory development process, it was very evident that the required research had not been completed for key portions of the regulation. The Board, nonetheless, proceeded with approval instead of potentially delaying implementation to satisfy the procedural requirements and work through those issues raised regarding lead time. When it became clear that objections to the Omnibus Rule package in its existing form continued to pose significant problems for engine availability in the 2024MY, ARB requested that EPA "defer action" on the preemption waiver request for the Omnibus Rule to allow ARB to work with industry and other stakeholders. As of this writing, the Omnibus Rule still requires further modification, as the proposed amendments really only address 2024MY engine availability and do not resolve the Omnibus Rule's other shortfalls.

Roush also objects to ARB's use of "extra-regulatory" and non-public negotiations to develop and enter into the CTP agreement with members of EMA. We believe this type of private negotiation, only made public after the State of California and multiple publicly owned companies had signed the commitment, subverts the mandated process of transparent public input and review that is a cornerstone of our environmental regulatory system. The focus of the agreement on OEMs complying with regulatory language even if the Omnibus Rule is overturned or never fully implemented, and eliminating future legal and public challenges, undermines the important legal protections afforded by the administrative process. Agreements relating to the ACT program and the internal combustion sales ban, in particular, will generate excess costs for consumers and commercial fleets that will not receive the variety of products that ordinarily would be present in a functioning competitive market. There are times when individual stakeholder and regulatory staff discussions are appropriate when proprietary information is involved; however, in this case, instead of those discussions furthering understanding and public discourse and review, they have served to cut off the process and exclude affected stakeholders from providing meaningful input.

Aside from the issues with the Omnibus Rule which will require the modifications noted in the CTP, Roush believes there are at least two additional areas that should be addressed before ARB requests a waiver of federal preemption under section 209 of the Clean Air Act and fully implements the rule:

• The off-cycle in-use test protocol (single-bin moving average window, or "1-bin MAW") included for Otto-cycle/Spark-Ignited ("SI") engines in the 2021 Omnibus Rule should be either significantly revised or eliminated entirely. This test method was never properly researched or validated during the initial Omnibus rulemaking, with the assumption that EPA would review the procedure as part of their Clean Trucks Initiative rulemaking and ARB would simply adopt any modifications accordingly. EPA determined that off-cycle standards for SI engines were not necessary and therefore did not conduct any verification

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¹ Notice of Public Comment Period on Proposed Amendments to the Heavy-Duty Engine and Vehicle Omnibus Regulation, California Air Resources Board, p. 5.

² Email from Steven Cliff, ARB, to Joseph Goffman, EPA, March 10, 2023.

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of the testing methodology. ARB already intends to eliminate these standards in 2027MY as stated in the CTP agreement³. We suggest therefore that the best path forward is to simply remove the standards from the Omnibus for 24-26MY as well. If ARB wishes to maintain an off-cycle SI standard for model years 2024-26, Roush would be pleased to work with staff to resolve the technical problems with the proposed test protocol and support the public comment and review process that such changes would require.⁴

The second issue is related to the timing of a final rule supported by a valid waiver of federal preemption. Importantly, the final Omnibus Rule and EPA waiver have not been completed so that other states can adopt the Omnibus Rule requirements in a timely and coordinated fashion. The 2024-26MY NOx standard for California was adopted with early compliance provisions at its heart—ARB was fully aware that the 0.05 NOx standard was ambitious, and therefore provided flexibility for engine manufacturers to receive credit for early certification of cleaner NOx engines. California explicitly allowed credit accumulation beginning in the 2021MY. A number of OEMs, including Roush, took advantage of these Averaging, Banking, and Trading ("ABT") provisions and accumulated California NOx credits in the 2023MY. No other state adopted the Omnibus Rule in 2021; Oregon is positioned to be the first state to try to adopt the rule in the 2024MY if an EPA waiver is granted to California, with the remaining adopting states having the program take effect in 2025MY or 2026MY. To our knowledge, none of these states has promulgated an ABT program associated with their proposed Omnibus Rule. We assume this is due to the lack of a finalized California Omnibus Rule with a valid EPA waiver allowing for implementation. This gap will likely lead to the unfortunate situation where states could immediately implement the rule without any ABT credit pooling or established ABT credit balances because the program language does not allow credits to be accumulated prior to adoption. This could result in the states adopting the Omnibus Rule requirements with a more stringent ABT requirement than California itself, which we believe was not the original intent of the rule and would run counter to the requirement in section 177 of the Clean Air Act which allows states to adopt California standards so long as they are identical. We note that ARB seems to be aware of this concern given the provision in the CTP agreement stating the intent, beginning with model year 2027, to roll all 2026MY and earlier credits into a single 50-state pool based on EPA's 0.20 NOx standard, and the commitment from ARB to help create a 50-state pool for the ACT program. Notwithstanding this provision, the issue of NOx credits during the 2024-26MY timeframe remains unresolved.

While Roush would be pleased to work collaboratively with ARB staff on improving the Omnibus Rule, we are struggling to see how the 2024-26MY requirements can be retained, as it seems highly unlikely the rule can be revised appropriately and presented for waiver approval in any reasonable implementation timeframe. This not only puts ARB's ability to hold manufacturers to the proposed 2024MY provisions in doubt, but also calls into question whether any state can adopt the program. As explained above, while we do not support the process behind developing the CTP agreement, we suggest that the Board may wish to take advantage of that voluntary commitment as the first phase of reductions for 2024-26MY and focus the updated rulemaking on

³ This provision is not dealt with directly in the CTP agreement. However, the CTP states that "CARB plans to harmonize with the U.S. EPA 2027 CTP NOx rule with the exceptions noted in Appendix B", and Appendix B does not include an exception for SI off-cycle standards.

⁴ Note that the CTP agreement includes a commitment from ARB to remove the mandatory recall provisions associated with the off-cycle test procedures for all engines. We welcome this change, but do not believe it is sufficient to resolve the concerns with the procedure itself.

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a full public review for 2027MY and later. Once the problematic 2024-26MY and additional provisions are removed from the rulemaking, and any 2027MY+ California-specific requirements are transparently reviewed, fully justified, and approved, it would be appropriate to revive the waiver process so that manufacturers can have robust federal and California heavy-duty emissions programs that account for the key transition and compliance issues.

Thank you for considering our comments.

Sincerely,

John Thomson Executive Director, Roush Technical Office john.thomson@roush.com