

**STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**Proposal to Adopt California's
Advanced Clean Trucks (ACT)
Regulations**)
)
)
)

**Public Hearing Date:
August 17, 2023
Public Comment Deadline:
August 28, 2023**

**COMMENTS OF THE
TRUCK AND ENGINE MANUFACTURERS ASSOCIATION**

August 23, 2023

Timothy A. French
Truck & Engine Manufacturers Association
333 West Wacker Drive, Suite 810
Chicago, IL 60606

**STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Proposal to Adopt California’s)	Public Hearing Date:
Advanced Clean Trucks (ACT))	August 17, 2023
Regulations)	Public Comment Deadline:
)	August 28, 2023

The Truck and Engine Manufacturers Association (EMA) hereby submits its comments on the proposal of the Maine Department of Environmental Protection (MDEP) to adopt California’s Advanced Clean Trucks (ACT) regulations. EMA is the trade association that represents the world’s leading manufacturers of medium-duty and heavy-duty (MHD) on-highway vehicles and engines, and is a key stakeholder in the development and implementation of the ACT regulations that the California Air Resources Board adopted in 2021.

Recently, EMA has entered into a comprehensive agreement with CARB regarding the implementation of a suite of state and federal regulations to help transition the MHD on-highway vehicle sector to zero-emission (ZE) trucks. (See CARB website; [“CARB and truck and engine manufacturers announce unprecedented partnership to meet clean air goals.”](#)) That agreement includes, among other things, commitments to cooperate on the implementation of CARB’s ACT regulations in the increasing number of “opt-in” states, and to align CARB’s MHD “Omnibus” low-NO_x regulations with EPA’s recently-finalized “Clean Trucks Plan” regulations as of the 2027 model year.

Consistent with the recent agreement between EMA and CARB, EMA does not oppose the MDEP’s proposal to opt-in to the ACT regulations starting with the 2027 model year. That said, EMA does want to highlight four important prerequisites to the successful implementation of the ACT regulations in Maine: first, the MDEP will need to take steps to align the manner in which ACT credits and ACT deficits are generated; second, the MDEP will need to establish a coordinated and pooled ACT credit banking and trading program before the end of the year; third, the MDEP will need to take steps to ensure that the necessary ZE truck recharging and hydrogen-refueling infrastructure is put in place in Maine sufficiently in advance of the implementation of the ACT regulations’ annually increasing ZE truck sales mandates; and fourth, the MDEP will need to work with other agencies and departments to ensure that sufficient ZE-truck purchase incentives are available to trucking fleet operators in Maine. EMA’s comments will expand on each of these prerequisites to a viable ACT program in Maine.

As the MDEP has recognized, the availability of zero-emission vehicle (ZEV) credits will be integral to the feasibility of the ACT regulations. Indeed, the MDEP’s proposal specifically allows for the early generation of ZEV credits starting with the 2024 model year (which begins in just over four months). However, there are a number of issues currently frustrating the development of a robust ACT credit program that the MDEP will need to address. Specifically, the underlying regulations currently create a misalignment between when and how ACT deficits are generated (with respect to sales of conventionally-fueled MHD vehicles) and when and how

ACT credits are generated (with respect to the sales of ZE trucks). The ACT regulations currently state that deficits and credits are generated as follows:

1963.1 (a) Deficit Generation. Starting with the 2024 model year, a manufacturer shall annually incur deficits based on the manufacturer's annual sales volume of on-road vehicles produced and delivered for sale in California. Deficits are incurred when the on-road vehicle is sold to the ultimate purchaser in California.

1963.2 (a) ZEV Credit Calculation. A manufacturer may generate ZEV credits for each ZEV produced and delivered for sale in California for the manufacturer-designated model year. ZEV credits are earned when a new on-road vehicle is sold to the ultimate purchaser in California.

California has recognized the operational mismatch in credit/deficit generation and in early credit reporting requirements, and has acknowledged that future updates will be needed to the ACT sales/credit reporting system to account for, among other things, vehicles that have been sold by OEMs but remain on dealer lots, and for vehicles that may be delivered for sale in California but are sold thereafter to an ultimate customer out-of-state. To that end, CARB has issued a Manufacturers Advisory Correspondence (MAC), that states as follows:

“Credits and deficits are accrued when a vehicle is delivered to the ultimate purchaser in California. However, we recognize that all sales for a given model year will not be delivered to the ultimate purchaser by the time the first annual report is due for the applicable model year. ***Future updates will be necessary until all sales for the model year are completed and compliance can be determined.***”
[Manufacturer Advisory Correspondence, ACT 2023 \(ca.gov\)](#)

The specific problem centers around the regulatory language stating the ZEV credits “are earned when a new on-road vehicle is sold to the ultimate purchaser in California.” Vehicle manufacturers, especially in the MHD market, often are not aware of the timing of when a given MHD vehicle is sold to an ultimate purchaser, especially since the vehicle manufacturer may have initially sold the unfinished truck to a body-builder, truck dealership or other intermediate third-party in the MHD vehicle distribution chain. For example, a vehicle could be sold by an OEM to a dealership group, and then to a body-builder company (that up-fits the vehicle with a box, or a refrigerator unit, or a tow-bed, or whatever), and then back to a dealership, where it might eventually, after all that, be sold to an ultimate customer who puts the truck in service.

Given that chain of distribution, OEMs are typically not aware of their MHD vehicles’ final sales transactions and state registrations until the trucks show up in the OEMs’ warranty systems (for which there is no strict timing), or, more likely, until their vehicles show up as registered in the Polk data base as new registrations. Thus, the best and most accurate source of data that OEMs have is often Polk, since it contains the timing of registration and the state of registration, and so can serve as the “final arbiter” of whether or not a vehicle has been “sold in California” so as to count under the ACT regulations.

The problem with this process is that it lags the manufacture and initial shipment of the MHD vehicle by months, and sometimes even years, and is, in the end, a process over which OEMs have no control. In that regard, if an OEM sells a vehicle in Nevada, there is nothing that stops a

final customer from registering it in California, and the OEM would have no ability to control or even be aware of that transaction upfront. Consequently, and by way of example, if an OEM plans 9% ZEV sales into California, or Oregon, or any other opt-in state, that OEM will not actually have upfront control over where the ZEVs ultimately end-up in the hands of ultimate purchasers, which means that the OEM will not actually know upfront in which state the credit from the ZEV sale will actually count. The adverse consequence of that is that OEMs may unwittingly undersell ZEVs in certain originally-targeted states, which can lead to ACT non-compliance, through no actual fault of the OEM. This is especially likely, since, when faced with potentially limited availability of conventionally-fueled vehicles in the vehicle stock of California/opt-in-state dealerships, fleets might look to purchase vehicles from out-of-state dealerships, and then, without the OEM's knowledge, register those vehicles in California, thereby frustrating OEMs' calculations and plans for percentage-based sales of ZEVs in the various ACT states.

In recognition of this significant misalignment and timing problem, and as part of the previously referenced agreement between CARB and EMA, CARB has confirmed that:

In a show of good faith, in calendar year 2023, CARB issued guidance on ACT credit reporting, clarifying that compliance determination and sales reporting requirements are both defined when vehicles are produced and delivered for sale in California. CARB staff will also propose to initiate a rulemaking action to that effect in calendar year 2024. Staff also will propose to modify section 1963.3(b) to lengthen the number of years a manufacturer has to make up a deficit from one year to three years.

In another section of the agreement, related to Omnibus NO_x credits (not strictly ACT), but for the same reason, CARB also has clarified that:

A MAC prescribing how to demonstrate legacy engine cap compliance (for example, via labeling data) [will be issued]. CARB staff's intent is to be flexible regarding de minimus accidental leakage of non-legacy engines to California.

As a piece of the "fix" to make it easier to determine which vehicles will count as California vehicles, CARB is asking manufacturers to add the letters "CA" to their engine labels for vehicles which the OEMs *intend* for sale in California. CARB staff have not actually provided language yet that clarifies how OEMs should make this determination, but they have signaled their intent to use this "as-labeled" mechanism for legacy engine compliance reporting, and it may be suitable for ACT credit-generation purposes as well, in California.

That said, given the compressed time between now and the beginning of next year when early ACT credits can start to be generated in Maine, the MDEP will need to take its own steps to make clear that ACT credits can be generated when an OEM delivers a vehicle to another party where the vehicle is *intended* for sale by the OEM in Maine. The implementation of the ACT regulations in opt-in states, including Maine, will be frustrated if not thwarted if OEMs will have to wait months or years to review the Polk data to determine where a given ZEV credit can be applied. Such a waiting period could easily lead to under/over-sales of ZEVs in the respective ACT opt-in states, and could result in wide-scale non-compliance, again all through no fault of the OEMs. Thus, the MDEP needs to address and remediate this issue as soon as possible. In that regard, as noted, CARB may not make its own intended regulatory fix (aligning the generation of

deficits and credits) by the end of the year. Thus, the MDEP will need to take some affirmative steps of its own to resolve this issue before year-end.

Turning to the second prerequisite to a successful ACT program in Maine, the MDEP will need to work with California, NESCAUM and the other opt-in states to establish a pooled ACT credit program, since the sales volumes in several of the opt-in states, including Maine, are simply too low to sustain viable stand-alone ACT credit programs. Significantly, in the recent agreement between CARB and EMA, CARB has agreed to “work with OEMs and section 177 states in an effort to develop and implement a pooling structure for states that have adopted the ACT regulations to provide OEMs flexibility.”

Such a pooled credit program will need to allow for the use of credits among the various pooled opt-in states regardless of which particular opt-in state a credit may have been “earned” in – *i.e.*, without regard to which individual opt-in state turns out to be where each individual MHD ZEV is ultimately registered and operated. Since the transaction path for a commercial vehicle is so much more complicated and obscured than for a passenger vehicles (as described above), manufacturers have limited capability to track and precisely distribute exact percentages of ZEV products in each opt-in state (the number of which continues to grow).

Moreover, while an “as-labeled, as-sold” approach can work for one very large state, like California, it would be unworkable to have such a program for the multiple other states (perhaps up to seventeen states) that may end up opting-in to the ACT regulations. Manufacturers would be forced to sell a California-labeled version, a New York-labeled version, a New Jersey labeled version, a Colorado-labeled version, and a Maine-labeled version, etc. – which would seriously constrict the inter- and intra-state sales of trucks, along with the supply lines and business practices with which the commercial vehicle industry works. A cement truck builder, for example, would need to know which of seventeen states a particular truck would eventually be sold in, months or years down the line, at the time of ordering a vehicle – or risk holding on to an extremely expensive capital investment they cannot sell, because their customer is in one particular ACT opt-in state, and not another. The ultimate ramifications could effectively end the “stock truck” business if the country is subdivided into enough different pools. It would also make inventory management, ordering systems, and logistics extremely complex, as we would move from having individual truck models (or two, for CA- and non-CA) to however many different state ACT credit banks there might turn out to be. It would become entirely unworkable very quickly.

In light of the foregoing, the opt-in states (perhaps coordinating through California and NESCAUM) will need to pool all ACT credits and deficits equally, without any discounts, regardless of which individual opt-in state turns out to be where a particular ultimate purchaser resides. In essence, all ACT opt-in states will need to be treated as “one big state” for the purposes of calculating ACT volumes. That would have the benefit of allowing manufacturers to ease state transitions into the ACT program, since OEMs would be able to leverage credits they had already built-up in other states to offset conventional vehicles in new states that have not yet developed a robust ZEV market. It would preserve a continued functional body-builder and TEM (truck equipment manufacturer) market, and avoid potential shortages of the new trucks that are needed to move goods and do work throughout the nation. If a bridge-builder needs a new cement mixer, and cannot get one because the only ones available have been shipped to and labeled for the wrong opt-in state, that affects not just OEMS, but all of the economic sectors that relies on trucks. Even more fundamentally, since the GHGs at issue are global pollutants, not local air contaminants, it

should not matter where a particular ZEV truck ends up among the opt-in states so long as the overall ZEV-truck sales mandates are being met.

A third prerequisite to the deployment of a successful ACT program in Maine is taking steps to ensure that the necessary infrastructure to recharge battery-electric (BEV) trucks and to refuel hydrogen fuel-cell (FCEV) trucks will be in place *before* the ACT ZE-truck sales mandates kick in. The MDEP will need to monitor the progress and pace of that necessary infrastructure development, and potentially will need to implement delays in the phase-in of the ACT sales mandates if that infrastructure is not installed at scale and on time. As the MDEP is well aware, trucking fleet operators in Maine simply will not buy ZE-trucks if they cannot be sure that the necessary ZE-truck infrastructure is in place and fully operational before they purchase a ZE-truck. That is a real challenge, since third-party analyses indicate that the ACT program in Maine could require the sale of more than 6,700 BEV trucks and 525 FCEVs by 2030. Those sales in turn would require the installation of approximately 6,500 MHD charging ports and multiple hydrogen refueling stations *before* 2030. The MDEP will need to help coordinate and ensure the development of that vital infrastructure development.

As a fourth and final prerequisite to a successful ACT program, the MDEP will need to coordinate with other state agencies and departments to ensure that sufficient publicly-funded incentives are available to trucking fleet operators in Maine for the purchase of ZE-trucks. As the MDEP is aware, the current price of a ZE-truck is more than twice that of a conventionally-fueled truck. As a result, trucking fleet operators are unlikely to purchase ZE-trucks in the near-term without some form of incentive funding to offset the significant difference in capital costs. While the total cost of ownership (TCO) calculations continue to improve for ZE-trucks, it may take until the 2030-plus time period for those TCO calculations to come out consistently in favor of ZE-trucks. During that interim period, it is vital that the MDEP take additional steps to try to ensure that sufficient public funding is available to bridge the capital-cost differentials for MHD truck purchasers in the state.

It is vitally important that the MDEP address the foregoing issues promptly. More specifically, if MHD truck manufacturers cannot be assured of when and where their ZEV-truck credits can be generated and used – *i.e.*, if OEMs cannot be assured that ZEV-truck credits will be generated when a ZEV truck is “delivered for sale” in a particular opt-in state as intended by the OEM – then truck manufacturers could be compelled to take other measures to ensure compliance with the ACT’s ZEV-truck sales mandates. Stated differently, and as was raised by multiple other stakeholders during the public hearing on this matter, if an OEM cannot predict with a reasonable degree of certainty when a ZEV-truck credit will be generated in a given opt-in state, the OEM would have no compliance option other than to reduce the sales of conventionally-fueled trucks into that state to protect against violating that state’s ACT ZEV-sales requirements, which requirements are set based on a percentage of sales of conventionally-fueled trucks. To guard against violating the ZEV-truck sales mandate in an opt-in state, OEMs would have no choice other than to reduce the scale of that mandate by reducing the number of conventionally-fueled vehicles sold into the opt-in state, especially if the state lacks the necessary infrastructure capabilities and incentive programs, or has trucking fleets that are poorly suited to the early deployment of ZEV-trucks in the first place.

Thus, unless the MDEP can promptly solve the ZEV-credit problems at issue (as well as assure that the needed infrastructure and incentives will be in place), there is a risk, as other

commenters have stated, that opting-in to the ACT program could lead to reduced availability of new conventionally-fueled trucks in Maine. We note again that we do not oppose the proposed opt-in, but in order for it to be successful, Maine (along with the other opt-in states) will need to address the significant issues discussed above.

EMA appreciates the opportunity to submit these comments, and we look forward to working with the MDEP on the implementation of this important rulemaking going forward.

Respectfully Submitted,

TRUCK AND ENGINE
MANUFACTURERS ASSOCIATION