

TOWN COUNCIL STAFF REPORT

Title: Update on Vehicle Replacement and CARB Compliance

Meeting Date: May 15, 2024

Prepared by: Haislip Hayes, PE Public Works Director

RECOMMENDATION:

Receive a report on the vehicle replacement program and the Town's responsibilities to comply with the California Air Resources Board (CARB) requirements.

BACKGROUND:

The formation of the California Air Resources Board (CARB) dates back to 1967. The formation was the merger of existing organizations and a response to Federal legislation giving California the ability to set its own more stringent air quality rules due to California's unique geography, weather, and expanding number of people and vehicles. Through the decades, CARB has enacted legislation to reduce air pollutants. Much of this legislation has been directed at automobile and truck pollutants. CARB created the first in the nation tailpipe emissions standards, eliminated lead from gasoline, and required on-board diagnostics and other innovative emission control strategies. In recent years CARB has legislated significant changes to diesel fleets and directives to move fleets to zero emission vehicles. These changes will have a direct impact on the Town of Mammoth Lakes and measures need to be taken to prepare for these changes.

ANALYSIS/DISCUSSION:

The Town maintains a robust and fully funded vehicle replacement program. These efforts have allowed the Town to replace vehicles as appropriate at the end of their useful life. The program also allows the Town to adapt to its needs, surplusing and adding equipment to serve the community. Recently, staff have taken a fresh look at our inventory of vehicles and are removing several older and underutilized vehicles from the fleet. The cleanup not only helps with CARB compliance but reduces clutter and our financial obligation to the program. In the future staff will need to purchase equipment to serve our new facilities such as the Community Recreation Center (CRC), Mammoth Arts and Cultural Center (MACC), and Town Hall. Staff are looking at equipment that is multifunctional and can serve multiple departments. Staff will return to Council in the coming months with recommendations on new vehicle acquisitions and replacements.

Navigating "CARB compliance" is no easy task. There are several compounding and overlapping programs that must be complied with. These programs influence how the Town manages the vehicle replacement program. The purpose of this report is to provide a high-level overview of the aspects of these programs that directly impact the Town. These regulations may change some practices and influence the Town to develop new strategies

to comply. A significant amount of information has been left out to make this report more applicable. CARB regulations are applied differently across the State. Mono County is under less stringent regulations and has been given more time to comply with certain regulations. There are also some key differences between how regulations are applied to private and public fleets. The Town only needs to comply with the regulations applicable to local government. The following CARB programs impact the Town.

Truck Compliance

The Rule for On-Road Heavy-Duty Diesel-Fueled Public and Utility Fleets was approved in 2005 to reduce diesel particulate matter (PM) emissions from fleets operated by public agencies and utilities (PAU). The rule mandates affected owners to equip their affected vehicles with the Best Available Control Technology by December 31, 2012. This rule applies to Town-owned diesel vehicles over 14,000 pounds such as our Peterbilt semi-truck. Compliance was phased in based on the engine model year. In general, compliance for the Town required retrofit with the highest-level PM diesel emission control strategy. This regulation has no reporting system but requires the Town to keep its own records of compliance.

Off Road Vehicle and Equipment Regulations

All self-propelled off-road diesel vehicles 25 horsepower or greater used in California and most two-engine vehicles (except on-road two-engine sweepers) are subject to the regulation for In-Use Off-Road Diesel-Fueled Fleets. The overall purpose of the regulation is to reduce emissions of oxides of nitrogen and particulate matter emissions from off-road diesel vehicles operating within California. The regulation requires all vehicles be reported to CARB and labeled. Additionally, the regulation restricts the adding of older vehicles into fleets starting on January 1, 2014. Finally, it requires fleet owners to reduce their emissions by retiring, replacing, or repowering older engines. This regulation applies to equipment such as our backhoe, forklift, and roller. Snow removal equipment is exempt. This regulation has an online reporting system called DOORS. The Town logs its off-road fleet in this system.

Clean Truck Check

The Clean Truck Check program, also known as the Heavy-Duty Inspection and Maintenance program applies to most diesel and alternative fueled heavy-duty vehicles with a gross vehicle weight rating over 14,000 pounds operating in California. The program was fully implemented in January 2024. Clean Truck Check is similar to California's Smog Check program for light-duty vehicles. The goal of Clean Truck Check is to ensure that heavy-duty vehicles operating in California remain equipped with properly functioning emissions control equipment and that these components are repaired in a timely manner when needed. Clean Truck Check requires reporting, payment of annual compliance fees, and emissions compliance testing. This new program has an online reporting portal in which the Town has registered all applicable vehicles. The Town is required to test its vehicles to demonstrate compliance. Staff are currently being trained in how to conduct and report the test. Some equipment will need to be purchased to complete the testing, the cost of which fits within existing equipment budgets.

Advance Clean Fleets (ACF)

The ACF regulation requires certain fleets to phase-in medium and heavy-duty zero-emission vehicles (ZEV) into their California fleets through 2042. Starting January 1, 2027, the Town will be required to ensure 100% of new purchases are zero-emission vehicles. This will impact the purchase of larger vehicles and applies to all on road Town vehicles larger than an F250 truck. Snow removal equipment and certain two engine vehicles such as the vactor truck will be exempt from this regulation. Staff are adapting their vehicle replacement strategy to prepare for this mandate. Steps are being taken to reduce potential impacts to service and the budget.

In preparation for compliance with the ACF regulation Staff will be evaluating and projecting the Town's needs for what may be the serviceable life of our existing equipment. As the Town will no longer be permitted to purchase certain ICE vehicles beyond 2027 it is important that the Town fully understand the financial and functional impacts of these changes. Staff is working on a strategy to replace or consolidate equipment possibly sooner than usual as many vehicles do not exist in ZEV format. This will ensure community needs can be met for a lifespan beyond the implementation of this new regulation. Staff believes that infrastructure will need to be installed in preparation for these new vehicles; however, the capacity and technology needs are unknown. It is more than likely infrastructure will have to be phased in as needed. This will impact the Town Capital Improvement Program. The good news is that since the Town fully funds its vehicle replacement program the financial impacts of purchasing these mandated pieces of equipment will more than likely not have a significant financial burden to the Town.

FINANCIAL CONSIDERATIONS:

The Town fully funds its vehicle replacement program. These regulations will impact the timing and type of vehicles purchased to comply with these regulations. It is anticipated that there will be some strategy and timing impacts to the vehicle replacement program. Staff at this time do not believe there will be an overwhelming negative financial impact.

LEGAL CONSIDERATIONS:

Compliance with CARB regulation is a legal requirement. Failure to comply with CARB regulation has varying degrees of consequences.