RAQPAC Notes – EPA Update

3/28/2024 Meeting

Light & Medium-Duty Vehicles Multi-Pollutant Emissions Standards, Model Years 2027 & Later

On March 20, 2024, EPA announced a final rule, Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles, that sets new, more protective standards to build on existing federal greenhouse gas (GHG) and Tier 3 standards for these vehicles. The vehicles covered by this rule are passenger cars & light trucks, as well as larger pickups & vans (medium-duty, also known as Class 2b and 3 vehicles). These new standards will significantly reduce air pollutant emissions (not just GHGs, but criteria pollutants and air toxics as well) starting with model year (MY) 2027, and fully phase-in over a 6-year period between MY 2027 through MY 2032. The standards will provide important health benefits to millions of people nationwide, including both urban and rural communities near major roadways, which are disproportionately exposed to air pollution from motor vehicles.

For light-duty vehicles (LDVs), these new standards are projected to result in an industry-wide average target for the light-duty fleet of 85 grams/mile (g/mile) of CO_2 in MY 2032, representing a nearly 50% reduction in projected fleet average emissions target levels relative to EPA's existing federal GHG MY 2023-MY 2026 standards. For medium-duty vehicles (MDVs), EPA is revising the existing GHG standards for MY 2027 and establishing new standards for MYs 2028-2032, a six-year phase-in period from MY 2027-MY 2032. When fully phased in, the MDV standards will represent a 44% reduction in projected fleet average emissions target levels relative to the existing MY 2026 standards.

Beyond the revised GHG standards, EPA has finalized "Tier 4" criteria pollutant emissions standards for non-methane organic gases (NMOG), NOx, PM, and other criteria pollutants and their precursors.
For LDVs, EPA is finalizing:

- NMOG plus NOx standards that by MY 2032 will represent a 50% reduction from the existing 30 mg/mi standards for MY 2025 established in the Tier 3 rule in 2014.
- A PM standard to be fully phased-in by MY 2030, reducing tailpipe PM emissions from gasoline vehicles by over 95% in addition to reducing mobile source air toxics.

For MDVs, EPA is finalizing:

- NMOG+NOx standards that represent a 58% reduction & 70% reduction from the Tier 3 standards for Class 2b & Class 3 vehicles, respectively by MY 2033.
- A PM standard to be fully phased-in by MY 2031, reducing tailpipe PM emissions from gasoline vehicles by over 95% in addition to reducing mobile source air toxics.

These final standards are technology-neutral/performance-based standards for cars/SUVs/light pickup trucks & medium-duty larger pickups & vans for MYs 2027-2032. EPA expects that manufacturers will choose to produce a diverse range of clean vehicles under the standards, including cleaner gasoline vehicles, hybrids (HEVs), and plug-in hybrid electric vehicles (PHEVs), and full battery electric vehicles (BEVs). Under the performance-based emissions standards, manufacturers choose the mix of technologies they believe is best suited for their fleets to meet the standards.

The prepublication Final Rule is available on EPA's dedicated webpage for Regulations for Emissions from Vehicles and Engines, as well as a supporting fact sheet, regulatory impact analysis (contains discussion of associated costs), response to comments document (also contains cost discussions), Air Quality Analysis memo to the docket, and EPA's OMEGA model runs & files supporting the final rule's

benefit-cost & effects analysis. For more information, see: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-multi-pollutant-emissions-standards-model