

Cleaner Trucks Initiative NACAA Mobile Sources & Fuels Committee

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Overview

- Motivation
- Background
- Preliminary Timeline & Current Status
- Key Constituencies & Outreach
- Points of Contact
- Questions

Motivation

- EPA last revised NOx standards for heavy-duty (HD) trucks nearly 20 years ago
- Our current emissions performance standards have lowered overall NOx emissions, but have not encouraged effective emission control under low-load conditions (when at idle, moving slowly, or in stop-and-go traffic)
 - By addressing low-load operation, we can improve NOx emission controls in cities and in areas of high traffic, where it will make a big difference to communities
- We have an opportunity to modernize the requirements to better reflect the capability of available emissions control technologies

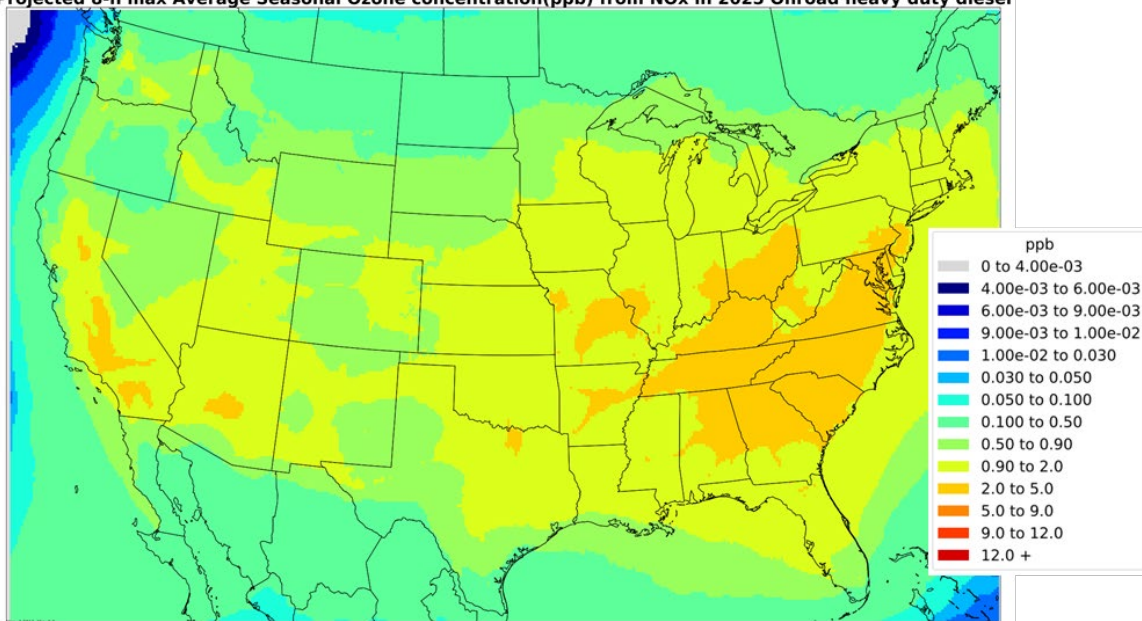
Impact of NOx Emissions from Heavy-Duty Diesel Vehicles

- Highway Heavy-Duty Diesel Vehicles
 - Largest single contributor to mobile source NOx
 - One of the largest mobile source contributors to ozone in 2025
 - Significant mobile source contributor to PM_{2.5} in 2025, due to
 - NOx emissions which form PM
 - Directly emitted PM
- Many HD vehicles travel interstate, and areas impacted most by NOx emissions are distributed around the country
 - June 2016: South Coast AQMD along with 20 other state and local government agencies petitioned EPA to reduce the federal highway heavy-duty engine NOx standards

Impact of NO_x Emissions from Heavy-Duty Diesel Vehicles*

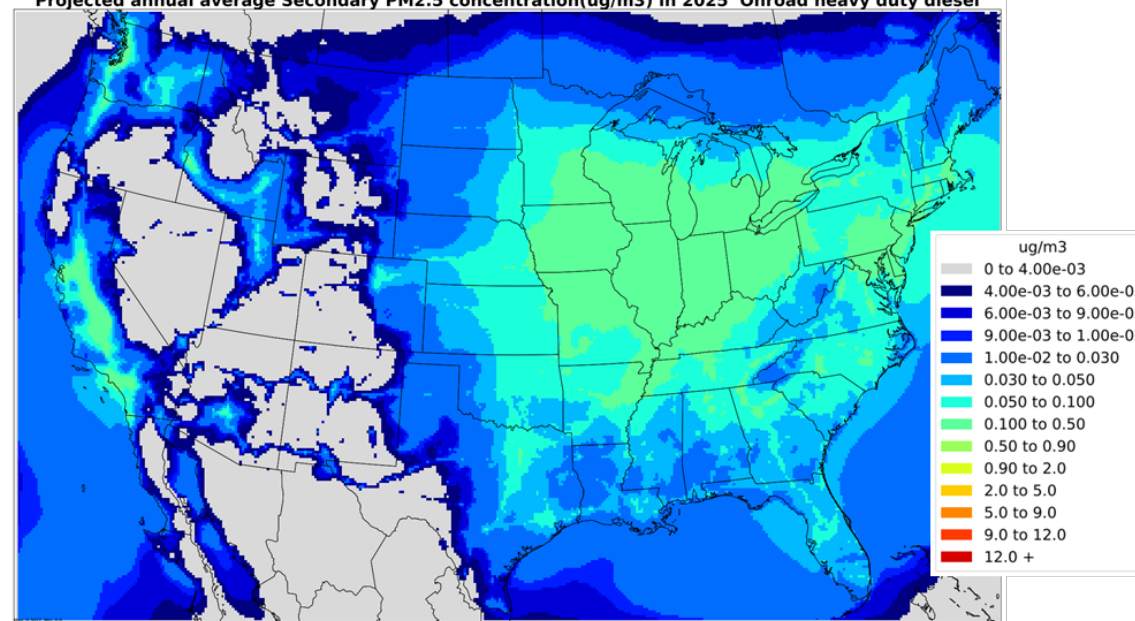
NO_x CONTRIBUTION TO OZONE IN 2025

Projected 8-h max Average Seasonal Ozone concentration(ppb) from NO_x in 2025 Onroad heavy duty diesel



NO_x CONTRIBUTION TO AMBIENT PM_{2.5} IN 2025

Projected annual average Secondary PM_{2.5} concentration(ug/m3) in 2025 Onroad heavy duty diesel



* Zawacki, et al. <https://doi.org/10.1016/j.atmosenv.2018.04.057>

The Cleaner Trucks Initiative

- On November 13, 2018, EPA Acting Administrator Andrew Wheeler announced the “Cleaner Trucks Initiative” (CTI) to address emissions from new heavy-duty trucks and engines
- Our objective is to achieve lower NOx emissions nationwide
 - Ensure real world emissions reductions
 - Investigate options for pre-production certification and in-use testing
 - Pursue a national, harmonized program
 - California already working on a low NOx program
 - Focus on NOx, and take a broad look at other heavy-duty engine emissions
- Additionally, we want to identify cost-effective means of assuring real-world compliance, and explore opportunities to streamline existing requirements

CTI Rulemaking Timeframe and Current Status

- Targeting 2020 for a notice of proposed rulemaking (NPRM)
 - Comment period after the proposal, followed by final rulemaking (FRM)

- Currently in the information-gathering stage
 - Early outreach to stakeholders
 - OEMs, Suppliers, States, Tribes, Labor, Fleets/OO, Env. NGOs, Dealerships
 - Continuing engagement with California Air Resources Board (CARB)
 - Coordinate our technical work with CARB staff
 - Preparing for formal small business outreach
 - Assessing technical feasibility
 - Cost and effectiveness of advanced technologies and compliance strategies
 - Planning cost, benefit, inventory, air quality, and economic analyses

Key Constituencies & Outreach

○ Key Constituencies

- Engine and vehicle manufacturers
- Technology suppliers
- Fleets
- Owner operators
- Trade associations
- Labor
- Dealerships
- State and local air quality organizations
- Tribes
- Environmental & health organizations

○ Recent & near-term outreach focus

- Senior Leaderships' early engagement
 - CARB senior management
 - Environmental NGOs
 - State & local air organizations (NACAA, NESCAUM, ECOS, AAPCA)
- Staff introductions to the rulemaking
 - Manufacturers of Emission Controls Assoc (MECA) bi-annual meeting
 - NACAA Mobile Sources & Fuels Committee
 - National Tribal Air Association (NTAA)/EPA Air Policy
- Ongoing staff outreach
 - Bi-weekly CARB collaboration
 - OEM and supplier meetings/site visits

CTI Points of Contact

- Director, ASD's Heavy-Duty Onroad & Nonroad Center
 - Brian Nelson, Nelson.Brian@epa.gov, 734-214-4278

- Rulemaking Team Leads
 - James Sanchez, Sanchez.James@epa.gov, 734-214-4439
 - Jessica Brakora, Brakora.Jessica@epa.gov, 734-214-4936
 - Christy Parsons, Parsons.Christy@epa.gov, 734-214-4243

Questions?

Clean Air Act Authority

Section 202(a)(1)

The Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. Such standards shall be applicable to such vehicles and engines for their useful life (as determined under subsection (d) of this section, relating to useful life of vehicles for purposes of certification), whether such vehicles and engines are designed as complete systems or incorporate devices to prevent or control such pollution.

...

Section 202(a)(3)(C) *Lead time and stability*.—Any standard promulgated or revised under this paragraph and applicable to classes or categories of heavy-duty vehicles or engines shall apply for a period of no less than 3 model years beginning no earlier than the model year commencing 4 years after such revised standard is promulgated.