# Heavy Duty Diesel Emissions Tampering Detection

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# Heavy Duty Diesel Emissions Tampering Detection

## Purpose of the Project and Background Information

The Regional Transportation Council approved the project in May 2024

Determine the extent and impacts of heavy duty (HD) diesel emission system tampering in North Central Texas

HD diesel emissions are a significant source of nitrogen oxides that contribute to ground-level ozone formation in our 10-county ozone nonattainment area

## Objectives

Collect real-world data on HD diesel vehicles using tamper detection devices purchased from vendor HEM Data Corp.

Identify whether emissions control systems have been tampered with during roadside inspection events and fleet inspections

Determine regional extent of emissions system tampering and  support analysis of how tampering affects emissions and air quality

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## Current Roadside Inspections Process

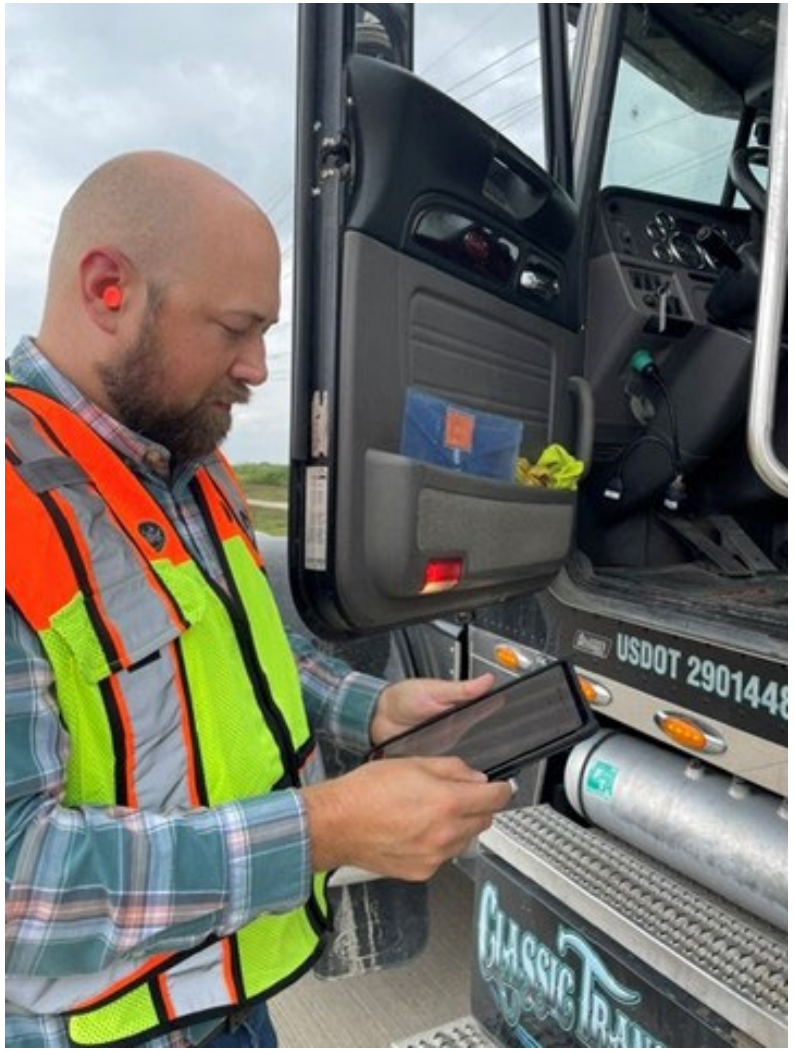
Coordinated enforcement efforts with Texas Department of Public Safety and other local law enforcement agencies, including ride along patrols

Trucks are identified by law enforcement and pulled over safely off the main highway/roadway

Commercial Vehicle Enforcement (CVE) officers inspect truck for brake system, coupling devices, head lamps, lamps on projecting loads, safe loading, steering mechanism, suspension, tires, etc.

NCTCOG staff plugs in tampering detection device and downloads the truck's computer data within two minutes to iPad, no enforcement action taken if shown to be tampered

Staff uploads gathered truck data when back at the office



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## Future HD Truck Data Gathering

Staff will:

Attend multijurisdictional CVE events and ride along patrols

Coordinate with HD truck fleets to go onto their lots

Coordinate with HD truck auction houses to test vehicles before sales

## Assessment of Data

Combination of field data collection with analysis will improve understanding of HD emissions tampering magnitude

Tampering effect on ozone nonattainment trend

Future legislative efforts

# Contact Us


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