



# Vehicle Tampering

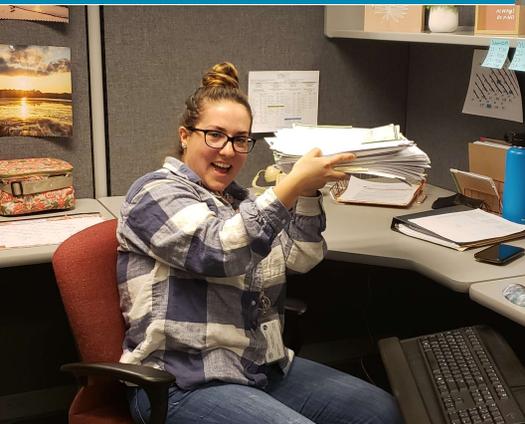
---

May 4, 2022



# Meet Our Staff - Diesel Enforcement Team

Kelsie  
Lupinetti



Matt  
Kennelly



Tim  
Davis





## Tampering

The disconnection, detachment, deactivation, or any other alteration or modification from the design of the original vehicle manufacturer or an element of design installed on any motor vehicle with a certified configuration or motor vehicle engine with a certified configuration, except temporarily for the purpose of diagnosis, maintenance, repair, or replacement;

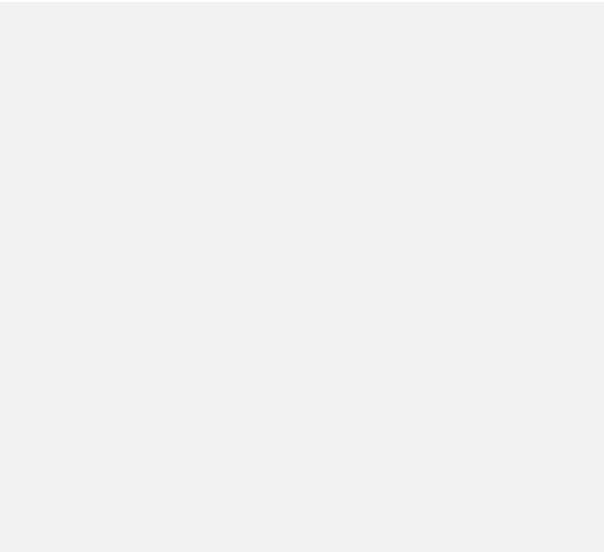
**BLACK SMOKE**  
**Don't Mean It's Broke**

# Why Do It?

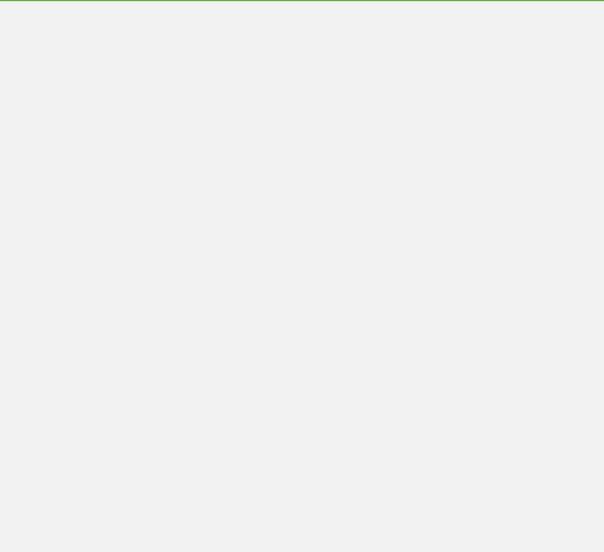
The most common reasons provided for tampering is increased performance and , but the more likely reason is to avoid maintenance upkeep costs. Like almost every other part of a vehicle, the emission system requires maintenance in order to work properly.

---





# How Big of a Problem is Tampering?



EPA estimates that more than 550,000 Medium Duty Diesel Trucks have removed their emission controls in the last decade.

The emissions increases from these vehicles is equivalent to having over nine million additional stock trucks on the roads – That's Nine Million!

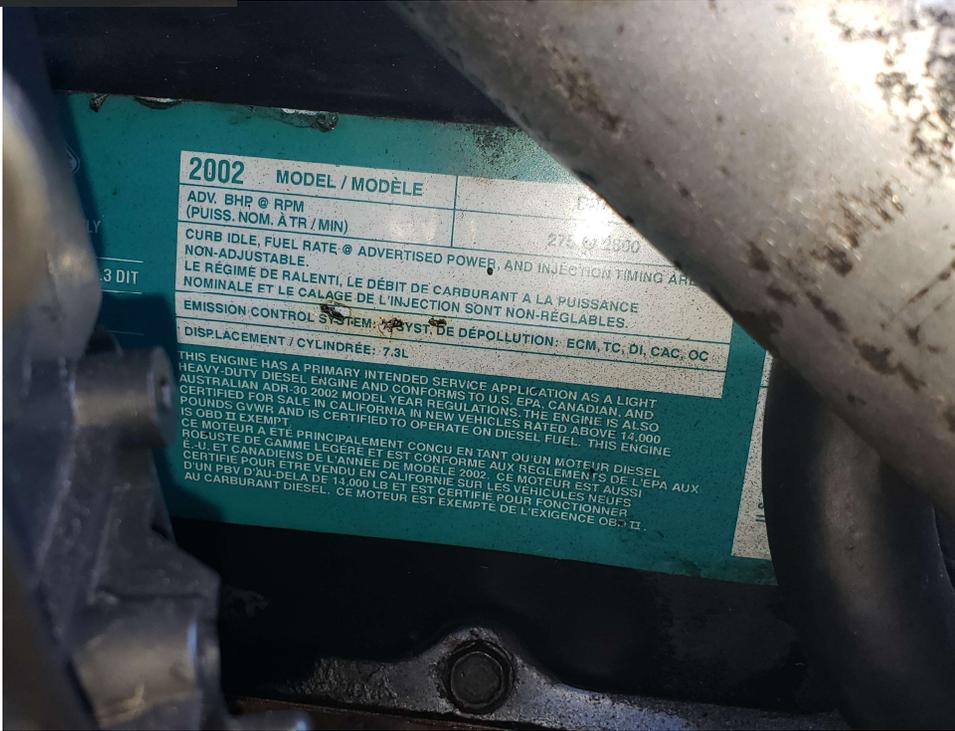
# In New Jersey, Where Does Tampering Occur?



County	Private Sale Totals
Atlantic	14
Bergen	10
Burlington	20
Camden	9
Cape May	2
Cumberland	5
Essex	4
Gloucester	11
Hudson	2
Hunterdon	13
Mercer	1
Middlesex	4
Monmouth	16
Morris	9
Ocean	17
Passaic	2
Salem	6
Somerset	7
Sussex	12
Union	3
Warren	7
<b>Total</b>	<b>174</b>



Vehicle Emission Control Inventory (VECI)



A photograph of an offshore wind farm. In the foreground, a large white wind turbine tower rises from a yellow base. The sky is a vibrant blue, filled with scattered white clouds. In the distance, several other wind turbines are visible on the horizon, and a small red boat is seen on the right side of the sea.

# What Specific Control Components Are Tampered?

# EGR Valve & EGR Cooler Exhaust Gas Recirculation

The EGR system works by returning a small portion of exhaust gas to the engine's combustion chambers through the intake manifold, lowering combustion temperatures and therefore reducing the amount of NOx emitted. This control is located in the engine compartment

EGR Valve



EGR Cooler



# Exhaust Gas Recirculation Delete



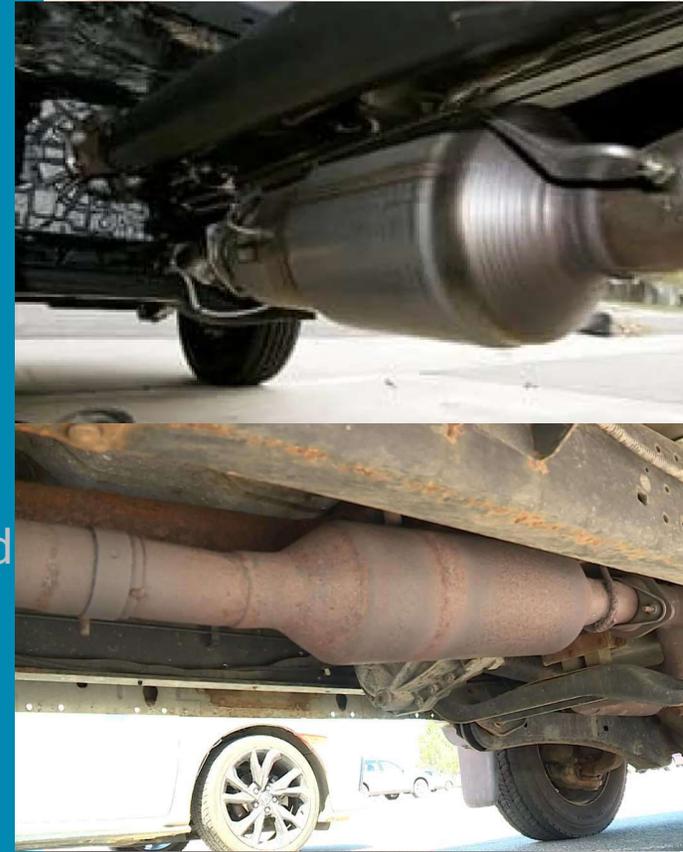
- EGR Cooler location

- EGR Valve location



# Diesel Oxidation Catalyst (DOC)

Diesel Oxidation Catalysts (DOC) are **catalytic converters** designed specifically for diesel engines and equipment to reduce Carbon Monoxide (CO), Hydrocarbons (HC) and Particulate Matter (PM) emissions. DOC's are simple, inexpensive, maintenance-free and suitable for all types and applications of diesel engines.





A diesel particulate filter, or DPF, is an exhaust aftertreatment device that traps particulate matter such as soot and ash. A DPF typically uses a substrate made of a ceramic material that is formed into a honeycomb structure.

## Diesel Particulate Filter (DPF or Ptox)

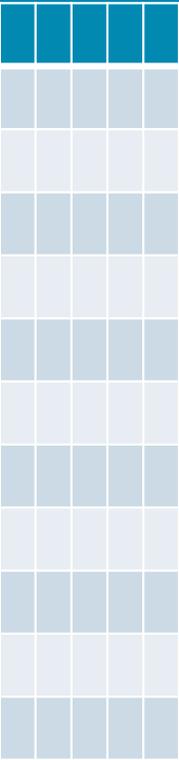
---





# Selective Catalytic Reduction (SCR)

This emission control device injects a liquid-reductant agent through a special catalyst into the exhaust stream of a diesel engine. The reductant source is usually automotive-grade urea, otherwise known as Diesel Exhaust Fluid (DEF). The DEF sets off a chemical reaction that converts nitrogen oxides into nitrogen, water and tiny amounts of carbon dioxide (CO<sub>2</sub>), natural components of the air we breathe, which is then expelled through the vehicle tailpipe.





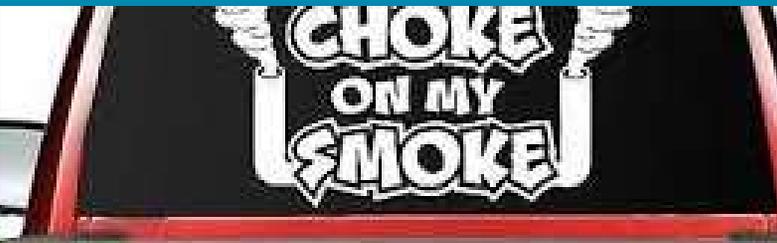
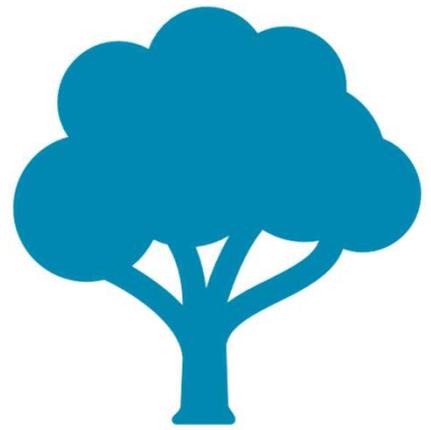
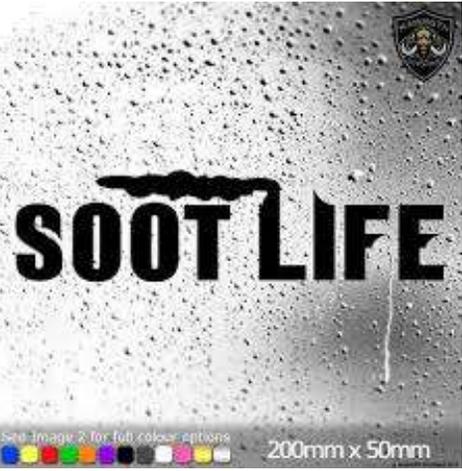
# Complete Exhaust System

Located Underside of Vehicle



## Additional Tampering Components

- Tuners
- Smoke Switch



# Influencers

- In today's world nothing happens in a vacuum
- One 'kid tinkering' with his vehicle at home can reach millions of people
- February 2020 - NRO was notified of one such person on social media running his tampered TDI up and down the roads and sharing details of his altered vehicles
- 44.5K subscribers on YouTube, 72.5 on Instagram and over 1M on Tiktok



FEATURED autoevolution's Land Rover Month →

## "Tilted TDI" Is One Crazy Jetta Locomotive Rolling Coal Through the Hood

Home > News > Tuning 18 Sep 2019, 19:50 UTC · by Mihnea Radu

This is definitely one of the craziest camber experiments we've ever seen. It's an old Jetta with purple paint and a TDI engine blowing lots of smoke through the hood. They call this rolling coal, but it's only common for trucks.



Have you ever noticed how all the bad stuff starts in America but the country recovers really fast? The subprime recession of last decade was all gone after a couple of years while Europe or Asia struggled for far longer. Dieselgate was like that too.



ES	DRAEN QUARRY	McClain, Jennifer Closed, Inv-no viol 03/19/2019	83001 BRAEN ROYALTY LLC Sparta Twp Sussex			1
OF DOING IT	37 BENHAM WAY Sparta Twp, Sussex Co., NJ					
ING INTO	WELDING QUARRY	Ponsica, Carlo CEHA - no viol	83008 WELDON QUARRY CO LLC			1
	ROUTE 181 Sparta Twp,					
AL GAS ND IS	CROSS OF N					1
SSUE	SOUTH SHO Sparta Twp,					
BLE LARGE OF HIS	IN FRONT OF					1
INDUAL AT ICLES USH THE AIR.	278 SPARTA Sparta Twp,					1
AREA PPER	4 BALDWIN E Sparta Twp,					
OR OF AND COMING STREET.	278 SPARTA Sparta Twp,					
AREA OF IAS	278 SPARTA Sparta Twp,					
0 TIMES G	278 SPARTA Sparta Twp,					
ING MA	278 NEW SPA Sparta Twp,					
SA HE FRONT THE UNS IN	RESIDENCE A Sparta Twp,					
GS CALLER THE	STREET OF 599 & 601 GLEN RD Sparta Twp, Sussex Co., NJ	DeMatteo, Anita CEHA - no viol 02/03/2021	DARM STATTER & SONS			
n the area tar smell e area	In the area of 175 Sussex Mills Rd Sparta Twp, Sussex Co., NJ	Bielen, Gary CEHA - no viol 04/19/2021	83001 BRAEN ROYALTY LLC Sparta Twp Sussex			1

**Incident Detail**

Incident ID: #C751578 Tampering, Sparta Twp, Sussex County Copied From: #751550  Linked Received: 04/29/2020 21:06

Reporter	Description	Action	Attachments	Electronic Attachment Submittals
Incident Description:	REPORTING THAT THE INDIVIDUAL AT THIS HOUSE HAS TWO VEHICLES THAT ARE MODIFIED THAT PUSH SMOKE AND FLAMES IN TO THE AIR.			
Incident Location	Location Description: AT THE RESIDENCE			
Incident Source	Name: [REDACTED] Address Line 1: [REDACTED] Address Line 2: [REDACTED] Municipality: [REDACTED] State: NJ County: #% [REDACTED] Zip: 07871 Source Contact: [REDACTED] Phone #: [REDACTED] Permit/Case #: [REDACTED]			
Injuries?	No	Public Evacuation?	No	Follow-Up Priority:
Fac. Evacuation?	No	Firemen at Scene?	No	Follow-Up Status:
Public Exposure?	No	DEP Requested?	Yes	Lead Investigator:
Police at Scene?	No	Road Closure?	No	Management Referral #:

Buttons: Incident Report... Edit Incident Pesticides... F & W... Subs & Impacts... Insp. Attributes... OK Cancel



A citizen complaint was reported on April 29, 2020. This incident was from the next-door neighbor who had dealt with this issue for too long.



**At the time we weren't dealing with Private citizens, but due to the blatant and public nature of these actions, the Commissioner wanted this case referred to Criminal Justice.**

**CJ investigated for several months and eventually seized both of the vehicles in February 2021. We inspected the vehicles to verify that they were in fact tampered. Both vehicles had their catalyts removed and the VW had an EGR delete, and the oxygen sensors removed.**

**Owner entered into PTI and both vehicles were forfeited to the state.**



Here are both vehicles – Still parked at Ewing impound yard

What's next?

**Looking forward to seeing both vehicles destroyed!**

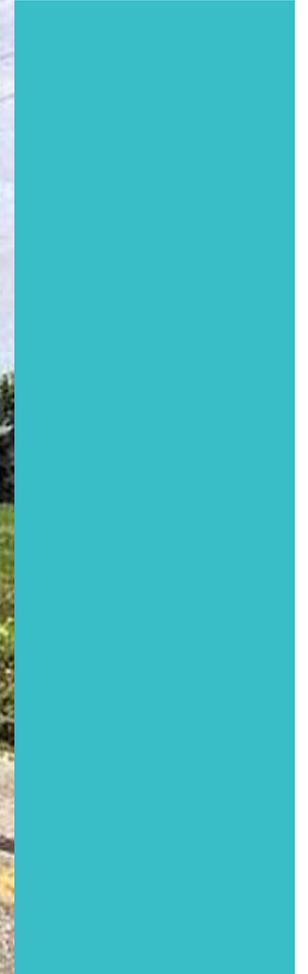


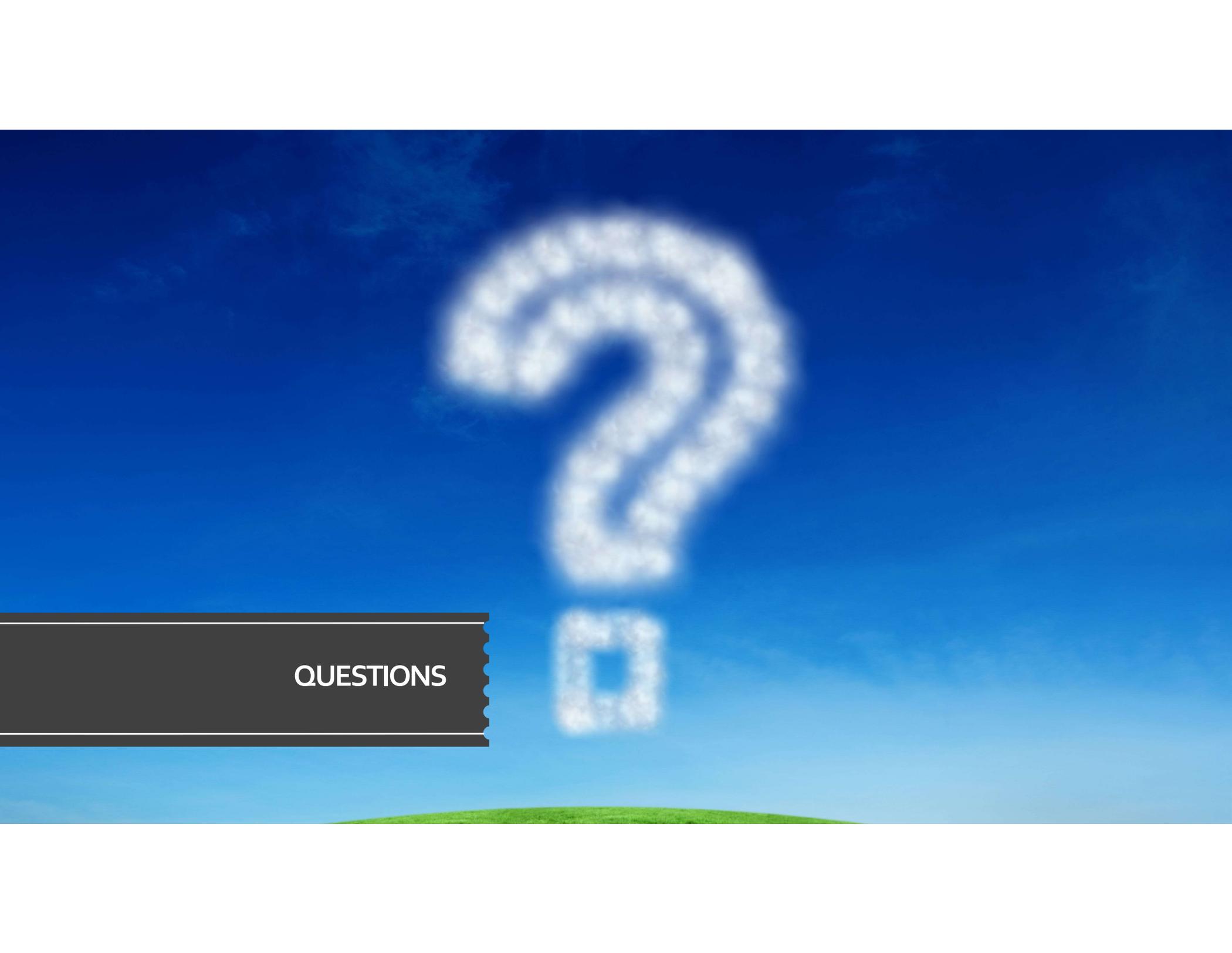
We'll be sure to get video, stay tuned...

**TOLD THEM I WANTED**



**THE VW TUNE**





QUESTIONS

Like & follow us!

    @newjerseydep  @nj.dep



Thank you!

Diesel Enforcement

[matt.Kennelly@dep.nj.gov](mailto:matt.Kennelly@dep.nj.gov)

[tim.davis@dep.nj.gov](mailto:tim.davis@dep.nj.gov)

609-433-3634