

# **2021 Diesel Emissions Reduction Act (DERA) State Grants Overview**

**March 8, 2021**





# Topics

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1. Overview
2. Funding for 2021
3. Status of Currently Open 2020 or Earlier State Grants
4. Key Changes for 2021
5. Eligibility
6. Cost Shares
7. Next Steps
8. VW Mitigation Trust
9. Lessons Learned/Tips
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## Overview of DERA State Grants

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- AKA: State Clean Diesel Grant Program
- Annual funding opportunity since 2008
  - Section 793 of 2005 Energy Policy Act of 2005
  - Reauthorized in 2010 and again in December of 2020 through FY2024
- Allocates funds to eligible states and territories to establish programs that reduce harmful heavy-duty diesel emissions
- States/territories can use funding for grant or rebate programs



# Funding for 2021

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- Total of \$90 million allocated to DERA in EPA's FY 2019 budget
  - ~\$27 million set aside for the State Program
    - 30% of \$90 million total
  - 2/3 of \$27 million is split between the states and territories as their base funding amount
    - If some states/territories do not participate, their base funds will be reallocated among the participating states based on population (2010 census)
  - 1/3 of \$27 million is set aside for the matching incentive (bonus)
    - States/territories that provide a voluntary match that equals or exceeds the base amount qualify for a bonus amount from EPA equal to 1/2 the base amount



## Funding for 2021 (cont.)

*Estimated funding assuming all states and territories participate:*

	<b>State, PR, and DC Base</b>	<b>State, PR, and DC Matching Bonus</b>	<b>Territory Base</b>	<b>Territory Matching Bonus</b>
<b>Funding Amount</b>	\$336,226	\$168,113	\$84,056	\$42,028
<b>Base + Bonus</b>	\$504,339		\$126,084	



# Currently Open State Grants

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- Most states participating in the 2019-2020 State Grants received extensions through 9/30/2022
  - These states can request 2021 State Grants and start work on those grants while wrapping up their 19-20 State Grants
- In general, any remaining DERA State Grants from 2018 or earlier must ensure that these grants are completed by September 30, 2021 in order for the state to receive 2021 funding
- Requests to extend 2018 and older state grants and also receive a new 2021 award will be evaluated by the EPA Regional program office on a case-by-case basis



# Key Changes for 2021

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1. 2021 funds will be awarded as a new grant
  - Assuming DERA receives an appropriation from Congress for FY2022, states participating in 2022 State Grants would receive those FY2022 funds as an amendment to existing 2021 State Grants
2. No more engine model year (EMY) eligibility floor. Instead, there are new ownership, usage, and remaining life requirements.
3. To meet usage requirements, mileage/hours from multiple units can be summed if those units will be scrapped and replaced with a single unit



## Key Changes for 2021 (cont.)

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4. Tier 3 engines now allowed for nonroad engine replacements with EPA approved best achievable technology analysis
5. Tier 4 nonroad engines/equipment can now be replaced with zero emission engines/equipment





# Eligible Equipment

School Buses	Includes diesel powered school buses of Type A, B, C and D. To be eligible as a school bus a vehicle should meet the definition of a school bus as defined by the National Highway Transportation Safety Administration. This definition includes but is not limited to: 1) A bus that is used for purposes that included carrying students to and from school or related events on a regular basis; 2) Be identified with the words “School Bus”; and 3) Be painted National School Bus Glossy Yellow.
Transit Buses	Includes Class 5+ diesel powered medium-duty and heavy-duty transit buses.
Medium-duty or heavy-duty trucks	Includes diesel powered medium-duty and heavy-duty highway vehicles with gross vehicle weight rating (GVWR) as defined below: Class 5 (16,001 -19,500 lbs GVWR); Class 6 (19,501 - 26,000 lbs GVWR); Class 7 (26,001 - 33,000 lbs GVWR); Class 8 (33,001 lbs GVWR and over)
Marine Engines	Includes diesel powered Category 1, 2, and 3 marine engines and vessels.
Locomotives	Includes diesel powered line-haul, passenger, and switch engines and locomotives.
Nonroad engines, equipment or vehicles	Includes diesel powered engines, equipment and vehicles used in construction, handling of cargo (including at ports and airports), agriculture, mining, or energy production (including stationary generators and pumps).



# Eligible Projects

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- Eligible clean diesel projects are outlined in the State Program Guide on our website:  
[www.epa.gov/dera/state](http://www.epa.gov/dera/state)
- Common projects include:
  - Vehicle replacements
  - Engine replacements
  - Verified exhaust retrofits (e.g., DPFs)
  - Verified idle reduction technology (e.g., fuel operated heaters)



# Ownership, Usage, and Remaining Life

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- The existing vehicle must be fully operational.
- The participating fleet owner must have owned and operated the vehicle during the 2 years prior to upgrade.
- The existing vehicle must have at least 3 years of remaining life at the time of upgrade. Remaining life is the fleet owner's estimate of the number of years until the unit would have been retired from service if the unit were not being upgraded or scrapped because of the grant funding.
- Highway Usage: 7,000 miles/year during 2 years prior to upgrade.
  - School Buses may use mileage from calendar year (Jan-Dec) 2019.
- Nonroad, Locomotive, and Marine Usage:
  - Agricultural Pumps: 250 hours/year during 2 years prior to upgrade.
  - All Other Nonroad Engines: 500 hours/year during 2 years prior to upgrade.
  - Locomotive and Marine Usage: 1,000 hours/year during 2 years prior to upgrade.



## Ownership, Usage, and Remaining Life (cont.)

- Documentation Requirements: Participating fleet owners must attest to the ownership, usage, and remaining life requirements in a signed eligibility statement. The documentation is not required at the time of application, but is required if the project is selected for funding. This documentation is to verify the eligible use of grant funds. A sample eligibility statement may be found at: [www.epa.gov/dera/state](http://www.epa.gov/dera/state)

# Eligible Projects Cont.



**Table 3: Medium and Heavy-Duty Truck, Transit Bus, and School Bus Project Eligibility**

<b>Current Engine Model Year (EMY)</b>	<b>DOC +/- CCV</b>	<b>DPF</b>	<b>SCR</b>	<b>Verified Idle Reduction, Tires, or Aero-dynamics</b>	<b>Vehicle or Engine Replacement: EMY 2019+ (2015+ for Drayage)</b>	<b>Vehicle or Engine Replacement: EMY 2019+, Zero Emission<sup>2</sup>, or Low-NO<sub>x</sub><sup>3</sup></b>	<b>Clean Alternative Fuel Conversion</b>
older - 2006	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2007 - 2009	No	No	Yes	Yes <sup>1</sup>	Yes	Yes	Yes
2010 - newer	No	No	No	Yes <sup>1</sup>	No	Yes	Yes

# Eligible Projects Cont.



## Table 4 Part 1. Nonroad Engine Project Eligibility

Current Engine Tier	Vehicle/Equipment Replacement: EMY 2019+					Verified Retrofit
	Compression Ignition			Spark Ignition	Zero Emission <sup>3</sup>	
	Tier 0-2	Tier 3-4i	Tier 4	Tier 2		
Unregulated – Tier 2	No	Yes <sup>1</sup>	Yes	Yes	Yes	Yes
Tier 3	No	No	Yes	Yes	Yes	Yes
Tier 4	No	No	No	No	Yes	No



## Table 4 Part 2. Nonroad Engine Project Eligibility

Current Engine Tier	Engine Replacement					Verified Engine Upgrade
	Compression Ignition			Spark Ignition	Zero Emission <sup>4</sup>	
	Tier 0-2	Tier 3-4i	Tier 4	Tier 2		
Unregulated – Tier 2	No	Yes <sup>2</sup>	Yes	Yes	Yes	Yes
Tier 3	No	No	Yes	Yes	Yes	Yes
Tier 4	No	No	No	No	Yes	No

# Eligible Projects Cont.



## Table 5: Marine Engines Project Eligibility

Engine Category	Engine Horsepower	Current Engine Tier	Engine & Vessel Replacement					Certified Re-manufacture System <sup>3</sup>	Verified Engine Upgrade
			Compression Ignition			Spark Ignition (EMY 2019+)	Zero Emission <sup>2</sup>		
			Tier 1-2	Tier 3	Tier 4				
C1, C2	<803	Un-regulated – Tier 2	No	Yes	No	Yes	Yes	Yes	Yes
C1, C2	≥804	Un-regulated – Tier 2	No	Yes <sup>1</sup>	Yes	Yes	Yes	Yes	Yes
C1, C2	<803	Tier 3	No	No	No	Yes	Yes	No	No
C1, C2	≥804	Tier 3	No	No	Yes	Yes	Yes	No	No
C1, C2	≥804	Tier 4	No	No	No	No	No	No	No
C3	All	Un-regulated - Tier 2	No	Yes	No	No	No	No	No
C3	All	Tier 3	No	No	No	No	No	No	No



# Eligible Projects Cont.



## Table 6: Locomotive Engines Project Eligibility

Current Locomotive Tier	Engine & Locomotive Replacement				Verified Retrofit	Idle-Reduction <sup>2</sup> Technology	Certified Remanufacture System <sup>4</sup>
	Tier 0-2+	Tier 3	Tier 4	Zero Emission <sup>1</sup>			
Unregulated - Tier 2+	No	Yes <sup>3</sup>	Yes	Yes	Yes	Yes	Yes
Tier 3	No	No	Yes	Yes	Yes	Yes	Yes
Tier 4	No	No	No	No	No	Yes	No

# Cost Shares



<b>Eligible Technologies</b>	<b>DERA Funding Limits</b> (EPA Funds + Voluntary Match including VW Trust)	<b>Minimum Mandatory Cost-Share</b> (Fleet Owner Contribution)
Drayage Truck Replacement	50%	50%
Vehicle or Equipment Replacement with EPA Certified Engine	25%	75%
Vehicle or Equipment Replacement with CARB Certified Low NOx Engine	35%	65%
Vehicle or Equipment Replacement with Zero-tailpipe Emission Power Source	45%	55%
Engine Replacement with EPA Certified Engine	40%	60%
Engine Replacement with CARB Certified Low NOx Engine	50%	50%
Engine Replacement with Zero-tailpipe Emission Power Source	60%	40%
EPA Certified Remanufacture Systems	100%	0%
EPA Verified Highway Idle Reduction Technologies when combined with new or previously installed exhaust after-treatment retrofit	100%	0%
EPA Verified Highway Idle Reduction Technologies without new exhaust after-treatment retrofit	25%	75%
EPA Verified Locomotive Idle Reduction Technologies	40%	60%
EPA Verified Marine Shore Connection Systems	25%	75%
EPA Verified Electrified Parking Space Technologies	30%	70%
EPA Verified Exhaust After-treatment Retrofits	100%	0%
EPA Verified Engine Upgrade Retrofits	100%	0%
EPA Verified Hybrid Retrofit Systems	60%	40%
EPA Verified Fuel and Additive Retrofits when combined with new retrofit, upgrade, or replacement	Cost differential between conventional diesel fuel	Cost of conventional diesel fuel
EPA Verified Aerodynamics and Low Rolling Resistance Tires when combined with new exhaust after-treatment retrofit	100%	0%
Alternative Fuel Conversion	40%	60%



## Next Steps – NOIP

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- Notices of Intent to Participate (NOIP) are due Thursday, March 18, 2021
  - NOIPs can be electronically signed
- EPA will use the NOIPs to determine participation and final allocations
- EPA will then notify participants of their final allocations by Wednesday, March 24, 2021



## Next Steps - Work Plan

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- Work Plan and Budget Narrative and the Fleet Description spreadsheet are due to your EPA Regional contacts no later than Monday, April 26, 2021 for their review
  - Templates are posted on our [website](#)
- Fleet Description: Provide a *best estimate* of equipment/technology to be impacted by 2021 State Grant Funds. Projects listed on this sheet at the time of application are not binding.
- EPA Regions will review and offer feedback



# Next Steps - Final Application Submission

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- States/territories must submit their application on Grants.gov no later than Wednesday, May 26, 2021
  1. Standard Form (SF) 424, Application for Federal Assistance
  2. Standard Form (SF) 424A, Budget Information
  3. Key Contacts Form
  4. EPA Form 4700-4, Preaward Compliance Review
  5. Certification Regarding Lobbying (Grants.gov Lobbying Form)
  6. EPA-reviewed Project Narrative Work Plan and Budget Narrative
  7. EPA-reviewed Fleet Description spreadsheet



## Next Steps – Award and Project Period

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- EPA will finalize awards by September 30, 2021
- Project Period will begin by October 1, 2021
- Project Period will end September 30, 2023
  - This 2023 deadline will remain the same whether or not a state requests State Grant funding in 2022



# VW Mitigation Trust - Overview

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- 50 states, DC, Puerto Rico, and federally recognized tribes are eligible to become beneficiaries with ~\$3 billion available
  - Each beneficiary will receive a specific allocation of funds that can be used for any of the listed eligible mitigation actions
  - The allocation structure is primarily based on the number of registered illegal Volkswagen vehicles within the boundaries of the beneficiary
  - Appendix D lists 9 eligible mitigation actions (EMAs) as well as a 10th EMA, the “DERA Option”



# VW Mitigation Trust – Eligible Mitigation Actions

## Eligible Mitigation Projects

1. Class 8 local freight trucks and port drayage trucks
2. School/shuttle/transit bus
3. Locomotive switchers
4. Ferries/tugboats
5. Ocean going vessel shorepower
6. Class 4-7 local trucks
7. Airport ground support equipment
8. Forklifts and cargo handling equipment at ports
9. Light duty ZEV supply equipment (up to 15% of allocation)

## DERA Option (#10)

- Option to use Trust Funds for actions eligible under DERA (may or may not be eligible under VW EMAs)
- Beneficiaries may use Trust Funds for their DERA non-federal voluntary match
- State and Tribal DERA grants only





# VW Mitigation Trust – DERA Option

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- Most of the eligible project types under the DERA Option allow Trust funds to pay for only a certain percentage of the project
- In addition, DERA grants generally require a mandatory cost-share
- Trust funds cannot be used to meet this non-federal mandatory cost-share requirement
- Mandatory cost-share funds cannot count towards the state's voluntary matching funds to qualify for the matching incentive (bonus)



# VW Mitigation Trust – DERA Option Examples

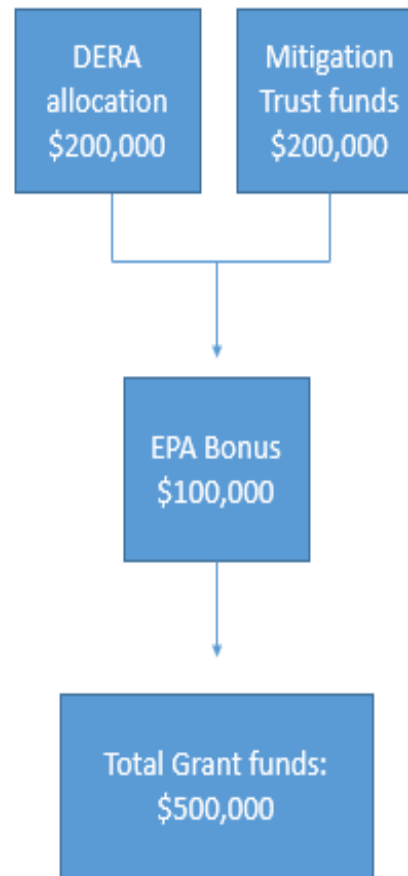
**Example A:** Trust funds can be used to match the EPA base funding for State DERA grants

- State's DERA allocation in 2021 is ~\$200,000
- State uses \$200,000 in Trust funds as the 1:1 voluntary non-Federal match
- State bonus is 50% of the base amount \$100,000
- Total State grant is \$500,000
  - State will receive \$300,000 from DERA and \$200,000 from the Trust

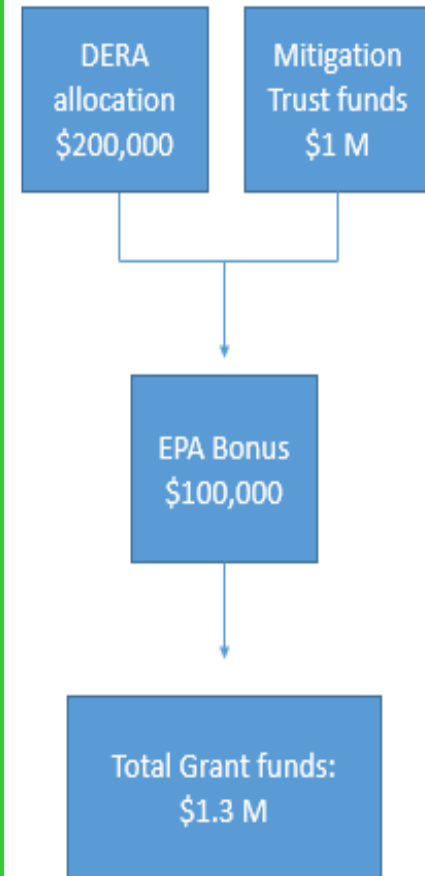
**Example B:** Trust funds can be greater than the 1:1 voluntary match above

- State's DERA allocation in 2021 is ~\$200,000
- State may use a larger amount - \$1,000,000 in this example - in Trust funds
- State bonus DERA amount of \$100,000
- State's DERA Clean Diesel Grant program for 2021 would be \$1.3 million
  - State will receive \$300,000 from DERA and \$1,000,000 from the Trust.

## Example A



## Example B





# VW Mitigation Trust - Reporting

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- A Beneficiary which chooses the DERA Option must submit DERA Quarterly Programmatic Reports and a Final DERA Programmatic Report to EPA as required under the DERA grant terms and conditions
- A Beneficiary may submit its DERA reports to the Trustee to fulfill reporting obligations for the portion of its Trust funds using the DERA Option



## Lessons Learned/Tips

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1. States/territories must publish their State Program awards within 60 days of granting funds
  - Online notice must include the total number and dollar amount of rebates, grants, or loans provided, as well as a breakdown of the technologies funded.
2. States/territories may fund local or state mandates
  - Cannot use funds for federal Supplemental Environmental Projects (SEPs)
  - Cannot use funds for federally mandated projects
3. Do not use other federal funds on your DERA State Grant projects
  - E.g., No mixing CMAQ and DERA



## Lessons Learned/Tips - Waivers

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- EPA will consider waiver requests from programmatic requirements on a case-by-case basis
- Waivers will only be approved for non-statutory and non-regulatory requirements. Sufficient justification for the waiver must be provided by the state.
- States must obtain EPA approval for any waiver request before conducting any work or expending any funds on a project involving a waiver request. Any questions regarding waivers should be directed to the EPA Project Officer.



# Lessons Learned/Tips - Administrative

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- Keep your EPA PO in the loop
  - Inform them of potential issues early
  - Ask questions if you are unsure of program rules or requirements
- Actively track progress
  - Continually compare your progress to planned schedule/milestones in your work plan
  - Communicate with subgrantees and vendors often.
    - Grantees are ultimately responsible for the project.
- Document, Document, Document
  - Pictures are a great tool, and can also be used for press



# Lessons Learned/Tips - Partnerships

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If a DERA grant recipient intends to fund target fleets that they do not own and operate, they have the option to:

1. Make a subaward
  - Can fund a project partner’s direct and indirect costs such as personnel and travel
2. Provide participant support costs (e.g., rebate) to a project partner
  - If the DERA grant recipient is only funding a project partner’s equipment and installation costs, they may choose to provide participant support costs rather than a subaward to avoid the extensive subaward monitoring and management requirements
  - Rebates should be listed under the “Other” budget category
  - See Section XIII (Appendix A: How to Fund Projects and Partnerships) of the Program Guide for more details.



# Lessons Learned/Tips - Administrative

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- Drawing down grant funds
  - Only draw down funds for work that has been completed (invoiced, etc.)
  - Grantees may not draw down and ‘hold’ money in their account – must be used to pay invoice or pay employees, etc.
  - Generally, percentage of funds drawn down should correspond with percentage of work completed on the grant
    - EPA tracks this amount, and uses it to get general idea of project progress
  - In some cases, funds won’t be drawn until the end of the project (delivery of a replaced vehicle, etc.)





## Lessons Learned/Tips - Technical Tips

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- For on-highway vehicles, only Class 5 (16,001 lb GVWR) and above are eligible for DERA funding
  - School buses under Class 5 may also be funded (see pg. 6 of Program Guide)
- All projects must use EPA or CARB verified technologies or certified engine configurations
  - Zero emission vehicles and equipments do not require EPA or CARB certification



# Lessons Learned/Tips - Scrappage

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- Vehicles and engines that are replaced must be scrapped to ensure emission reductions
- Cut 3” hole in engine block to disable engine for vehicle and engine replacements
- Cut chassis rails in half to disable chassis for vehicle replacements
- Be sure to obtain evidence of appropriate disposal including photos of the following:
  - VIN tag
  - Side profile of equipment
  - Engine tag showing serial number, engine family number, and engine model year;
  - Before and after photos of destroyed engine;
  - Cut frame rails



## Lessons Learned/Tips - Reporting

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- Begin open and frequent communication with fleets, vendors, and any other participants
  - Don't assume they know the program, or program requirements (verified technologies, etc.)
- Keep organized documents records – and please save them in a shared place
  - Competitive Procurement (cost and price analysis)
  - Scrappage – Photos and documentation
  - Invoices



## Lessons Learned/Tips - Reporting

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- Quarterly reports must be submitted to your PO
- Close out process:
  - All work must be completed and all costs incurred during the Project Period
  - Final report
  - Coordinate with PO regarding any other close out documentation



# Timeline

Activity	Date
Release of Notice of Intent to Participate (NOIP) form	Thursday, March 4, 2021
Deadline for states and territories to submit Notice of Intent to Participate form to <a href="mailto:DERA@epa.gov">DERA@epa.gov</a>	Thursday, March 18, 2021
States and territories will be notified of final allocation amounts via email by	Wednesday, March 24, 2021
Deadline for states and territories to submit Work Plan and Budget Narrative, and Fleet Description to their EPA Region for review	Monday, April 26, 2021
Deadline for states and territories to submit application on <a href="https://www.epa.gov/grants">Grants.gov</a>	Wednesday, May 26, 2021
Project period for FY 2021 awards begins. Regional offices will finalize the FY 2021 Program awards by October 1, 2021	Friday, October 1, 2021
End of project period	September 30, 2023



# Tools and Resources

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- DEQ – Diesel Emissions Quantifier:
  - <https://cfpub.epa.gov/quantifier/index.cfm?action=main.home>
- Verification/Certification Lists:
  - EPA Verified Technologies List for Clean Diesel
    - [www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel](http://www.epa.gov/verified-diesel-tech/verified-technologies-list-clean-diesel)
  - California Air Resources Board (CARB) Verified Technologies
    - <https://ww2.arb.ca.gov/diesel/verdev/vt/cvt.htm>
  - CARB certified low-NOx engine list:
    - [ww3.arb.ca.gov/msprog/onroad/optionnox/optional\\_low\\_nox\\_certified\\_hd\\_engines.pdf](http://ww3.arb.ca.gov/msprog/onroad/optionnox/optional_low_nox_certified_hd_engines.pdf)



# Program Documents

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See the DERA State Clean Diesel Program Website at

[www.epa.gov/dera/state](http://www.epa.gov/dera/state) for:

- 2021 State Program Guide
- 2021 State Work Plan and Budget Narrative Template
- 2021 Fleet Description Spreadsheet
- Notice of Intent to Participate (NOIP)
- VW DERA Option Factsheet:
  - [www.epa.gov/dera/volkswagen-vw-settlement-dera-option](http://www.epa.gov/dera/volkswagen-vw-settlement-dera-option)



## Questions?

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- Please enter your questions or comments in the webinar chat
- Slides will be posted on our [website](#) soon

Thank you for your participation in this webinar and the DERA State Grants

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