

## 2023 North Carolina Mobile Source Emissions Reduction Grant Request for Proposal Guidance

The N.C. Department of Environmental Quality, Division of Air Quality (DAQ) will provide funding for projects that reduce mobile source diesel emissions. Awarded projects are expected to begin in early 2024 and must be completed by **September 30, 2026**.

The Division of Air Quality reserves the right to award less than the total amount of funding requested.

### ELIGIBILITY

Any private- or public-sector entity stationed in North Carolina is eligible. Use our [DERA eligibility tool](#) to verify project eligibility for funding and the cost share requirements.

Vehicle/Engine/ Equipment Type	Description
School buses	Includes diesel-powered school buses of Type A, B, C and D. A “school bus” is defined as a passenger motor vehicle designed to carry a driver and more than 10 passengers and is likely to be used significantly to transport preprimary, primary, and secondary school students to or from school or an event related to school.
Transit buses	Includes Class 5-8 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).

### AVAILABLE FUNDING

Approximately \$1,118,966 is available for all projects funded statewide. DAQ expects to fund several projects.

### APPLICATION DEADLINE

Applications must be submitted electronically via DAQ’s Grant Management System at <https://ebs.nc.gov/> by **11:59 pm Eastern Time, February 2, 2024**, to be considered.

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### PROJECT TYPE FUNDING LEVELS

Eligible Technologies	DERA Funding Limits	Minimum Mandatory Cost-Share (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%

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## PROJECT REQUIREMENTS

### General

All applicants must comply with all applicable North Carolina state laws. N.C. Department of Environmental Quality (NCDEQ) may share your application with other local and state agencies with additional funding opportunities if your project is not selected for funding.

All applicants must apply electronically through DAQ's Grant Management System at <https://ebs.nc.gov/>. If you currently do not have access to this system, you must request access prior to applying. Please see our webpage for instructions on how to request access to the Grants Management System: [DAQ's Grants Management System information webpage](#). To guarantee enough time to apply, new users to the Grants Management System should request online access well before January 18, 2024.

The Program ID in the DAQ Grants Management System for the 2023 NC Diesel Emissions Reduction Grant will be **NCDEQDAQ0017**.

### **All equipment funded must be EPA verified.**

For alternative fuel conversions, systems for engine model years 2006 and earlier must achieve at least a 30% nitrogen oxides (NOx) emissions reduction and a 10% particulate matter (PM) emission reduction from the applicable certified emission standards of the original engine. Conversion systems for engine model years 2007 and newer must achieve at least a 20% NOx reduction with no increase in PM from the applicable certified emission standards of the original engine. **All original equipment or vehicles must be operational in the previous two years and the replacement equipment or vehicle must be operated at least 70% in North Carolina for the next 5 years.**

Awarded funds cannot be used for:

- Fueling infrastructure projects.
- Standalone cleaner fuel projects unless combined with another clean diesel project on the same vehicle (e.g., repower).
- Meeting compliance for emissions reductions that are mandated under federal law.
- The purchase of vehicles, engines or equipment to expand a fleet.
- Matching funds for other federal grants.
- Emissions testing and/or air monitoring.
- The purchase of engine retrofits, idle-reduction technologies, low-rolling resistance tires or advanced aerodynamic technologies if similar technologies have previously been installed on the truck or trailer.

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A complete list of eligible and ineligible project costs can be found in the [EPA 2023 Diesel Reduction Act \(DERA\) State Grants Program Guide](#).

All vehicles, equipment, and/or engines being replaced must be scrapped or rendered permanently disabled within ninety (90) days of being replaced:

- Cutting a three-inch-by-three-inch hole in the engine block (the part of the engine containing the cylinders) is the preferred scrapping method.
- You can disable the chassis by cutting through the frame/frame rails on each side at a point located between the front and rear axles.

### On-road

- Funds cannot be used for light-duty highway vehicles.
- Funds can be used for Type A, B, C or D school buses.
- Funds can only be used for Class 5 (16,001-plus pounds GVWR) and above heavy-duty vehicles.
- Vehicles have a minimum mileage requirement of 7,000 annual miles.

### Summary of Medium- and Heavy-Duty Trucks, School and Transit Buses Funding Eligibility

Current Engine Model Year (EMY)	DOC +/- CCV	DPF	SCR	Verified Idle Reduction, Tires, or Aerodynamics	Vehicle or Engine Replacement		Clean Alternative Fuel Conversion
					EMY 2021+ (2017+ for Drayage)	EMY 2021+ Zero-Emission <sup>2</sup> or Low-NOx <sup>3</sup>	
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

<sup>1</sup> Auxiliary Power Unit (APUs) and generators are not eligible on vehicles with EMY 2007 or newer.

<sup>2</sup> Eligible fuel cell projects are limited to hydrogen fuel cell engine replacements for eligible urban transit buses, shuttle buses and drayage trucks, and hydrogen fuel cell engine replacements for eligible urban transit buses, shuttle buses, and drayage trucks.

<sup>3</sup> Please see the Low-NOx Engine Factsheet found at [www.epa.gov/dera/state](http://www.epa.gov/dera/state) for guidance on identifying engines certified to meet CARB's Optional Low-NOx Standards.

### Nonroad

- Funds cannot be used to replace agricultural pumps that operate fewer than 250 hours per year during the two years prior to upgrade.
- Funds cannot be used to replace all other nonroad engines and equipment that operate fewer than 500 hours per year during the two years prior to upgrade.
- Engine hours may be combined to reach the above thresholds where multiple units will be scrapped and replaced with a single unit.

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### Summary of Nonroad Engine Funding Eligibility

Current Engine Tier	Vehicle Equipment Replacement					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
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

<sup>1</sup> Tier 3 and Tier 4 interim (4i) allowed for vehicle/equipment replacement only when Tier 4 final is not yet available from original equipment manufacturer (OEM) for 2021 model year equipment under the Transition Program for Equipment Manufacturers (TPEM).

<sup>2</sup> Tier 3 and Tier 4i engines may be used for engine replacement only if Tier 4 is demonstrated to not be available or feasible through a best achievable technology analysis as defined in the EPA 2021 DERA State Program Guide (EPA-420-B-21-009).

<sup>3</sup> Eligible fuel cell projects are limited to hydrogen fuel cell equipment replacements for eligible terminal tractors/yard hostlers, stationary generators, and forklifts.

<sup>4</sup> Fuel cell engine replacement is not eligible.

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### Marine Engines

- No funds awarded under this program shall be used to retrofit, replace, upgrade or install idle reduction technologies on marine engines that operate fewer than 1,000 hours per year during the two previous years prior to upgrade.
- Engine hours may be combined to reach the 1000-hour threshold where multiple units will be scrapped and replaced with a single engine.

### **Marine Engine Project Eligibility**

Engine Category	Engine Horsepower	Current Engine Tier	Engine & Vessel Replacement			Spark Ignition	Zero-Emission <sup>2</sup>	Certified Remanufacture System <sup>3</sup>	Verified Engine Upgrade
			Compression Ignition						
			Tier 1-2	Tier 3	Tier 4				
C1, C2	<803	Unregulated-Tier 2	No	Yes	No	Yes	Yes	Yes	
C1, C2	≥804	Unregulated-Tier 2	No	Yes <sup>1</sup>	Yes	Yes	Yes	Yes	
C1, C2	<803	Tier 3	No	No	No	Yes	Yes	No	
C1, C2	≥804	Tier 3	No	No	Yes	Yes	Yes	No	
C1, C2	≥804	Tier 4	No	No	No	No	No	No	
C3	All	Unregulated-Tier 2	No	Yes	No	No	No	No	
C3	All	Tier 3	No	No	No	No	No	No	

<sup>1</sup> Tier 3 engines may be used for engine replacement only if Tier 4 is demonstrated to not be available or feasible through a best achievable technology analysis as defined in the EPA 2021 DERA State Program Guide (EPA-420-B-21-009). Over-800 horsepower, Tier 3 engines are not eligible for full-vessel replacement.

<sup>2</sup> Fuel cell engine and vessel replacements are not eligible.

<sup>3</sup> Some marine engine projects may be subject to the restriction on mandated measures.

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## Locomotive Engines

- No funds awarded under this program shall be used to retrofit, replace, upgrade or install idle reduction technologies on locomotive engines that operate fewer than 1,000 hours per year during the two years prior to upgrade.
- Engine hours may be combined to reach the 1000-hour threshold where multiple units will be scrapped and replaced with a single engine.

## **Locomotive Engine Project Eligibility**

Current Locomotive Tier	Engine & Locomotive Replacement				Verified Retrofit	Idle-Reduction Technology <sup>2</sup>	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

<sup>1</sup>Fuel cell engine and locomotive replacements are not eligible.

<sup>2</sup>Automatic engine start-stop technologies are only eligible to be installed on locomotives currently certified to Tier 0 or unregulated, subject to the restriction on mandated measures.

<sup>3</sup>Tier 3 engines may be used for engine replacement only if Tier 4 is demonstrated to not be available or feasible through a best achievable technology analysis as defined in the EPA 2023 DERA State Program Guide (EPA-420-B-21-009). Tier 3 is not eligible for locomotive replacement.

<sup>4</sup>Some locomotive engine projects may be subject to restrictions on mandated measures.

Note: Tier 0+, Tier 1+, Tier 2+, Tier 3, and Tier 4 represent locomotives manufactured or remanufactured under the more stringent Tier standards promulgated under the 2008 (current) locomotive and marine rule. Tier 0, Tier 1, and Tier 2 represent locomotives originally manufactured or remanufactured under the less stringent Tier standards promulgated in 1997.

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### HOW TO SUBMIT YOUR PROPOSAL

All applications must be submitted through DAQ’s Grant Management System at <https://ebs.nc.gov/>. In order to be allowed access to the Grant Management System you must complete an access authorization form which can be found in the Associated Files Section of our website [DAQ Grants Management System information webpage](#). Until you have received a “Welcome to the DAQ ENTERPRISE BUSINESS SYSTEM” email indicating that your authorization has been approved, you will not be able to log into the system to complete the application process. You can download the [user’s manual](#) to assist you in navigating the DAQ Grant Management System.

An example application is included to allow you to draft responses prior to completing the application online (Attachment A).

Applications must be submitted by **11:59 pm Eastern Time, February 2, 2024**, to be considered.

### PROJECT SELECTION CRITERIA

The below table outlines the project selection criteria. The total base points possible is 95. Applicants should address each of the selection criteria in the Grant Management System application.

Criteria	Point Value
<b>Emissions Reductions or Quantitative Benefits:</b> emission reduction calculation based on applicant-provided information	35
<b>Cost Effectiveness</b> (\$ funded per tons reduced): cost effectiveness is based on applicant-provided information using the <a href="#">EPA's Diesel Emissions Quantifier</a> software tool	30
<b>Co-Benefits:</b> e.g., emission reductions in other criteria pollutants or greenhouse gases	20
<b>Environmental Justice:</b> how projects affect areas that bear a disproportionate share of ambient air pollution (Attachment B)	10
<b>Bonus Points (5 points for each eligible category)</b> <ul style="list-style-type: none"> <li>• Project takes place in one of the following EPA Priority Counties: Buncombe, Cabarrus, Catawba, Davidson, Gaston, Guilford, Iredell, Lincoln, Mecklenburg, Rowan, or Union</li> <li>• Project involves replacement of diesel vehicle/equipment with an all-electric option</li> <li>• Project is owned by a minority- or women-owned business</li> <li>• Project takes place in one of the 37 identified historically under-resourced counties (Attachment C)</li> <li>• Project takes place in a goods movement facility</li> </ul>	5



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### SCHEDULE FOR 2023 MOBILE SOURCE EMISSIONS REDUCTION GRANTS

Task	Date Completed
Request for Proposals period opens	November 1, 2023
Webinar on Request for Proposal, Eligibility and Requesting Access to Grant Management System	December 1, 2023
How to Apply - Question and answer webinar	January 10, 2024
Request for Proposals period closes	February 2, 2024
Proposals processed and awardees selected	February – March 2024
All applicants notified of their application status	April 2024
Awardee contracts are processed	April - May 2024
Awarded projects' work begins	Within 1 month of contract execution
All diesel emissions reductions grant projects completed	September 30, 2026
Invoices, Certificate of Engine/Chassis Destruction and final reports submitted to DAQ	September 30, 2026

### Required Application Attachments

After you have digitally signed the application, you must click on the submit button. Note your Application ID. If you are not automatically redirected to your home page, please click “View Application” under Search. You will see your application under your recent list. Please click on your application and you will find an attachments section. This is where you will upload the required documents per the Request for Proposals for which you are applying.

### DERA Program Application Checklist:

	Downloaded and completed <b>DAQ Vehicle Equipment Spreadsheet</b>
	Quotes for the vehicle/equipment/engine being purchased and itemized budget
	Pictures of all equipment to be replaced, engine tags and VINs
	Optional supporting documentation

### Electrification Project Application Checklist:

	Charging Equipment Information (number of ports, spaces, model, manufacturer, etc.). One charger is allowed for each vehicle replacement or repower requested and must be Build America, Buy America (BABA) <sup>1</sup> certified.
	Itemized Materials/Services/Labor quote uploaded at attachment to application
	Acknowledgement of discussion with local utility in application

<sup>1</sup> **Buy America Requirements:** Certain projects under this program are subject to the Buy America sourcing requirements under the Build America, Buy America (BABA) provisions of the [Infrastructure Investment and Jobs Act \(IIJA\)](#) (P.L. 117-58, §§7091170917) when using Federal funds for the purchase of goods, products, and materials on any form of construction, alteration, maintenance, or repair of infrastructure in the United States. The Buy America preference applies to all of the iron and steel, manufactured products, and construction materials used for the infrastructure project under an award for identified [EPA financial assistance funding programs](#). Please consider this information when preparing project and budget information.

Under BABA, a Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. **On-highway vehicles/engines and non-road engines/equipment funded by this program are not considered “infrastructure.”** The following potentially eligible projects under this competition meet the definition of “infrastructure” and are subject to Buy America preference requirements under BABA:

- Structures, facilities, and equipment that generate, transport, and distribute energy -including electric vehicle (EV) charging equipment

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- Any other permanent public structure that meets the infrastructure definition in [M-22-11](#).

If you have questions about the information above or completing the application, please email [daq.mscb.ncdaqgrants@deq.nc.gov](mailto:daq.mscb.ncdaqgrants@deq.nc.gov).

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## Attachment A

### *2023 North Carolina MSERG Program Application*

*This is a representation of the application information submitted by the applicant in the DAQ Grants Management System. Required application attachments and the original application are available to view in the DAQ Grants Management System. All submittals are to be completed in the DAQ Grants Management System.*

#### **Applicant Contact Information**

<b>Project Title</b>	
<b>Organization Name</b>	
<b>Organization Mailing Address</b>	
<b>City, State Zip</b>	
<b>Authorized Representative Name</b>	
<b>Authorized Representative Email Address</b>	<b>Authorized Representative Phone Number</b>
<b>Project Manager Name (primary contact)</b>	
<b>Project Manager Email Address</b>	<b>Project Manager Phone Number</b>
<b>Financial Contact Name</b>	
<b>Financial Contact Email Address</b>	<b>Financial Contact Phone Number</b>

#### **Project Details**

<b>Program Type</b>	<b>Eligible Applicant Type</b>
<b>Vehicle/Equipment Type</b>	<b>Project Type</b>

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**Project Location** (where equipment will be installed and/or used)

<b>Street Address</b>		
<b>City</b>	<b>County</b>	<b>Zip</b>

**Project Details** (Questions 1-5 are required.)

1. Please provide a detailed description of the proposed project.
2. Explain how this request will benefit North Carolina’s goal of reducing diesel emissions in areas of poor air quality or areas that are currently in maintenance for either the ozone or PM2.5 National Ambient Air Quality Standards. Priority will be given to projects that are located at, or service, goods movement facilities (e.g., ports, airports, rail yards, terminals, or distribution centers); please provide how the project addresses these types of areas.
3. What is the likelihood that the project will incentivize future indirect NOx and other emission reductions? That is, will this be the beginning or continuation of a transition of the fleet to an alternative fuel or electricity? If so, please provide details.
4. Are there any societal co-benefits of the project? Are there any populations with increased sensitivity to air pollution (including, but not limited to, people with asthma, children, or older adults) that the project is likely to directly benefit?
5. Project Feasibility: Provide a description of how you as the applicant have the necessary technical, managerial, procurement, and financial capability and experience to execute your proposed project.
6. Use this space for any additional information that you believe will be helpful in evaluating the project. (Optional)

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## Certification

The undersigned is an official authorized to represent the applicant. The person who submitted this document in the DAQ Grants Management System has the authority to legally bind the applicant or be the designated fiscal agent. The application was electronically signed in the DAQ Grants Management System when submitted by the applicant.

*I certify that all proposed activities will be carried out; that all money received will be utilized solely for the purposes for which it is intended; that records documenting the planning process and implementation will be maintained and submitted when requested, and DEQ is hereby granted access to inspect project sites and/or records. It is understood that if this project is selected, a contract with DEQ will be executed. I further attest that at least 70% of the equipment's operation will occur in North Carolina for the next 5 years.*

<b>Print Name of Authorized Representative</b>	<b>Title</b>
<b>Date</b>	

## Required and Optional Attachments

***Required application attachments and the original application are available to view in the DAQ Grants Management System.***

1. A completed DAQ application vehicle spreadsheet.
2. Pictures of all equipment to be replaced, engine tags and VINs.
3. An itemized budget for the project.
4. Quotes/Specifications for all replacement equipment and any infrastructure (if applicable).
5. Any optional attachments such as any supporting documentation or letters of support, etc.

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## Attachment B

### Environmental Justice Scores by County

County	EJ Score
Alamance	6
Alexander	5
Alleghany	8
Anson	8
Ashe	3
Avery	4
Beaufort	8
Bertie	13
Bladen	11
Brunswick	3
Buncombe	4
Burke	7
Cabarrus	4
Caldwell	5
Camden	1
Carteret	3
Caswell	6
Catawba	5
Chatham	3
Cherokee	3
Chowan	6
Clay	5
Cleveland	9
Columbus	9
Craven	6
Cumberland	9
Currituck	1
Dare	3
Davidson	5
Davie	6
Duplin	11
Durham	8
Edgecombe	11
Forsyth	8
Franklin	6
Gaston	5
Gates	3
Graham	6
Granville	6
Greene	14
Guilford	8
Halifax	12
Harnett	2
Haywood	4

County	EJ Score
Henderson	3
Hertford	14
Hoke	13
Hertford	14
Iredell	4
Jackson	8
Johnston	5
Jones	9
Lee	8
Lenoir	10
Lincoln	4
Macon	4
Madison	10
Martin	8
McDowell	4
Mecklenburg	6
Mitchell	4
Montgomery	7
Moore	3
Nash	7
New Hanover	6
Northampton	11
Onslow	3
Orange	4
Pamlico	2
Pasquotank	7
Pender	5
Perquimans	5
Person	5
Pitt	9
Polk	1
Randolph	5
Richmond	10
Robeson	15
Rockingham	6
Rowan	6
Rutherford	6
Sampson	11
Scotland	13
Stanly	2
Stokes	1
Surry	4
Swain	3
Transylvania	4

County	EJ Score
Tyrrell	6
Union	3
Vance	9
Wake	3
Warren	14
Washington	11
Watauga	5
Wayne	9
Wilkes	4
Wilson	10
Yadkin	5
Yancey	7

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## Attachment C

### Historically Under-Resourced Counties

Alexander	Greene	Rockingham
Anson	Halifax	Rowan
Bertie	Hertford	Rutherford
Bladen	Hoke	Sampson
Burke	Hyde	Scotland
Caldwell	Lenoir	Tyrrell
Caswell	Martin	Vance
Cleveland	Nash	Warren
Columbus	Northampton	Washington
Cumberland	Pasquotank	Wayne
Duplin	Randolph	Wilson
Edgecombe	Richmond	
Graham	Robeson	

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## Appendix C: Acronyms and Abbreviations

APU	Auxiliary Power Unit
CARB	California Air Resources Board
CNG	Compressed Natural Gas
CO	Carbon Monoxide
CO2	Carbon Dioxide
DERA	Diesel Emission Reduction Act
DPF	Diesel Particulate Filter
DOC	Diesel Oxidation Catalyst
EMY	Engine Model Year
EPA	United States Environmental Protection Agency
g/bhp-hr.	Grams per Brake Horsepower-Hour
GHG	Greenhouse Gases
GVWR	Gross Vehicle Weight Rating
DAQ	North Carolina Division of Air Quality
NCDEQ	North Carolina Department of Environmental Quality
NOx	Oxides of Nitrogen
PM	Particulate Matter
PM 2.5	Particulate Matter 2.5 micrometers and smaller in diameter
RFP	Request for Proposals
TPEM	Transition Program for Equipment Manufacturers



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## Appendix D: Definitions

**All-Electric:** powered exclusively by electricity provided by a battery, fuel cell, or the grid.

**Alternative Fuel:** an engine, or a vehicle or piece of equipment which is powered by an engine, which uses a fuel different from or in addition to gasoline fuel or diesel fuel (e.g., CNG, propane, diesel-electric hybrid).

**CARB - Certified:** Equipment meets the current emission standards set by the California Air Resources Board.

**Class 5 - 7 Vehicles:** trucks, including commercial trucks, used to deliver cargo and freight (e.g., courier services, delivery trucks, box trucks moving freight, waste haulers, dump trucks, concrete mixers) with a Gross Vehicle Weight Rating (GVWR) between 16,001 and 33,000 lbs.

**Class 8 Vehicles:** trucks with a Gross Vehicle Weight Rating (GVWR) greater than 33,000 lbs. used for port drayage and/or freight/cargo delivery (including waste haulers, dump trucks, concrete mixers).

**CCV (Closed Crankcase Ventilation):** a system that removes unwanted gases from the crankcase of an internal combustion engine.

**Drayage Trucks:** trucks hauling cargo to and from ports and intermodal rail yards.

**DOC (Diesel Oxidation Catalyst):** an aftertreatment component that is designed to convert carbon monoxide (CO) and hydrocarbons into carbon dioxide (CO<sub>2</sub>) and water.

**DPF (Diesel Particulate Filter):** a device designed to remove diesel particulate matter or soot from the exhaust gas of a diesel engine.

**Engine Model Year:** the “annual production period” for all models within an engine family of light-duty motor vehicles, heavy-duty motor vehicles and engines, and on-highway motorcycles begins either:

- when any vehicle or engine within the engine family is first produced; or
- on January 2 of the calendar year preceding the year for which the model year is designated, whichever date is later.

The annual production period ends either:

- When the last such vehicle or engine is produced; or
- on December 31 of the calendar year for which the model year is named, whichever date is sooner.<sup>1</sup>

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<sup>1</sup> US Code of Federal Regulations § 85.2304

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**EPA - Certified:** Equipment meets the current emission standards set by the U.S. Environmental Protection Agency.

**Forklift:** off-road equipment used to lift and move materials short distances; generally, includes tines to lift objects. Eligible types of forklifts include reach stackers, side loaders and top loaders.

**Gross Vehicle Weight Rating (GVWR):** the maximum weight of the vehicle, as specified by the manufacturer. GVWR includes total vehicle weight plus fluids, passengers, and cargo.

Class 1:  $\leq$  6000 lbs.

Class 2: 6001-10,000 lbs.

Class 3: 10,001-14,000 lbs.

Class 4: 14,001-16,000 lbs.

Class 5: 16,001-19,500 lbs.

Class 6: 19,501-26,000 lbs.

Class 7: 26,001-33,000 lbs.

Class 8:  $\geq$  33,001 lbs.

**Hybrid:** a vehicle that combines an internal combustion engine with a battery and electric motor.

**Infrastructure:** the equipment used to enable the use of electric powered vehicles (e.g., electric vehicle charging station).

**Model Year (MY):** means the manufacturer's annual new model production period which includes January 1 of the calendar year, ends no later than December 31 of the calendar year, and does not begin earlier than January 2 of the previous calendar year. Where a manufacturer has no annual new model production period, model year means calendar year.

**Original Equipment Manufacturer (OEM):** the entity that originally manufactures the engine or the vehicle for sale. Additional term defined by the state for purposes of administering this Program.

**Port Cargo Handling Equipment:** rubber-tired gantry cranes, straddle carriers, shuttle carriers, and terminal tractors, including yard hostlers and yard tractors that operate within ports.

**Port:** shall refer to facilities along navigable water for the loading and unloading of cargo from ships; places from which aircraft operate that have paved runways and passenger and cargo terminals which include baggage movement and passenger transit operations; or nodes in the larger goods movement supply chain, to include cruise terminals, bulk terminals, container terminals and intermodal container transfer facilities.

**SCR (Selective Catalytic Reduction):** an advanced active emissions control technology system that reduces tailpipe emissions of nitrogen oxides (NOx) down to near-zero levels in newer generation diesel-powered vehicles and equipment.

**Scrapped:** to render inoperable and available for recycle, and, at a minimum, to specifically cut a 3-inch hole in the engine block for all engines. If any Eligible Vehicle will be replaced as part



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of an Eligible project, scrapped shall also include the disabling of the chassis by cutting the vehicle's frame rails completely in half.

**Tier 0, 1, 2, 3, 4:** corresponding EPA engine emission classifications for off-road, locomotive and marine engines.

