COLORADO CLEAN DIESEL PROGRAM

PROGRAM GUIDE

Revised 09/25/26

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1. Program Overview

The Colorado Clean Diesel Program (CCDP) provides grants to spur the adoption and demonstration of new technologies that significantly reduce diesel emissions in the state of Colorado. Diesel emissions contribute to global greenhouse gas emissions and local air pollution harmful to public health.

Businesses or other entities that own certain types of diesel equipment may apply for a CCDP grant to help offset the cost of replacing it with all-electric or hybrid-electric equivalents. Grants of up to 25-45% of the project cost will be awarded, depending on the type of equipment.

Because CCDP's goal is to replace old, polluting machines with cleaner, new ones, there is a requirement for most equipment types that a corresponding existing diesel vehicle, engine, or piece of equipment be scrapped.

As of the date of this document, the CCDP has up to $941,153 in funding to distribute via competitive grants. Program funding comes from two sources: Colorado's state allocation under the Diesel Emissions Reduction Act (DERA), via the United States Environmental Protection Agency; and Colorado's Beneficiary Mitigation Plan (BMP), our state's share of funding resulting from the legal settlement of the Volkswagen emissions scandal. In order to comply with Executive Order B 2019 002, the portion of the CCDP Funding coming from Colorado's BMP must go toward zero-emissions technology solutions. Therefore, strong preference will be given to applications proposing zero-emissions technology.

Clean Energy Economy for the Region (CLEER), a Carbondale-based nonprofit, manages the CCDP under contract to the Colorado Department of Public Health and Environment (CDPHE).

2. Contact Information

Our staff is available to help you submit a successful grant application. If you have questions or would like to discuss your proposal, please contact:

Clean Energy Economy for the Region
(970) 704-9200
info@cleanenergyeconomy.net

Dova Castaneda Zilly
CCDP Program Manager
(970) 704-9200 x 113
dova@cleanenergyeconomy.net

3. Application Instructions

Applications are accepted and reviewed on a rolling basis, but funding is limited and competitive, so interested organizations are encouraged to apply as soon as possible.

Applications must be submitted via the CCDP website at http://cocleandiesel.org/apply/. All applications must include:

- **Project worksheet.** This Excel worksheet (downloadable from the application page of the website) is where you will enter specific information about the equipment to be purchased, the equipment to be replaced/scrapped, costs, and your funding request. Fill out the project worksheet to the best of your ability and skip any row with an asterisk. Remaining information should be added as it becomes available.
- **Supporting documentation.** Two cost quotes for the new equipment are required, along with photos of the old equipment. If selecting the more expensive option, please provide a brief (no more than one page) justification for that selection. These must be digital files. If you only include one quote, include a brief justification (no more than one page) about why that is the case.
- **Online application.** This form is the "cover sheet" for your application. It includes a list of application requirements that you must certify, and it's where you will upload your completed worksheet and documentation.

Please don't hesitate to contact CLEER directly if you have any questions, via the email address given above. This is a case-by-case program, and we are happy to provide individualized coaching to help you submit a successful grant application.

4. Applicant Eligibility

Applicants must meet all the following requirements in order to be eligible to apply for a CCDP grant:

- The applicant must be a business, government, or entity that owns and operates diesel vehicles or equipment in Colorado and be in good standing with the Colorado Secretary of State.
- The applicant must currently own and operate the vehicle/equipment being replaced and have owned and operated the vehicle for at least two years.
- The vehicle/equipment being replaced must be primarily used in the state of Colorado.

- The new vehicle/equipment must also be primarily used in the state of Colorado.
- The existing vehicle or equipment must be fully operational. Operational equipment must be able to start, move, and have all necessary parts to be operational.
- The existing vehicle or equipment must have at least three 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.
- Applicants seeking funding for electric vehicle equipment must demonstrate that adequate electrical infrastructure to support the equipment currently exists or will exist on site. The CCDP also funds certain expenses associated with this electrical charging infrastructure (see the Electrical Infrastructure section, below).

5. Eligible Technologies

The CCDP will provide grants to fund the technologies described below. All-electric (zero-emissions) types of equipment will be given preference and will qualify for grants that cover a higher percentage of costs because they completely eliminate diesel emissions. Hybrid-electric types qualify for lower-percentage grants because they don't cut emissions as much. Grant percentages are detailed in the Funding and Cost-Share Requirements section.

For more details about these technologies, please see the Technology Decision Support page of the CCDP website.

The CCDP can only fund trucks not registered for highway use. Funding for on-road vehicle electrification is available through the Clean Fleet Vehicle and Technology Grant program.

In addition to the technologies described here, the CCDP will consider funding requests for any other items deemed eligible under the State Grants program of the Diesel Emissions Reduction Act.

Reminder: You will be required to scrap one existing piece of comparable diesel equipment from your fleet for each new one funded by this program. See the Scrappage Requirements section.

Terminal Tractors

There are compelling economic and health reasons to make the switch to electric versions of terminal tractors, a.k.a. yard tractors, hostlers, goats, etc. These Class 8 trucks feature beefy onboard batteries to meet the high power requirements and intense duty cycles of the industry. Recharging the battery is typically done with one or more custom-installed fast-charging stations to minimize downtime.

Construction Equipment

Electric construction equipment funded by the CCDP falls into two broad categories:

Mobile electric construction machines are powered entirely by electricity stored in an onboard high-voltage battery. An electric motor or motors propel the machine and run the hydraulics. The equipment is fully mobile, but run time is limited, and the battery must be recharged by being plugged in when not in use. Currently, electric technology is confined to compact machines such as mini-excavators and skid steers.

Electric material handlers and cranes are powered by electricity rather than diesel fuel. Typically, these machines are either stationary and hardwired into their power supply, or they're attached to a tether cable that allows a limited range of travel. There are some models that have auxiliary battery packs to enable additional mobility around a larger job site.

Transportation Refrigeration Units (TRUs)

These technologies replace traditional all-diesel-powered transportation refrigeration units (TRUs) on refrigerated trailers (reefers).

All-electric TRUs have compressors that are driven by an electric motor all the time. While parked or being loaded, the TRU is plugged into shore power (i.e., the grid) via a standard plug-in connection. In transit, the TRU may be powered by an onboard battery pack and/or solar panels. More commonly, reefers with all-electric TRUs are confined to shore-powered stationary operations, such as to increase holiday and summer season cold storage capacity at grocery stores.

Hybrid TRUs (also called plug-in eTRUs or standby electric TRUs) can also be plugged into shore power when stationary, but they're powered by diesel when moving. The compressor is driven by electric power supplied by an integral diesel genset located within the TRU housing, or else mechanically driven by an integral diesel engine.

Airport Ground Support Equipment (GSE)

All-electric versions of most types of **airport GSE** – e.g., pushbacks, belt loaders, container loaders, luggage tugs, lavatory trucks, and water trucks – are increasingly being deployed at airports. GSE is well-suited for electrification because it benefits from low-end torque and has frequent start/stops, idle time, and short required ranges. The vehicle's onboard battery must be periodically recharged; in an airport setting, this can actually provide more flexibility and efficiency than diesel refueling.

Lawn Mowers

Electric lawn mowers are powered entirely by an onboard battery. The battery must be recharged by plugging the machine in when not in use, or else swapped out for a second battery that has been charged offline. A few manufacturers now offer electric versions of commercial-grade zero-turn mowers with cutting deck widths of up to 74".

Farm Tractors

All-electric farm tractors are starting to become available, offering an alternative to diesel machines at the compact end of the market. The onboard battery delivers power to electric motors and to the power take-off (PTO). The battery must be recharged by plugging the machine in when not in use, but it's possible to buy extra batteries and swap them to extend run time.

Bucket Trucks

This category includes not only traditional bucket trucks but also other similar vehicles with integrated PTO equipment, such as digger derricks, boom cranes, cable placers, spray equipment, etc. Eligible trucks must be Class 5-8, which are defined as follows: Class 5 (16,001-19,500 lbs. gross vehicle weight rating [GVWR]); Class 6 (19,501-26,000 lbs. GVWR); Class 7 (26,001-33,000 lbs. GVWR); Class 8a (33,001-60,000 lbs. GVWR); Class 8b (60,001 lbs. & over GVWR).

In an **all-electric bucket truck**, both the vehicle and the PTO are powered exclusively by onboard batteries. The batteries must be recharged by plugging them in when the vehicle is not in use. Applicants seeking funding for this technology must demonstrate that adequate electrical infrastructure to support the units currently exists or will exist on site. The CCDP also funds certain expenses associated with this electrical infrastructure (see the Electrical Infrastructure section, below).

A **hybrid-electric bucket truck** has a conventional internal combustion engine to run the vehicle, but its PTO equipment is powered by electricity from an onboard battery pack. This allows the operator to turn the vehicle engine off instead of idling while the truck is stationary.

Snow Groomers

A **hybrid-electric snow groomer** has a diesel engine that powers an onboard generator and also the hydraulic pumps. The generator charges a high-voltage battery, which is what runs the drive motors. In downhill operation, the electric motors recover energy to help recharge the battery and power the hydraulics, reducing overall fuel consumption. Hybrid machines don't require a plug-in charging station because they generate their electricity onboard with the diesel engine.

Multiple companies now manufacture **all-electric groomers** available in the US market. PistenBully manufactures the PB100 E, and Prinoth has unveiled its Husky eMotion groomer. These machines are on the small side, and given their battery specs, they could be expected to run only 2½-3 hours on a charge. They would require a dedicated charging infrastructure. Other electric groomers are currently in advanced testing or being developed.

Electrical Infrastructure

All of the above technologies replace diesel power with electrical power, and most of them require additional (or modified) electrical infrastructure to plug into. For example, transportation refrigeration units typically need loading bays or parking spaces with dedicated wiring and plug-in cables (these are generally known by the term Electrified Parking Spaces, or EPS's). Similarly, all-electric bucket trucks need access to a charging station at their home facility.

The CCDP requires applicants to demonstrate the appropriate electrical infrastructure exists or will be installed to support certain funded technologies. Infrastructure projects are site-specific, and we strongly recommend engaging the services of a licensed electrical contractor to assess your existing facility and planned modifications. Program staff can provide general advice.

Moreover, the Program will provide grants for such infrastructure projects.

Eligible costs for EPS's include the purchase and installation of the EPS unit, mount, pedestal, plug-in cable, or other equipment required for power delivery directly related to

the new equipment. Eligible costs also include design and engineering, electrical panels, upgrades to existing electrical panels or electrical service, transformers, wiring/conduit, and installation. Ineligible costs include power distribution to the property line, electricity, operation and maintenance, stationary energy storage systems that power the equipment (e.g., batteries) and their installation, and on-site power generation systems that power the equipment (e.g., solar and wind power generation equipment) and their installation.

Eligible infrastructure costs associated with a vehicle/equipment replacement include the modifications, attachments, accessories, or auxiliary apparatus necessary to make the equipment functional. The cost of additional “optional” components or “add-ons” that significantly increase the cost of the vehicle may not be eligible for funding under the grant; the replacement vehicle should resemble the replaced vehicle in form and function. For grid-electric-powered equipment replacements, examples of eligible replacement costs include, but are not limited to, the purchase and installation of electrical infrastructure or equipment to enable the use of power. Examples of ineligible costs include, but are not limited to, electricity, operation, and maintenance costs.

Tips to maximize your grant award:

- If you are submitting a combined grant request for all-electric equipment and the electrical infrastructure needed to support it, it will be to your advantage to select the “Infrastructure - with all-elec equip” option in Section 3 of the project worksheet. This will apply a higher funding percentage (45% instead of 30%) to the infrastructure costs you enter in Section 4.
- If you are submitting a combined grant request for hybrid TRUs plus associated EPS’s, select the “Infrastructure - other” option, and be sure to enter all infrastructure-related costs in Section 4. This will qualify the infrastructure costs for 30% grant funding (as opposed to 25% for the TRUs).
- For all other requests that include electrical infrastructure, select the “Infrastructure - other” option in Section 3.

Idle-Reduction Technologies (IRTs)

Idle-reduction technologies reduce unnecessary main engine idling, typically by providing heat, air-conditioning (AC), or power to the cab that would otherwise require the operation of the main drive engine while the vehicle or equipment is parked. These devices reduce fuel costs and pollution, and extend engine life.

Eligible technologies include auxiliary power units, battery AC systems, and direct-fired heaters (Class 8 trucks only). For the full list, see the EPA's website. The Colorado Clean Diesel will fund up to 100% of the cost of these devices if they are combined with a new or previously installed exhaust aftertreatment retrofit; otherwise, the funding cap is 25%.

6. Funding Request Requirements

Applicants are required to provide specifications about each piece of equipment or electrical infrastructure project for which they are requesting a grant. The required specs are listed in the project worksheet, which is downloadable from the grant application page.

In Section 1 of the Project Worksheet, please list each vehicle or piece of equipment being purchased in its own column (Vehicle 1, Vehicle 2, etc.). Details about the corresponding vehicle/equipment to be replaced will then be entered in the same column in Section 2. Specs on proposed electrical infrastructure are entered as a separate project (Infrastructure) in Section 3, if applicable.

Project costs, entered in Section 4, must be based on written quotes or estimates. Vehicle/equipment costs may include the purchase price of equipment or costs directly associated with putting the vehicle/equipment into service. Allowable costs for electrical infrastructure projects are listed in the previous section.

Applicants are required to upload two quotes or estimates to substantiate all project costs in their funding request. If you only include one quote or choose the higher quote, include a brief justification (no more than one page) explaining why. If uploading multiple documents, you will need to combine them into a single PDF file or zipped folder. Please name the file or folder using this format: [Applicant Name]-new equipment-[date of upload]. For example: [CLEER]-new equipment-[080426].

7. Scrappage Requirements

For each vehicle, engine, or piece of equipment approved for CCDP funding, a corresponding one in the applicant's existing fleet must be scrapped. This requirement does not apply to electrical infrastructure or IRTs.

For a vehicle or piece of equipment to be eligible for scrappage, it must:

- Run on diesel.
- Be of the same type and similar GVWR or horsepower, and perform the same function and operation as the vehicle/equipment that is replacing it.

- Be primarily used in the state of Colorado.
- Be fully operational and have a minimum of 3 years remaining in its useful life at the time of replacement.
- Have been owned by the applicant for at least 2 years prior to the replacement.
- Have been operated at least 500 hours annually in the 2 years prior to the replacement.

The federal Diesel Emissions Reduction Act places some additional restrictions on the eligibility of certain engines for scrappage if they are being replaced by hybrid- or partial-electric models. These restrictions are unlikely to apply to the technologies funded by the Colorado Clean Diesel Program, but if you have any questions, please don't hesitate to contact us for advice.

The CCDP application form requires the applicant to certify that their existing equipment meets the scrappage requirements. In addition, the applicant must submit supporting documentation in the form of clear and legible digital photos and video of the items listed below. We require a large, identifiable mark, such as spray paint on the vehicle's body, to be visible in all submitted scrappage documentation.

Required Images:

- Side profile of the equipment **before disabling**
- VIN label or equipment serial number. Note: this **must** be readable in the photo or paused video.
- Engine label (showing serial number, engine family number, and engine model year). Note: this **must** be readable in the photo or paused video. If the engine tag is damaged or worn to the point where information about the engine cannot be read, write the VIN, or at least the last six digits of the VIN, on the metal by the tag. Or, take a picture with the title next to the engine tag.
- Proof of Destruction
    - Option One:
        - Chassis rail prior to being cut in half
        - Chassis rail after it has been cut in half
        - Engine block prior to the 3" hole being drilled
        - Engine block after the 3" hole has been drilled

    - Option Two: The body and engine may also be disabled by crushing. Include a photo of before and after. See below for video requirements.

Required Videos:

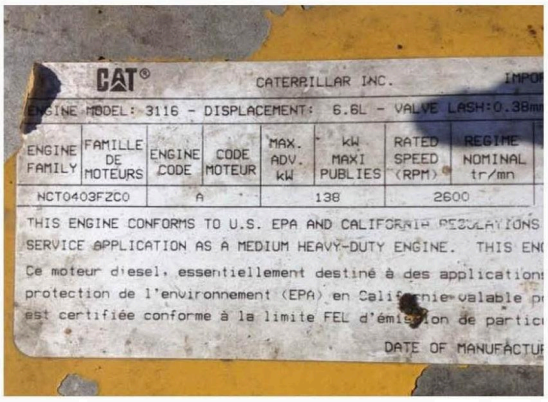
- Before Destruction: A continuous video showing the full piece of equipment with an identifying mark, the engine block, the engine plate, the VIN plate, the chassis rails, and the full body prior to destruction. The equipment does not need to be running. Note: The video must be submitted at a high enough quality that the required information is readable in **paused** video.
- Two Destruction Video Options:
    - A continuous video showing the full piece of equipment with the same identifying mark, the engine block, the engine plate, the VIN plate, and the chassis rails after destruction. Note: The video must be submitted at a high enough quality that the required information is readable in **paused** video.
    - If the body is crushed instead of the chassis rails being cut, there must be a continuous video showing the full piece of equipment with an identifying mark during body and engine destruction.

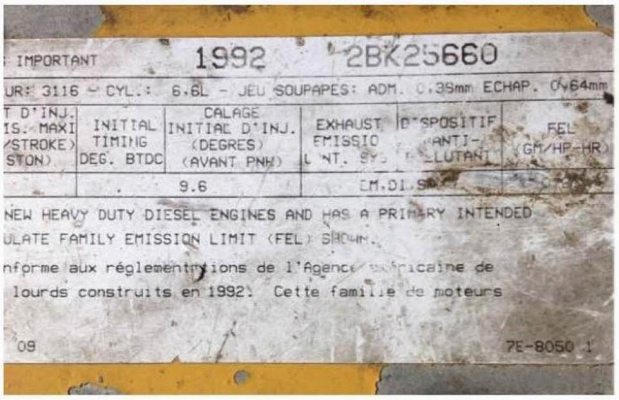
Photos must be clear, legible, and capture the full label. This may require two to three photos of the left, center, and right sides of the engine label. (See examples below.) You will need to combine multiple photos into a single PDF file or zipped folder. Please name the file or folder using this format: [Applicant Name]-old equipment-[date of upload].

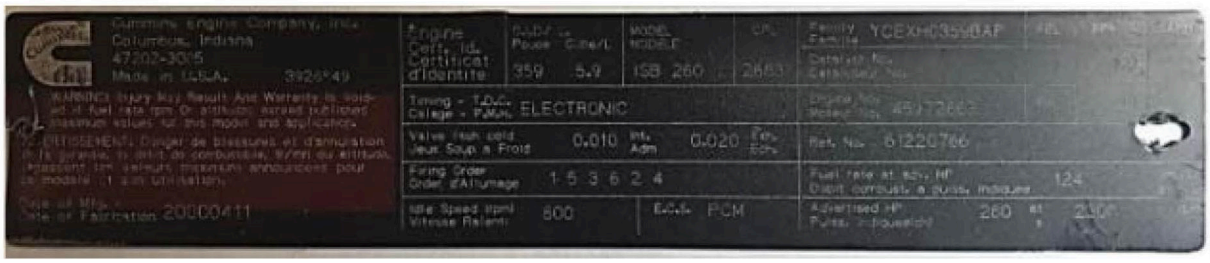
A signed Scrap Verification document (Appendix A) is another required component to show the vehicle was scrapped.

The vehicle/equipment must be scrapped or permanently disabled within 90 days of receiving the new vehicle/equipment funded by a CCDP grant.

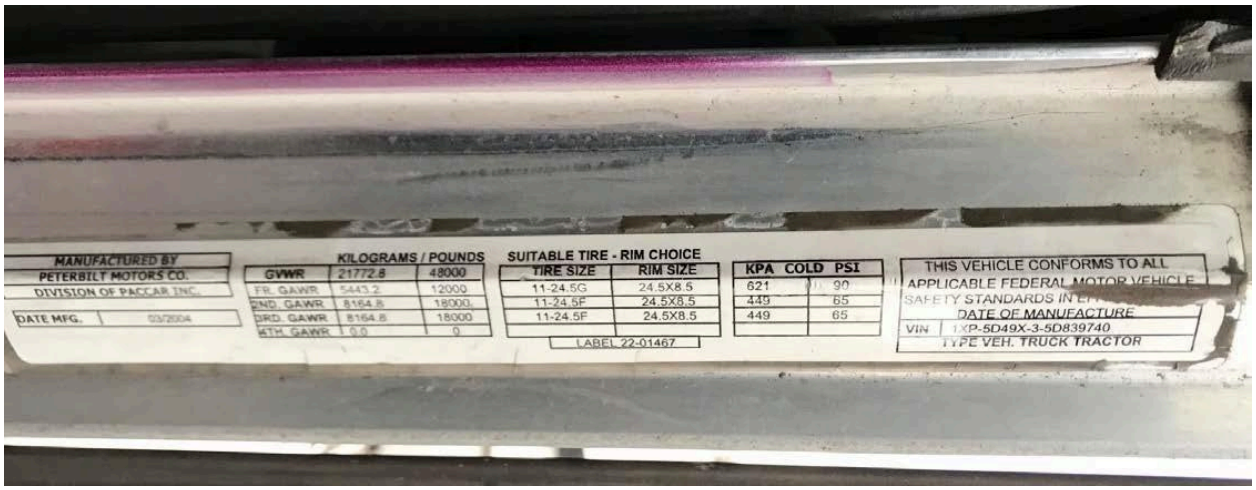
Examples of engine label photos:







Example of VIN plate photo:



8. Funding and Cost-Share Requirements

Table 1 shows the maximum funding and minimum applicant cost-share requirements available for the eligible technologies.

Table 1

Technology	Maximum CCDP Grant Funding	Minimum Applicant Cost Share
Terminal Tractor - electric	45%	55%
Construction Equipment - electric	45%	55%
TRU - electric	45%	55%
TRU - hybrid	25%	75%
Airport GSE - electric	45%	55%
Lawn Mower - electric	45%	55%
Farm Tractor - electric	45%	55%
Bucket Truck - electric	45%	55%
Bucket Truck - hybrid	25%	75%
Snow groomer - hybrid	25%	75%
Snow groomer - electric	45%	55%
Electrical infrastructure (combined with all-elec equip)	45%	55%
Technology	**Maximum CCDP Grant Funding**	**Minimum Applicant Cost Share**
Electrical infrastructure (other)	30%	70%
Idle-reduction technologies when combined with new or previously installed exhaust aftertreatment retrofit	100%	0%
Idle-reduction technologies without exhaust aftertreatment retrofit	25%	75%

Table 2 gives a cost breakdown of a hypothetical CCDP-funded project.

Table 2

Technology	Total Project Cost	Maximum CCDP Grant	Minimum Applicant Cost Share
Electric Material Handler	$900,000	$405,000 (45%)	$495,000 (55%)

Applicants are encouraged to propose a cost share larger than the minimum figure indicated in the table. If the number of applications exceeds the funding available, applicants' proposed cost share will be an evaluation criterion.

9. Evaluation Criteria

Funding will be competitively awarded based on the applications received. If grant applications exceed available funding, priority will be given to projects based on the following criteria:

- Estimated emissions reductions per dollar.
- Location of service area of equipment, with priority given to non-attainment zones. For a map showing non-attainment zones, click here.
- Innovation (e.g., first time technology is deployed in Colorado).
- Applicant cost share.

CLEER reserves the right to award partial grants if requests exceed the amount of funding available.

10. Grant Award Process and Expected Timeline

The Program endeavors to notify successful applicants of their grant award within 30 days of submission, but incomplete applications or those requiring an EPA waiver may take longer due to additional review.

Successful applicants will receive a Grant Award notifying them, and an End-User Agreement that binds the grant recipient to all applicable federal and state requirements associated with the grant award. To execute the agreement, the recipient must sign and return it to CCDP within 30 days.

After signing the End-User Agreement, the grant recipient will work with their vendor to purchase the new equipment. No purchases can be made until the End-User Agreement is executed.

After completing the installation or receiving the new equipment, the grant recipient must scrap the old equipment and submit scrappage documentation within 90 days.

Once the grant recipient has completed the scrappage requirements, they will submit their final package to CLEER. The accompanying documentation will be:

- W-9 IRS form
- Paid invoice from the vendor
- Scrappage documentation (photos, videos, and the Scrap Verification document)

The final package will be forwarded to CDPHE and Volkswagen Diesel Emissions Environmental Mitigation Trust for review and approval. Payment will be issued within 90 days of submission.

Appendix A: Scrap Verification Document

See following page.

2023-2024 DERA State Grants

Colorado Clean Diesel Program

Vehicle make:	Engine make:
Vehicle model:	Engine model:
Vehicle model year:	Engine model year:
VIN:	Engine horsepower:
Odometer/usage meter reading:	Engine ID or serial number

I certify that on _____, the above engine and chassis were permanently disabled. Disabling the engine consisted of drilling a three-inch hole in the engine block or some other approved scrappage method. Disabling the chassis consisted of cutting completely through the frame/frame-rails on each side of the vehicle/equipment at a point located between the front and rear axles or some other approved scrappage method. The following required digital photos of the disabled engine and chassis are attached: Side profile of the vehicle, prior to disabling; VIN tag or equipment serial number; Engine label (showing serial number, engine family number, and engine model year); Engine block, prior to hole; Engine block, after hole; and Cut frame rails, or other approved methods of proof.

_____

EPA Grantee/Subgrantee Authorized Representative (Print Name)

_____ _____

EPA Grantee/Subgrantee Authorized Representative (Signature) Date

Vehicle owner's name and address: _____

_____ _____

Vehicle Owner (Signature) Date

Dismantler/Scrapper name and address: _____

_____ _____

Dismantler/Scrapper (Signature) Date