

Mandated Measures Justification

2026 Diesel Emissions Reduction Act (DERA) National Program and 2025-2026 DERA State Program

Document Summary

Participants of any DERA Program funding opportunity should note that DERA funds cannot be used to fund emission reduction projects mandated by federal statute. The restriction applies when the mandate takes effect (the effective date) for any affected vehicles, engines, or equipment. This restriction does not apply to a mandate in a State Implementation Plan (SIP) approved by the U.S. Environmental Protection Agency (EPA) under the Clean Air Act (CAA). Voluntary or elective emissions reduction measures shall not be considered “mandated,” regardless of whether the reductions are included in the SIP.

The information that follows is provided purely for informational purposes to highlight certain parts of the rules that may be of most interest to applicants, such as applicability, exemptions, and remanufacture requirements. This information is not all-inclusive and is not meant as a substitute for the actual rule. There are additional applicability, exemptions, and requirements under the rule that are not highlighted below.

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Projects Affected

Specifically, projects involving locomotives and marine engines are not eligible for funding if the emissions reductions are required by the EPA’s locomotive and marine rule, [“Control of Emissions of Air Pollution from Locomotives and Marine Compression-Ignition Engines Less than 30 liters per Cylinder”](#) Also, projects involving stationary engines will not be considered for funding if the emissions reductions proposed for funding are required by the EPA’s [Reciprocating Internal Combustion Engines](#) (RICE) rule, [“National Emission Standards for Hazardous Air Pollutants \(NESHAP\) for Stationary Reciprocating Internal Combustion Engines”](#) as outlined in the Code of Federal Regulations (CFR) under [40 CFR Part 63 Subpart ZZZZ](#).

All applications that include locomotives, marine engines, or stationary engines must include a clear and concise justification in Section 1 of the Workplan project narrative for why and how the proposed emissions reductions are not subject to the restriction for mandated measures under the Notice of Funding Opportunity (NOFO). The justification must clearly demonstrate why and how:

- The engines are exempt from the requirements of the EPA's rule; or
- Emissions reductions funded with EPA funds will be implemented prior to the effective date of any applicable requirements under the rule; or
- Emissions reductions funded with EPA funds will not be used to satisfy any applicable requirements under the rule but are in excess of (above and beyond) those required by the applicable mandate.

Applicants must provide sufficient information to support the justification, including copies of maintenance records, if applicable. The applicant should include supporting information as an attachment to the application, which does not count towards the 14-page limit.

Applicants are responsible for addressing all applicable parts of the rule in their justification for why/how the emissions reductions proposed for funding are not subject to the restriction for mandated measures under the NOFO.

Justification for Locomotives and Marine Compression-Ignition Engines Less than 30 liters per Cylinder

What is sufficient justification?

For locomotives, the justification must include, but is not limited to:

- a. The original build date of each locomotive;
- b. The model year of the existing engines for each locomotive;
- c. Whether or not the existing locomotive engines are the original engines that were installed in the locomotive by the locomotive manufacturer at the time of original manufacturer, or whether the original engines were ever replaced or upgraded (prior to the activities that are being proposed for funding). If so, when and what upgrades were made; and
- d. The date that the power assemblies of each existing engine have been replaced, if ever.

As outlined above, certain locomotives and marine engines are exempt from the rule. This exemption may be based on the age or size of the locomotive or marine engines, or on the type or size or annual revenue of the owner/operator. In these cases, sufficient justification would include a summary of the rule applicability, and an explanation of why each locomotive or marine engine is exempt from the rule. For example:

"The EPA's Marine Remanufacture Program applies only to those commercial marine propulsion and auxiliary diesel engines which meet all of the following criteria:

- i. C1 and C2 engines (i.e., per cylinder displacement up to 30 liters);*
- ii. Greater than 600 kW (800 hp);*
- iii. Tier 2 and earlier engines; and*
- iv. Built in model year 1973 or later.*

Engines A, B, and C, as described fully in the previously submitted Applicant Fleet Description, are exempt from the requirements of the EPA's marine rule because all three engines are of original model year 1972. Further, all three of these engines are 600 horsepower engines and are, therefore, exempt from the rule requirements."

As outlined above, certain locomotives and marine engines may be subject to the rule requirements. However, the applicant may be able to demonstrate that the emissions reductions funded with EPA funds

will be implemented prior to the effective date of any applicable requirements under the rule. Additionally, emissions reductions funded with EPA funds will not be used to satisfy any applicable requirements under the rule; rather, they are in excess of (above and beyond) those required by the applicable mandate. In these cases, sufficient justification would include a summary of the rule applicability and an explanation of how the proposed emissions reductions from each locomotive or marine engine meet the criteria listed above. For example:

“Marine Engine D is a commercial C1 marine diesel engine of 900 hp, built in model year 1980, and is unregulated. Please see previously submitted Applicant Fleet Description for full engine information including marine engine model and engine family name. Therefore, the EPA’s Marine Remanufacture Program covers this engine. We have conducted a thorough search of the EPA’s list of remanufacture systems (i.e., “kits”, certified for use with Category 1 and 2 marine diesel engines according to the provisions of [40 CFR Part 1042, Subpart I](#)) listed at the [EPA’s Annual Certification Data for Vehicles, Engines, and Equipment](#), and have determined that at this time there are no certified kits available for this engine. Therefore, there are no applicable requirements under the rule for this engine at this time and the emissions reductions proposed for EPA funding are not subject to the Restriction for Mandated Measures under the NOFO.”

OR

“Marine Engine E is a commercial C1 marine diesel engine of 900 hp, built in model year 1980, and is unregulated. Please see previously submitted Applicant Fleet Description for full engine information, including marine engine model and engine family name. Therefore, the EPA’s Marine Remanufacture Program covers this engine. We have conducted a thorough search of the EPA’s list of remanufacture systems (i.e., “kits”, certified for use with Category 1 and 2 marine diesel engines according to the provisions of [40 CFR Part 1042, Subpart I](#)) listed at the [EPA’s Annual Certification Data for Vehicles, Engines, and Equipment](#). We have determined that at this time there is one certified remanufacture kit available for this engine: [insert kit info].

However, emissions reductions funded with EPA funds will not be used to satisfy any applicable requirements under the rule but are in excess of (above and beyond) those required by the applicable mandate. [The applicant should include a thorough discussion of the emissions reductions that could be achieved by the application of the certified kit to the existing engine and the emissions reductions that will be achieved by the activities proposed from funding under the grant. The applicant should calculate the difference between the required emissions reductions and the proposed emissions reductions and should be able to clearly demonstrate that emissions reductions funded with EPA funds are in excess of (above and beyond) those required by the rule.]

Therefore, the emission reductions proposed for EPA funding are not subject to the restriction for mandated measures under the NOFO.”

Affected Entities and Engines

Affected Entities and Engines

Entities potentially affected by this rule are those that manufacture, remanufacture, or import locomotives or locomotive engines; those that own or operate locomotives; companies and people that manufacture, sell, or import into the United States new marine compression ignition engines; companies and people that rebuild or maintain these engines; companies and people that make vessels that use such engines; and the owners/operators of such vessels.

The rule addresses all types of diesel locomotives, including line-haul, switch, and passenger rail. It also addresses all types of marine diesel engines below 30 liters per cylinder displacement (hereafter referred to as “marine diesel engines”). These engines are used to power a wide variety of vessels, from small fishing and recreational boats to large tugs and Great Lakes freighters. They are also used to generate auxiliary vessel power, including on ocean-going ships.

Locomotives

The rule affects locomotives currently regulated under [40 CFR Part 92](#) or [Part 1033](#). With some exceptions, the locomotive regulations apply for all locomotives originally built in or after 1973 that operate in the United States.

Some Class III Railroads are exempt from the remanufacture standards for existing fleets. The rule limits the category of small railroads which are exempt from the Tier 0, 1, and 2 remanufacturing requirements for existing fleets to those railroads that qualify as Class III railroads and that are not owned by a large parent company. Under the current Surface Transportation Board classification system, this exemption is limited to railroads having [total revenue less than \\$48,237,637 per year in 2024](#).

The EPA estimates that nearly all of the locomotives in the Class I railroad fleets were originally manufactured in or after 1973 and are already subject to Tier 0 or later standards.

Intercity passenger or commuter railroads are not included as railroads that are small businesses and are therefore subject to the rule.

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) (40 CFR Part 63 Subpart ZZZZ)

Stationary engine projects, such as energy producing generators and agricultural pumps, will not be considered for funding under the NOFO if the emissions reductions proposed for funding are required by the EPA’s RICE rule, “National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines” as outlined under [40 CFR Part 63 Subpart ZZZZ](#). Under the RICE Rule provisions, the replacement or reconstruction of an engine may trigger the compliance requirements.

Stationary RICE means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work, and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a nonroad engine as defined at [40 CFR 1068.30](#) and is not used to propel a motor vehicle or a vehicle used solely for competition.

The RICE Rule applies to new and existing engines as described below:

1. Engines greater than 500 HP at a major source of Hazardous Air Pollutants (HAP):
 - Existing engines if constructed before December 19, 2002;
 - New engines if constructed on or after December 19, 2002; and
 - Reconstructed engines if reconstruction began on or after December 19, 2002.
2. Engines less than or equal to 500 HP at a major source of HAP and engines or all horsepower located at an area source of HAP:
 - Existing engines if constructed before June 12, 2006;
 - New engines if constructed on or after June 12, 2006; and
 - Reconstructed engines if reconstruction began on or after June 12, 2006.

The EPA assumes most stationary source projects proposed under the NOFO will fall under #2, above.

Sufficient Justification

The applicant must demonstrate that the emissions reductions funded with EPA funds will be implemented prior to the effective date of any applicable requirements under the rule. Additionally, these reductions must not be used to satisfy any applicable requirements under the RICE Rule. Instead, they should be in excess of (above and beyond) what is required by applicable mandates. In these cases, sufficient justification would include a summary of the RICE Rule's applicability and an explanation of how the proposed emissions reductions from the target engines are achieved prior to any compliance dates or are in excess of any emissions reductions required by the RICE Rule.

In general, the requirements for existing stationary RICE located at areas sources of HAP (found in Table 2d to Subpart ZZZ of Part 63) include Carbon Monoxide (CO) limits, maintenance and inspection requirements, and operation limits.

Additional Information for Locomotive and Marine Engines

Locomotive Rules under [40 CFR Part 1033](#):

Remanufactured Locomotives: The rule sets new standards for the existing fleet of Tier 0, Tier 1, and Tier 2 locomotives, to apply at the time of remanufacture, if a certified remanufacture system is available.

To avoid confusion between the old standards and the new standards, the EPA has adopted a simple approach whereby a Tier 0 locomotive remanufactured under the more stringent Tier 0 standards adopted in the 2008 (current) rule will be designated a Tier 0+ locomotive. The same approach applies for Tier 1 and Tier 2 locomotives. That is, those remanufactured under the new standards would be called Tier 1+ and Tier 2+ locomotives, respectively. However, in many contexts, including a number of places in the final rule, there is no need to make distinctions of this sort, as no ambiguity arises. In these contexts, it would be perfectly acceptable to drop the "+" designation and simply refer to Tier 0, 1, and 2 locomotives and standards.

Switch Locomotives: The rule includes standards and other provisions aimed at encouraging the replacement of old high-emitting units with newly built or refurbished locomotives powered by very clean engines developed for the nonroad equipment market. For example, a provision applicable to switch locomotives allows a streamlined certification process.

Reduction of Locomotive Idling Emissions: The rule requires that an Automatic Engine Stop/Start System (AESS) be used on all new locomotives (refer to the definition of "switch locomotives" above).

Voluntary Emissions Reductions: The rules allow locomotive owners to voluntarily subject their pre-1973 locomotives to the Tier 0 standards or to include in the locomotive program low-horsepower locomotives that would otherwise be excluded based on their rated power. Additionally, the rule allows Tier 0 switch locomotives, which are normally not subject to line-haul cycle standards, to be voluntarily certified to the line-haul cycle standards. Also, the rule allows any locomotives to be voluntarily certified to a more stringent tier of standards. In doing so, the locomotives then become subject to the new remanufactured engine standards, at the point of first remanufacture under the new standards.

Marine Engine Rules

The rule ("marine existing fleet program") affects marine diesel engines and vessels regulated under [40 CFR Part 94](#) or [Part 1042](#).

The marine existing fleet program applies only to those commercial marine propulsion and auxiliary diesel engines which meet the following criteria:

- C1 and C2 (*i.e.*, per cylinder displacement up to 30 liters);
- Greater than 600 kW (800 HP);
- Tier 2 and earlier; and
- Built in model year 1973 or later.

Small vessel operators are exempt from the new standards for existing fleets. The requirements of the marine existing fleet program do not apply to owners of marine diesel engines or vessel operators with less than \$5 million in gross annual sales revenue. This threshold includes annual sales revenue from parent companies or affiliates of the owners/operators.

The EPA estimates that about 4% of all C1 and C2 engines are subject to the marine existing fleet program and are likely to have certified kits available at the time of remanufacture.

- A. *Replacement with a Freshly Manufactured Engine:* Under the marine diesel engine program, an engine manufacturer is generally prohibited from selling a marine engine that does not meet the standards that are in effect when that engine is produced. However, manufacturers are allowed to produce a new engine which meets an earlier tier of standards if the engine manufacturer makes a determination that an engine compliant with the current standards would not fit a particular vessel.

Specifically, in making the feasibility determination the engine manufacturer is required to consider all previous tiers and use any of their own engine models from the most recent tier that meets the vessel's physical and performance requirements. If an engine manufacturer can produce an engine that meets a previous tier of standards representing better control of emissions than that of the engine being replaced, the manufacturer would need to supply the engine meeting the tier of standards with the lowest emissions levels. For example, if a Tier 1 engine is being replaced after the Tier 3 standards go into effect, the engine manufacturer would have to demonstrate why a Tier 2 as well as a Tier 3 engine cannot be used before a Tier 1 engine can be produced and installed. Similarly, for an engine built prior to 2004, the engine manufacturer would have to demonstrate why a Tier 1, Tier 2, or a Tier 3 engine cannot be used. It should be noted, in the case of Tier 0 engines, that MARPOL Annex VI prohibits replacing an existing engine at or above 130 kW with a freshly manufactured engine unless it meets the Tier 1 standards.

- B. *Replacement with an Existing Engine:* The remanufacture requirements of the rule apply whether the owner is obtaining an identical existing (used) replacement engine due to an engine failure or through an engine exchange for a periodic engine rebuild. These requirements also apply if a vessel owner is obtaining an existing (used) replacement engine of a different model. This means if the existing engine (greater than 600 kW that is built after 1973) is the replacement engine that is rebuilt and has all of its cylinder liners replaced, it will be required to be remanufactured using a certified remanufacture system if one is available for that engine.

Additional Resources

- Final Rule: [Control of Emissions of Air Pollution From Locomotive Engines and Marine Compression-Ignition Engines Less Than 30 Liters per Cylinder](#)
- Factsheet: The [EPA Finalizes More Stringent Emissions Standards for Locomotive Engines and Marine Compression-Ignition Engines](#)
- Factsheet: Control of Emissions from Idling Locomotives EPA420-F-08-014, may be found at the [National Service Center for Environmental Publications](#)

- EPA: [Locomotives: Exhaust Emission Standards](#)
- Frequently Asked Questions from Marine Engine Owners and Rebuilders about the EPA's Marine Remanufacture Program EPA420-F-09-003, may be found at the [National Service Center for Environmental Publications](#)
- EPA: [Federal Marine Compression-Ignition Engine Exhaust Emission Standards](#)
- Marine and Locomotive Certified Remanufacture Systems can be found at the [EPA's Annual Certification Data for Vehicles, Engines, and Equipment](#).

Definitions

Definitions under [40 CFR Part 1033](#)

- A. *Freshly manufactured locomotive* – means a new locomotive that contains fewer than 25% previously used parts (weighted by the dollar value of the parts) as described in [§ 1033.640](#).
- B. *New locomotive or new locomotive engine* – a locomotive or engine that has never been transferred to an ultimate purchaser or put into service. A locomotive or engine also becomes new if it is remanufactured or refurbished. Locomotives and engines that were originally manufactured before January 1, 1973, are not considered to become new when remanufactured unless they have been upgraded (as defined by the rule). Locomotives that are owned and operated by a small railroad and that have never been certified (*i.e.*, manufactured or remanufactured into a certified configuration) are not considered to become new when remanufactured.
- C. *Refurbished locomotive* - a locomotive which contains more unused parts than previously used parts (*i.e.*, contains 50% to 75% brand new parts). Note: Locomotives built before 1973 become “new” and thus subject to emission standards when refurbished (*i.e.*, are not exempt from the rule requirements due to age of locomotive). In general, the rule requires refurbished switch locomotives to meet the Tier 0+ standards, and refurbished line-haul locomotives to meet Tier 2+/Tier 3 standards, even if the original locomotive was manufactured before 1973.
- D. *Remanufacture* means one of the following–
 - i. To replace, or inspect and qualify, each and every power assembly of a locomotive or locomotive engine, whether during a single maintenance event or cumulatively within a 5-year period; or
 - ii. To upgrade a locomotive or locomotive engine; or
 - iii. To convert a locomotive or locomotive engine to enable it to operate using a fuel other than it was originally manufactured to use; or
 - iv. To install a remanufactured engine or a freshly manufactured engine into a previously used locomotive; or
 - v. To repair a locomotive engine that does not contain power assemblies to a condition that is equivalent to or better than its original condition with respect to reliability and fuel consumption. Remanufacture also means the act of remanufacturing.
- E. *Remanufactured locomotive* - a locomotive powered by a remanufactured locomotive engine, a repowered locomotive, or a refurbished locomotive.
- F. *Upgrade* - one of the following types of remanufacturing:
 - i. Repowering a locomotive that was originally manufactured prior to January 1, 1973; or
 - ii. Refurbishing a locomotive that was originally manufactured prior to January 1, 1973, in a manner that is not freshly manufacturing; or

- iii. Modifying a locomotive that was originally manufactured prior to January 1, 1973 (or a locomotive that was originally manufactured on or after January 1, 1973, and that is not subject to the emission standards of this part), such that it is intended to comply with the Tier 0 standards.

G. Definitions under 40 CFR Part 94 or Part 1042

- H. *Remanufacture of a marine engine* - the removal and replacement of all cylinder liners, either during a single maintenance event or over a 5-year period. It should be noted that marine diesel engines are not considered to be remanufactured if the rebuilding process falls short of this definition (*i.e.*, the cylinder liners are removed and replaced over more than a 5-year period).
- I. *Remanufactured Marine Engines*: When an engine is remanufactured, it must be certified as meeting the emission standards for remanufactured engines (by using a certified remanufacture system) unless there is no certified remanufacturing system available for that engine. If there is no certified system available at that time, there is no requirement.

A certified marine remanufacture system must achieve a 25% reduction in Particulate Matter (PM) emissions compared to the engine's measured baseline emissions level, which is measured after the engine is rebuilt according to the manufacturer's specification but before the remanufacture system is installed. Additionally, the system must not increase Nitrogen Oxides (NO_x) emissions by more than 5%.

If several certified systems are available, any of them may be used.

For engines on a rolling rebuild schedule (*i.e.*, cylinder liners are not replaced all at once but are replaced in sets on a schedule of five or fewer years, for example five sets of four liners for a 20-cylinder engine on a 5-year schedule), the requirement is triggered at the time the remanufacture system becomes available. The engine must be in a certified configuration when the last set of cylinder liners is replaced. Any remanufacturing that occurs after the system is available needs to use the certified system, including remanufacturing that occurs on a rolling schedule over less than five years following the availability of the remanufacturing system. If the components of a certified remanufacture system are not compatible with the engine's current configuration, the program allows the owner to postpone the installation of the remanufacture system until the replacement of the last set of cylinder-liners, which would occur no later than five years after the availability of the system. At that time, all engine components must be replaced according to the certified remanufacture system requirements.

In general, remanufactured engines are considered to be "new" engines, and they remain new until sold or placed back into service after the replacement of the last cylinder liner. The standards do not apply for engines that are rebuilt without removing cylinder liners. For a new engine to be placed into service, it must be covered by a certificate of conformity.