

**Mandated Measures Information**

Please refer to the FY12 DERA Request for Proposals, Section III.D.1, for additional information

**C1 and C2 Marine Engine Eligibility for DERA Funds – Mandated Measures Information**

Background – Since marine engines last a long time, EPA’s 2008 Locomotive and Marine Engine Rule covers existing marine diesel engines when they are upgraded, remanufactured, or rebuilt. This mandated measure, referred to as EPA’s Marine Remanufacture program, requires a vessel owner to use a certified remanufacture system when it comes time to remanufacture their marine engine, if one is available. The program covers Category 1 (C1) and Category 2 (C2) marine diesel engines above 800 horsepower (hp) with displacement less than 30 liters per cylinder. Category 3 (C3) engines are those at or above 30 liters per cylinder, typically these are the largest engines rated at 3,000 to 100,000 hp. C3 engines are not included in this rule. They are typically used for propulsion on ocean-going vessels and are covered by a separate C3 Marine Rule.

C1 and C2 marine diesel engines typically range in size from about 700 to 11,000 hp. These engines are used to provide propulsion power on many kinds of vessels including tugboats, towboats, supply vessels, fishing vessels, and other commercial vessels in and around ports. They are also used as stand-alone generators for auxiliary electrical power on many types of vessels. C1 represents engines up to 7 liters per cylinder displacement. C2 includes engines from 7 to 30 liters per cylinder.

DERA funds may not be used to pay for mandated measures. The 2008 Marine Engine Rule, which is a mandated measure, applies to a subset of marine engines and could therefore cause a project to be ineligible to receive DERA funds. This guidance can be used to determine if an engine is or is not subject to the rule, and therefore if that engine may be eligible for DERA funding.

Eligibility – A marine engine is eligible to receive DERA funding for an upgrade if it is not subject to the Marine Engine Rule. If an engine is subject to the Marine Engine Rule, the project still may be eligible to receive DERA funding, but only if the applicant can demonstrate, through maintenance and use records, that the proposed upgrade is in advance of when it would have normally been upgraded without DERA funds. Please follow the attached flowchart to determine if your project may be eligible for DERA funding.

Emissions Calculations – To calculate the emissions reductions of a marine repower or upgrade that is subject to the Marine Engine Rule, the applicant can only count those emissions reductions from the time of the upgrade or repower using DERA funds up to the time that the engine would have been overhauled if DERA funds were not available.

Funding – EPA will provide up to 50% of an eligible marine engine upgrade. Although these projects are eligible, EPA may offer less than 50% to any project. For marine upgrade projects, EPA should assess the overall scope of project and determine if it is appropriate to negotiate with the applicant to provide less than 50% funding, if that upgrade would most likely occur in the future without DERA funding. Regions should use their judgment on the percentage of funds that should be offered, and should take into account factors such as how far in advance from the engine’s normal schedule the upgrade is occurring, and how large the emissions reductions will be.

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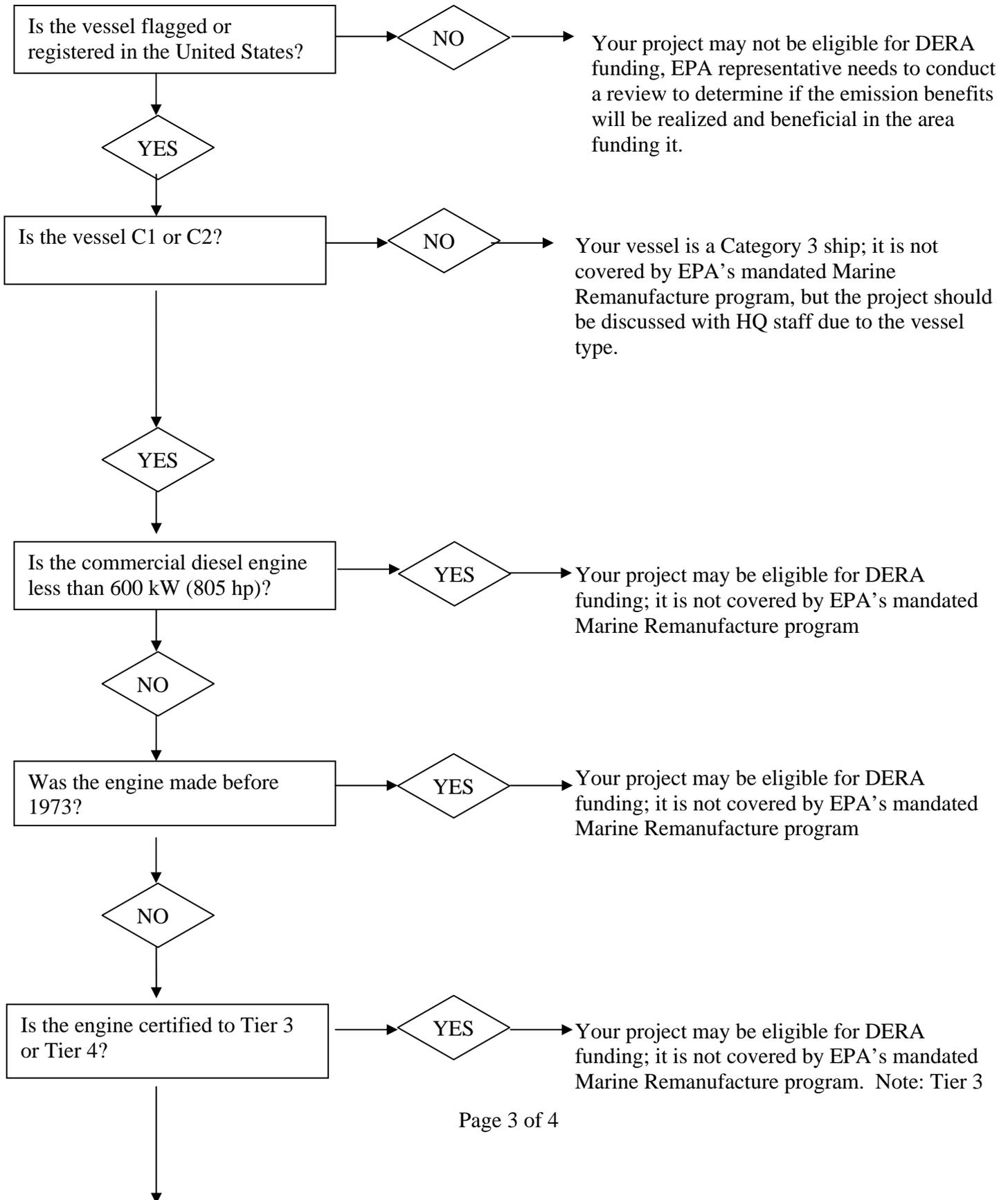
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Example: 1985 marine engine is expected to be repowered in 2016. At that time, the engine will be required to be upgraded from an unregulated engine to a Tier 1 engine. The applicant is proposing to use DERA funds to repower the engine to a Tier 2 in 2011.

- Assuming using the flowchart below, the project was deemed eligible for DERA funding.
- 100% of the emission reductions are attributable to DERA funds for 2011 – 2016.
- From 2016 to the end of engine life, emission reductions are attributable to DERA funds for the difference between a Tier 1 engine and a Tier 2 engine.
- EPA may negotiate with the applicant to offer less than 50% funding.

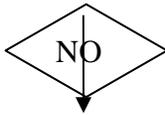
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Commercial Diesel Marine Engine Eligibility flowchart:



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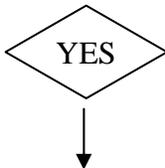
and Tier 4 engines are already very clean, so projects involving these engines should be closely evaluated to ensure funding for additional emission reductions are appropriate and cost effective.



With the marine engine model and model year in hand, please look at EPA's Marine Remanufacture Kit List, located on EPA's website: <http://www.epa.gov/otaq/certdata.htm>  
Does the engine have a certified remanufacture system?



Your project may be eligible; it is covered by EPA's mandated Marine Remanufacture program, however a kit is not available at this time and DERA funds may be used. Note: Regions should confirm with HQ staff that a kit will not be imminently certified for this engine.



The commercial marine diesel engine is covered by EPA's Marine Remanufacture Program and requires the use a certified remanufacture system. This project may not be eligible for DERA funding. If, however, the applicant can demonstrate, through maintenance and use records, that the proposed upgrade or repower is in advance of when it would have normally been upgraded or repowered, then it can be eligible for DERA funding. The EPA representative needs to provide justification on why the project was deemed eligible and not covered by EPA's Marine Remanufacture Program.