

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JUI - 1 2015



OFFICE OF AIR AND RADIATION

Cindy Heil Program Manager Division of Air Quality Alaska Department of Environmental Conservation 619 E. Ship Creek Avenue, Suite 249 Anchorage, AK 99501

Dear Ms. Heil:

Thank you for your letter dated June 3, 2015 to the U.S. Environmental Protection Agency (EPA). According to your letter, I understand the Alaska Department of Environmental Conservation (ADEC) is seeking formal concurrence that the State of Alaska workplan is in compliance with the fiscal year (FY) 2015 State DERA Program requirements, and is requesting a waiver for the following items:

- 1. Replacement (repower) of a nonroad engine with a marine engine for the purposes of stationary power generation
- 2. Horsepower increases greater than 10%
- 3. Replacement (repower) of engines/equipment with less than a seven year useful life
- 4. Use of a reduced cost-share requirement

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The equipment eligibility and funding restrictions for the FY2015 State DERA Program are defined in EPA's FY2014 National Clean Diesel Funding Assistance Program Request for Proposals (RFP) #EPA-OAR-OTAQ-14-05. Specifically, the RFP states the following criteria and funding restrictions as they apply to nonroad repowers:

Section I.B.2.f. Certified Engine Repowers: "Repower" refers to replacing an existing engine with a newer, cleaner engine that is certified to a more stringent set of engine emission standards. Repower includes, but is not limited to, diesel engine replacement with an engine certified for use with a clean alternative fuel, diesel engine replacement with an electric power source (battery or fuel celi), and/or the replacement of a nonroad engine with a highway engine. Proposals for repowers should include the pre- and post-project standard emission levels of the engines to be repowered, in order to ensure that the repower will result in a net emissions reduction. This funding can cover up to 40% of the cost (labor and equipment) of an eligible engine repower. Please see Section III.B of this RFP for additional information on cost-share requirements. All-electric (i.e zero emission) repowers do not require EPA or CARB certification.

1) Electric Generator Repower:

b) Repower of an existing genset involves replacing the existing diesel engine in the genset with a newer, cleaner engine. Only the newer, cleaner engine (labor and equipment) is an eligible cost of the repower, subject to the cost-share requirement defined above.

2) Repower Criteria: Repower projects are eligible for funding on the condition that the following criteria are satisfied:

a) The repowered vehicle, engine or equipment must continue to perform the same function as before the repower.

b) The replacement engine must be of similar horsepower as the engine being replaced. Horsepower increases of more than 10 percent will require specific approval by EPA prior to purchase.

c) Repower Scrappage: The purchase of new engines to expand a fleet is not covered by this program. Evidence of appropriate disposal (such as a photograph of the scrapped engine), including the engine serial number, is required in a final

assistance agreement report submitted to EPA.

i. Nonroad, Locomotive and Marine Engines: The engine being replaced must be scrapped or rendered permanently disabled or returned to the original engine manufacturer for remanufacturing to the cleanest certified emission standard possible.

iv. If scrapped or salvaged engines are to be sold, program income

requirements may apply.

d) Early Attrition: Repowers that would have occurred through normal attrition are considered to be the result of normal fleet turnover and are not eligible for funding under this program. Normal attrition is generally defined as a repower that is scheduled to take place within 3 years of the project start date. Normal attrition is typically defined by the vehicle or fleet owner's budget plan, operating plan, standard procedures, or retirement schedule. For example, if a nonroad fleet typically repowers its equipment after 20 years, a piece of equipment that is currently in its 18th or 19th year of service is not eligible for repower. A piece of equipment that is currently in its 17th year of service and has three years of useful life remaining (as defined by the fleet's repower schedule) is eligible for repower. Normal attrition does not include repowers that must occur due to a State or Local mandate. Proposals which include repowers must include a detailed discussion of the fleet owner's normal attrition/engine repower schedule and must explain how the proposed emission reductions are not a result of vehicle/equipment repowers that would have occurred through normal attrition/engine repower within three years of the project start date. e) Additional funding restrictions for repower projects are described in Section III.D.

Section III.B.1. Mandatory Cost-Share Requirement: Projects involving engine upgrades, certain idle reduction technologies, shore connection systems, truck stop electrification technologies, certified engine repowers, clean alternative fuel conversions, or certified vehicle/equipment replacements, as defined in Sections I.B.2.b, d, f, g and i of

this RFP, are subject to the following funding limitations and mandatory cost-share requirements

d. Certified Engine Repower: EPA will fund up to 40% of the cost (labor and equipment) of an eligible engine repower (i.e. applicants are responsible for cost-sharing at least 60% of the cost of an eligible engine repower).

Section 3.D. Funding Restrictions

- 12. No funds awarded under this RFP shall be used to retrofit, repower, upgrade or replace a nonroad engine or equipment that has less than seven years of useful life remaining. A table distinguishing which nonroad engine model years EPA has determined to have at least seven years of useful life remaining, based on the type and age of vehicle, can be found at www.epa.gov/cleandiesel/documents/fyl4-nonroad-remaining-useful-life.pdf.
- 13. No funds awarded under this RFP shall be used to retrofit, repower, replace or upgrade nonroad engines and equipment that operate less than 500 hours per year.
- 14. No funds awarded under this RFP shall be used to repower or replace nonroad Tier 0 (unregulated) engines to a nonroad Tier 1 or lower nonroad engine standard or from a Tier 2 nonroad engine standard to a Tier 3 or lower nonroad engine standard. Refer to Table 3 for further explanation.
- 16. No funds awarded under this RFP shall be used to repower, replace or upgrade Tier 3 or Tier 4 marine engines, or to repower or replace marine engines from Tier 1 marine engine standard to Tier 1 marine engine standard, or from a Tier 2 marine engine standard to a Tier 2 or lower marine engine standard. Refer to Table 4 for further explanation.

In accordance with the criteria and funding restrictions listed above, the repower of stationary generators powered with Tier 0 (unregulated) nonroad diesel engines with Tier 2 or higher nonroad engines is eligible for funding under the FY2015 State DERA Program guidance. EPA concurs on Alaska's overall approach and workplan, and approves the following waivers to allow additional flexibility in the implementation of the proposed projects.

Firstly, understanding that Tier 3 and Tier 4 nonroad engines present operational issues for rural Alaska communities, EPA will allow stationary diesel generators powered with Tier 0 nonroad diesel engines to be repowered with Tier 3 marine engines, where appropriate.

Secondly, understanding that newer engines typically have higher horsepower than older engines of the same displacement, EPA will allow horsepower (HP) increases of more than 10 percent of the original engine's horsepower rating.

Thirdly, understanding that some of the generators in operation in rural Alaska are older than model year 2001 (for 0-50 HP engines) or model year 1991 (for 51-300 HP engines), and that

these older engines will continue to be in service indefinitely, EPA will allow repower/replacement of nonroad diesel engines that have less than seven years of useful life remaining (as determined by EPA and defined in the RFP).

Fourthly, EPA recognizes that rural Alaska tribes are disproportionally impacted by the diesel emissions of the older diesel generators that they depend on, and that these tribes have limited resources with which to address the issue. EPA will allow a reduced cost-share for rural Alaska tribes; EPA will fund up to 75 percent of the cost of an eligible stationary generator repower or replacement.

If you have further questions, please contact me or your staff may call Cindy Huang, the DERA State Clean Diesel Program Coordinator, at 202-343-9240.

Sincerely,

Elizabeth Etchells, Acting Director

Elizabeth Etabello

Legacy Fleet Incentives and Assessment Center

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