



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Washington, DC 20460

OFFICE OF
AIR AND RADIATION

Rebecca Garrett
Project Manager
Alaska Energy Authority
813 West Northern Lights Blvd.
Anchorage, Alaska 99503

Dear Rebecca Garrett:

Thank you for your email dated April 13, 2021 to the U.S. Environmental Protection Agency (EPA). According to your email, the Alaska Energy Authority (AEA) is requesting that the waiver they were granted for their 2019-2020 Diesel Emissions Reduction Act (DERA) State Grant also apply to their 2021 DERA State Grant. That request includes:

1. Reduced mandatory cost-share to match those used in the FY 2020 Tribal DERA cost-share requirements, for projects benefiting rural Alaska Tribes
2. Replace stationary prime power Nonroad Engines and Equipment with certified Tier 2 & Tier 3 marine engines
3. Replace larger stationary prime power Nonroad Engines and Equipment (generally larger than 550 HP) with Tier 0, Tier 1, and Tier 2 low-PM-emitting engines
4. Exceed administrative cost cap due to Alaska's unique logistic and technical support requirements

The equipment eligibility and funding restrictions for the 2021 DERA State Grants are defined in EPA's 2021 Diesel Emissions Reduction Act (DERA) State Grants Program Guide. EPA agrees to extend the 2019-2020 waiver for AEA to cover 2021 DERA State Grant funds. Subject to the availability of funds, EPA anticipates the 2022 DERA State Grants to be supplemental amendments to existing 2021 DERA State Grants. If Alaska chooses to participate in 2022, this waiver will also apply to those 2022 DERA State Grant funds. See the following list of EPA's determinations on the waiver requests summarized above:

1. EPA recognizes that rural Alaska tribes are disproportionately impacted by the diesel emissions of 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; DERA funds and voluntary matching funds can fund up to 100% of the cost of an eligible stationary generator equipment replacement or engine replacement. This is consistent with the cost share requirements of the 2021 DERA Tribal and Insular Area Grants.
2. Understanding that Tier 4 nonroad engines present availability and operational issues for rural Alaska communities, and that marine engines used in prime power applications can offer

environmental and reliability benefits over nonroad engines, EPA will fund the following diesel generator engine and equipment replacement projects in rural Alaska communities:

- i. Cleaner Tier 2 marine engines replacing eligible Tier 0, Tier 1, and Tier 2 nonroad engines.
 - ii. Cleaner Tier 3 marine engines replacing eligible Tier 0, Tier 1, Tier 2, and Tier 3 nonroad engines.
3. Similarly, EPA recognizes that rural Alaska communities can achieve significant reductions in particulate matter (PM) pollution by replacing existing equipment with specific low-PM-emitting Tier 0, 1, and 2 engines in large prime power applications. EPA will fund 550+hp nonroad Tier 0, 1, and 2 prime power replacement projects in rural Alaska communities if:
- i. The replacement engines and equipment meet or exceed Tier 3 PM emission standards;
 - ii. The replacement engines and equipment result in improved fuel efficiency and a reduction in PM emissions compared to the original equipment being replaced; and
 - iii. To ensure the above requirements are met, AEA must submit a “Best Achievable Technology” analysis to EPA for approval before replacement engines may be purchased. This analysis should take into consideration the availability and performance record of equipment in rural Alaska. Please refer to the attached appendix for further guidance.

4. EPA will allow administrative costs in excess of 15% as eligible expenses under the grant.

If you have further questions, please contact me or your staff may call Jason Wilcox, the DERA State Grants Coordinator, at 202-343-9571.

Sincerely,

Christine Koester, Director
Legacy Fleet Incentives and Assessment Center

cc:

Karl Pepple, EPA R10

Lucita Valiere, EPA R10

Jason Wilcox, OTAQ Headquarters

Faye Swift, OTAQ Headquarters

APPENDIX A – BEST ACHIEVABLE TECHNOLOGY ANALYSIS

Best Achievable Technology Analysis Requirements: Applicants will be required to submit a best achievable technology analysis to EPA for approval before Tier 4i or lower tier engines can be purchased, as defined below. This analysis is not required at the time of grant application submittal. Costs for engineering analysis may be included in the project budget.

- 1) The analysis must be prepared by the engine manufacturer or installer.
- 2) Using good engineering judgment, the engine manufacturer or installer must determine that no engine certified to Tier 4 is produced by any manufacturer with the appropriate physical or performance characteristics to repower the equipment.
- 3) If the engine manufacturer or installer determines that no engine certified to Tier 4 is available with the appropriate performance characteristics, explain why certified Tier 4 engines produced by them and other manufacturers cannot be used as a replacement because they are not similar to the engine being replaced in terms of power or speed.
- 4) If there are available engines with the appropriate performance characteristics but the engine manufacturer or installer determines that no engine certified to Tier 4 is available with the appropriate physical characteristics, explain why certified engines produced by them and other manufacturers cannot be used as a replacement because their weight or dimensions are substantially different than those of the engine being replaced, or because they will not fit within the equipment's engine compartment.
- 5) In evaluating appropriate physical or performance characteristics, the engine manufacture or installer may account for compatibility with equipment components that would not otherwise be replaced when installing a new engine, including but not limited to transmissions or reduction gears, drive shafts, cooling systems, operator controls, or electrical systems. If the engine manufacturer or installer makes their determination on this basis, they must identify the equipment components that are incompatible with engines certified to Tier 4 and explain how they are incompatible and why it would be unreasonable to replace them.
- 6) Identify the proposed Tier 4i or lower tier engines to be used and discuss the physical and performance characteristics of the engines that will ensure compatibility with the existing equipment. Quantify proposed emission reductions, fuel savings, and PM cost for the proposed options.
- 7) DERA project eligibility or approval does not supersede any regulatory requirements for equipment owners, operators, manufactures, installers and others, including but not limited to 40 CFR §1068.240, §1042.615, and §1033.601.