



WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

The goal of the Collaborative is to leverage federal funds to strategically reduce emissions from the most polluting diesel sources in impacted communities. The Collaborative seeks to improve air quality and public health by targeting the highest polluting engines with the most cost effective control strategies.

DERA 2018: The Alaska Energy Authority – Diesel Generator Replacement Program

Under the Diesel Emission Reduction Act (DERA), the EPA awarded the Alaska Energy Authority (AEA) a \$411,150 grant with Fiscal Year 2018 funding. In its efforts to reduce diesel emissions and exposure throughout the State of Alaska, AEA will use DERA funds to complete up to ten (10) diesel engine replacements from lower tier prime power diesel genset engines, with new more fuel-efficient Tier 2 and Tier 3 marine engines. The project will be implemented with a cost share of up to \$411,150 from the State of Alaska for a total project cost of \$1,573,500.

What is the Project?

The Alaska Energy Authority will work with the rural Alaskan communities involved in this project (Circle, Takotna, Tuluksak, and Chignik Lake) to replace old diesel-powered generators with newer, more fuel-efficient marine engines. Rural Alaskan communities are not connected to the power grid and must generate their own electricity. Small diesel power plants are used for this purpose. These power plants have at least one diesel engine running continuously. This program's efforts to replace generators in the power plants of these partner communities will support reduced diesel emissions and improved air quality in rural Alaskan villages.

Why is this Project Important?

Although the air quality in rural Alaska is typically quite good, power plants are often located in the center of these communities. Thus, these diesel-powered generators operate close to homes, workplaces, and the community school, exposing residents to the diesel emissions generated by these power plants. Research shows that there is no safe level of exposure to diesel particulate matter. This generator replacement effort will reduce diesel consumption, energy costs, diesel emissions, and health risks related to diesel particulate matter.

What are the Estimated Environmental Benefits?

The replacement of two generators in Circle, Alaska, three generators in Takotna, Alaska, a generator in Tuluksak, Alaska, and two generators in Chignik Lake, Alaska is projected to reduce annual diesel emissions of nitrogen oxides (NOx) by 3.11 tons, particulate matter 2.5 (PM_{2.5}) by 1.74 tons, hydrocarbons (HC) by 0.68, carbon monoxide (CO) by 4.68 tons, and carbon dioxide (CO₂) by 121.77 tons.

How is this Project Funded?

The West Coast Collaborative is a partnership between leaders from federal, tribal, state, and local government, the private sector, and environmental groups committed to reducing diesel emissions along the West Coast and is part of the National Clean Diesel Campaign: www.epa.gov/cleandiesel.

Where can I find more information?

For more information on the West Coast Collaborative, please visit our website at: www.westcoastcollaborative.org. For more information about this project, please contact Lucita Valiere at: Valiere.Lucita@epa.gov