



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.

Tribal DERA 2020: Louden Tribal Council (aka Galena Village) – Diesel Engine Generator Replacement and Powerhouse Upgrade in Galena, Alaska

Under the Diesel Emissions Reduction Act (DERA), the U.S. Environmental Protection Agency (EPA) awarded the Louden Tribal Council (aka Galena Village) a \$481,466 Tribal DERA grant with Fiscal Year 2020 DERA funding. The grant will be used to replace a non-tiered engine- set (gen-set) with a Tier 1. The FY20 project will be implemented with a mandatory cost share of \$155,328; a voluntary cost share of \$154,847 for a total project cost of \$791,641.

What is the Project?

The Louden Tribal Council will replace a non-Tiered Caterpillar 3512 model diesel-engine generator set (gen-set) with a certified Tier 2 Caterpillar 35088 gen-set in the Galena powerplant. The project is part of a multi-year comprehensive powerplant upgrade that includes 2 additional gen-set replacements, new switchgear; and powerplant infrastructure improvements.

Why is this Project Important?

When this multi-year project is completed, the Galena power plant will have six properly sized gen-sets and a backup powerplant on the opposite side of town for increased resiliency. This year's project will upgrade a gen-set to a higher tiered unit of similar size that will result in significant reduced emissions.

What are the Estimated Environmental Benefits?

The Louden Tribal Council (and Galena Village) anticipates significant reductions in diesel emissions based on EPA's verified emission reduction estimations, using the Diesel Emission Quantifier. The FY2020 gen-set replacement and installation of an automated switchgear will reduce diesel emissions both annual / lifetime in NOx by 1.681 / 10.086 tons; PM2.5 by .297 / 1.780 tons; HC by .305 / 1.833 tons; CO by 1.879 / 11.272 tons; and CO2 by 23.1 / 138.8 tons. With an extended engine life, 1.12 million gallons of diesel will be saved over a 14-year life of the powerplant and solar-battery hybrid.

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 EPA Clean Diesel Program. <https://www.epa.gov/dera>

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 Kayla Krauss at krauss.kayla@epa.gov