## **Tok Wood Heating**

Grantees Alaska Gateway School District (Government Entity - School District)

**Technology Type** BIOMASS

**Region** Yukon-Koyukuk/Upper Tanana

**AEDG Project Code** 10052

## **REF Grants Received**

Round	App	Grant Title	Grant #	<b>AEA Project #</b>	Phase	<b>Start Date</b>	<b>End Date</b>	<b>Status</b>
1	49	Tok Wood Heating	2195417	402038	Construction	8/20/08	12/31/11	Closed
		Construction						

## **Grant 2195417: Tok Wood Heating Construction**

**Project Scope**: The Tok School Biomass Heating Project is a comprehensive proposal, from project Feasibility to Design and Construction with the final Commissioning of the facility in the fall of 2010. An automated wood chip heating system that will heat a 75,000 sq. ft. school and approximately 5,000 sq. ft. of outbuildings will displace the 64,000 gallons of heating fuel used in 2007-08 and create an annual savings of at least \$126,562 per year for this complex.

A separate building for the chip-fired boilers will be constructed behind the school, in a central location with easy access to the rest of the outbuildings, for connecting heat piping. The building will have a chip storage bin that will feed into a surge bin inside the boiler room via augers and conveyer system. The surge bin can be loaded from the inside or outside of the building to accommodate for downtime of the chip delivery system.

The project was developed in partnership with the Tok Area Forestry, CTA Engineering, and Alaska Gateway School District staff. It is estimated that the forest around Tok can provide 50 tons of chipped fuel per acre. (Initial scientific studies show that the number of tons per acre could be higher than estimated.) High hazard fuel around Tok is estimated at 27,000 acres. Even at 20 tons per acre, the expected yield would provide fuel for about 5 years on the 200 acres.

**Project Status**: Project is operational and the grant is closed.

As of Nov. 30, 2013	Budget	Expenditures	
Renewable Energy Funding	\$3,245,349.00	\$3,245,349.00	
Other State Funding	\$0.00	\$0.00	
Total State	\$3,245,349.00	\$3,245,349.00	
Required Local Match	\$15,000.00	\$15,000.00	
Federal Grant Funding	\$0.00	\$0.00	
<b>Total Project Costs</b>	\$3,260,349.00	\$3,260,349.00	

247 of 260