



An Innovative Approach to Biomass Utilization Hazardous Vegetative Fuels Project Denali National Park and Preserve, Alaska National Fire Plan – Fuels Reduction

The Alaska National Park Service Western Area Fire Management program in cooperation with Ancor, Incorporated removed approximately 24 acres of biomass from the vicinity of buildings in the headquarters area of Denali National Park and Preserve. Ancor, a private 8a small business and disabled veteran contractor from Anchorage, Alaska completed the work which began on September 1 and concluded on October 12, 2004. In preparation for a wildland fire event, Ancor created defensible space around park structures in order to reduce the risk of property damage and improve safety for employees, visitors and fire suppression crews. Being the largest, contracted hazard fuels project to have taken place in a high visitation front country area rendered the project the first of its kind in Alaska's national parklands.



Staging area at Usibelli Coal Mine. NPS photo.

The Denali hazard fuels project biomass utilization operation represents a first of its kind in Alaska's parklands and perhaps nationwide. The forecasted large quantities of biomass and limited disposal venues created a significant problem. What could be done with the cut vegetation? Burning the biomass in a central location was an option however, the sheer volume was more than the proposed site could handle. Ancor suggested chipping the vegetation and discarding it in a landfill. Fire management expressed concerns about this disposal method and subsequently collaborated with Denali's Safety and Sustainability Officer on "green" options for wood chip disposal. As a result of these discussions, fire management found uses for the wood in specific park projects and then contacted Usibelli Coal Mine. The initial conversation between the two led to an atypical partnership and an innovative biomass utilization solution. Usibelli and fire management arranged to recycle the majority of the material.

In cooperation with Usibelli Coal Mine, located in Healy, Alaska, 12 miles north of Denali's park headquarters, Ancor employees cut trees, logs, slash and brush and placed them in strategically located mounds. Then a loader picked up the biomass and placed it in a twenty ton dump truck. The vegetation was transported by truck to a staging area for use in a reclamation project at the mine site. Usibelli preferred not to have the biomass chipped

because of the ineffectiveness of chips in soil stabilization. Over the course of 41 days and approximately 5 truck loads per day, the Denali hazard fuels project generated 205 truck loads of biomass. By going forth with the Usibelli Coal Mine partnership instead of the wood chip/landfill option, Alaska NPS fire management saved approximately \$363,010.00 in transport removal and labor costs.



C Camp cabins, before (left) and after (right) project. Denali National Park and Preserve. NPS photo.

This innovative solution to biomass utilization proved to be cost effective and was only achieved through the collaborative efforts of Western Area Fire Management, Ancor and Usibelli Coal Mine. Carl Waters, president and owner of Ancor stated, “This project would not have been such a success without the partnerships.”

In the spirit of the National Fire Plan, the Denali hazard fuels biomass utilization project exemplifies an innovative, cost effective, collaborative approach to reduce the wildland fire risk to communities.

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