UAF 10-0075 Sealaska Corporation Quarterly Report June 15, 2010

i. Denali Commission Total: $510,000

ii. Project Expenditure to date: $162,619.50

   Project Remaining Balance: $347,380.50

iii. Scheduling – The plaza conversion construction is about to start. The boiler and accessories are either in Juneau or Seattle. Construction has not been delayed but will not commence until the Egan/Main Street construction project by the City and Borough of Juneau is finished, which it almost is. At the time of this report construction appears to be on track.

iv. Narrative Summary – With construction about to start, the project appears to be on schedule. So far the project appears to be on budget. At this time we are still negotiating with ACEP on monitoring sensors and what data will be collected.

v. At this time there are no digital pictures to share, but next quarterly report we will have some.

vi. No pictures no digital reporting form (also please send copy of form I could not find one)

Nathan J. Soboleff
Sealaska Corporation NR Planner
UAF 10-0075 Sealaska Corporation Quarterly Report Sept 15,2010

i. Denali Commission Total: $510,000

ii. Project Expenditure to date: $395,644.50

Project Remaining Balance: $114,355.50

iii. Scheduling – The plaza conversion construction has started. The boiler and accessories are all in Juneau. As of September 15, 2010 two of the three oil boilers are removed and our electric boiler is in place. This week new reinforced concrete slabs have been poured and the boiler room is being renovated and plumbed for the new system. The conversion is scheduled to be complete by the end of October at which time Sealaska Corporation will be inviting ACEP, UAF, the Denali Commission and others to a grand opening.

iv. Narrative Summary – The Sealaska Wood Pellet Boiler conversion project is going very well. Since work has begun our construction manager Sam Burgeron of our subsidiary company (Synergy) has been telling me that this project is moving along very well and that according to the plumbing/mechanical and electrical contractors that this conversion is very easy and not unlike doing a conventional oil boiler replacement. This is excellent news.

The project as and EETG has been very successful even before the project is up and running. Today Sealaska Corporation has brought to Alaska bulk wood pellet deliveries and two different wood pellet boiler lines that are ASME certified and meet even the super stringent proposed EPA emissions for boilers. We are in contact with at least four other institutions representing up to 30 different building conversions and five potential wood pellet mills who are all thinking about moving to wood pellets after hearing about the Denali Commission EETEG Sealaska Plaza conversion project.

We have brought to Alaska bulk wood pellets and bulk wood pellet delivery vehicle which has the capability of serving communities from Kodiak to Ketchikan.

v. Pictures -
Accumulator Tank at the barge storage yard
Boiler room before removal of oil boilers
New electric boiler being rolled into boiler room
Last piece to remove of one of the oil fired boilers
New concrete pad forms for Viessman wood pellet boiler system
Top view of 900 cubic foot wood pellet storage silo at barge yard (19 Ton capacity)

vi. no digital reporting form

Nathan J. Soboleff
Sealaska Corporation NR Planner
i. Denali Commission Total: $510,000

ii. Project Expenditure to date: $510,000

Project Remaining Balance: $0.00

iii. Scheduling – The Viessmann boiler system is up and running. As of Dec 15th, the boiler has over 500 hours of operation under its belt and has produced a total of 232.6 Giga-Joules. The coldest temperature to date that I have recorded was 23 def Farenheit at which time our boiler was producing 192 Kilowatts of power out of 220 possible. By Friday Dec 17th the project should be complete with the final check-off list occurring with the construction manager. Sealaska Corporation will be inviting ACEP, UAF, the Denali Commission and others to a grand opening which will happen in late January 2011.

iv. Narrative Summary – The Sealaska Wood Pellet Boiler conversion project complete and we are monitoring operations and boiler inputs and outputs. For monitoring purposes the Sealaska Plaza is upgrading our building’s control systems and the UAF monitoring system uses an outdated “BacNet” system which my be tricky to incorporate into our system. This means that in order to track the boiler’s heat output I have to manually look and record the output in cumulative Giga-Joules. Automated logging of the output would be much nicer and provide better data.

The project as and EETG has been very successful even before the project is up and running and there are at least 4 other confirmed building conversions that will be happening in 2011 because of the Sealaska Plaza boiler.

v. Pictures -
Wood pellets shipped to Juneau by barge in “super sacks” holding 2,300 lbs of pellets in shipping containers
Pellets being trans-loaded into our bulk delivery truck
Unloading pellets at the Sealaska Plaza silo
Viessmann/KOB Pyrot wood pellet boiler set in place
Inside the burn chamber of the boiler
Both pictures of our flue gas emissions filters
Picture of the Pyrot’s automatic ash removal auger and ash can. 280 tons of pellets will fill less than 11 of these cans.
November 19th, 2010 first full day of wood pellet operations. No smoke!
View of the burn chamber
Insulated hot water accumulator tank
View of auger from storage silo going into the boiler
View of boiler control panel
View of flue gas filter control module and front of the boiler
Partial view of new insulation on new piping and smoke stack
vi. no digital reporting form

Nathan J. Soboleff
Sealaska Corporation NR Planner
UAF 10-0075 Sealaska Corporation Quarterly Report March 15, 2011

i. Denali Commission Total: $510,000

ii. Project Expenditure to date: $510,000

Project Remaining Balance: $0.00

iii. Scheduling – The Viessmann boiler system is up and running.

iv. Narrative Summary – The Sealaska Wood Pellet Boiler conversion project complete and we are monitoring operations and boiler inputs and outputs. As of March 15th, the boiler has over 2700 hours of operation under its belt and has produced a total of 1212.6 Giga-Joules.

On February 22, 2011 we conducted the boiler’s first major cleaning after 2100 hrs of operating time. This process should occur every 2000 hrs of operation. During the cleaning the boiler is shut down for 24hrs to cool down. Then the front of the boiler is opened and ash in the combustion chamber is removed, the boiler tubes are wire brushed, the fire-box extra ash bin is emptied, and the two flue gas filter’s ash boxes are emptied. The whole process of cleaning takes about an hour. We were expecting to conduct the cleaning twice a year but in actuality it occurred sooner than we thought. This means that we will conduct 3 major cleanings a year. One in the fall, one mid-winter, and one in the spring.

Unanticipated shut downs occurred three times, most over holidays or when I was out of the office. The Viessmann Pyrot boiler is a fantastic unit and does not take any time to maintain, BUT the Sealaska Plaza is not staffed with a building facilities maintenance person. To me this means that the Viessmann Pyrot and Pyrotec boiler lines need to be installed in facilities that have a full time maintenance person on staff already. And in all honesty most buildings 60,000 square feet do have full time maintenance people on staff. With that said I am a “suit” and perform all the maintenance on the system so it is VERY user friendly and easy to operate. The only care of operation other than the 2,000 hr cleaning, there is only about 5 minutes a week of duties to perform. On Mondays and Friday I have to tend the firebox which is breaking up clinkers (solidified ash) and raking them over the edge of the firebox into the ash auger, and cleaning the glass inspection ports so the laser level indicators can function properly. After 106 tons of pellets have been consumed over 2700 hours we have yet to accumulate 1 trashcan worth of ash.

The few operation hiccups we have encountered are as follows: 1) on very high wind days, 90mph winds, we have had the firebox snuffed out because we did not have a directional wind cap on top of the chimney 2) on very cold days when the boiler got snuffed out at night and didn’t restart and cooled down the Sealaska Plaza has such a draft from our 6 story chimney that the boiler would not
fire up because all of the hot air was pulled out of the boiler. To remedy this we are installing a flue dampener in the chimney for these rare events. These are small things we have learned.

We are very happy with the system and are saving somewhere on the order of $3,000 a month on the difference between heating costs of pellets compared to oil.

v. Pictures -

Combustion chamber after first major cleaning.
One of two flue gas filters showing captured fly ash after 2100 hrs of operation.
Close up of a boiler tube before cleaning.
Close up of a boiler tube after cleaning.
Not the proper chimney cap for a wood heating appliance. Will be replaced with a directional chimney cap to prevent blow outs during high wind events.

vi. no digital reporting form

Nathan J. Soboleff
Haa Aani, LLC Renewable Energy Program Manager
UAF 10-0075 Sealaska Corporation Quarterly Report June 15, 2011

i. Denali Commission Total: $510,000

ii. Project Expenditure to date: $510,000

Project Remaining Balance: $0.00

iii. Scheduling – The Viessmann boiler system is up and running.

iv. Narrative Summary – The Sealaska Wood Pellet Boiler conversion project complete and we are monitoring operations and boiler inputs and outputs. As of June 15th, the boiler has over 4,800 hours of operation under its belt.

In June we had a teleconference to begin the report writing and with a large group. We still need air emissions testing to be performed as I am getting some negative feedback from the uninformed public touting other wood smoke issues brought up in the news in other states as ammunition.

v. Pictures -
Graphs from the energy meter I compiled and generated using BTU and dates.

vi. no digital reporting form

Nathan J. Soboleff
Haa Aani, LLC Renewable Energy Program Manager