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Denali Commission Quarterly Progress Report

Name of Organization: Alaska Native Tribal Health Consortium

Name of Project: Rural Utility Cooperative aka Alaska Rural Utility Collaborative

Reporting Period: Final Report of grant ending 12/31/08

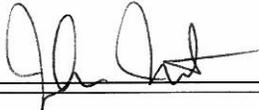
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Expenditures to date: \$300,000

Certification: I certify that the information in this report is current, correct and true and in accordance with the terms and conditions of the agreement.

Signed by:  Dated 3/19/09

1. In a few sentences, please describe the scope of your project:

This project's scope is the recruitment of new communities to join ARUC, a collaborative to help make rural utilities self-sustaining in rural Alaska. This project will also purchase spare parts and provide start-up funds for new communities in ARUC, and identify new communities to join ARUC for a total of at least 11 communities in ARUC.

2. Project Activities for this Reporting Period:

Describe the grant activities that happened during this report period.

The ARUC attained 11 member communities as promised during this grant period. These member communities are: Chevak, Chignik Lake, Goodnews Bay, Grayling, Lower Kalskag, Russian Mission, Savoonga, South Naknek, Sleetmute, Toksook Bay and Upper Kalskag. ARUC is now providing daily safe drinking water and sanitary sewer service to approximately 3,800 rural Alaska residents.

We are confident that this has improved the lives and health of these rural Alaskans. Recent studies have shown that rural Alaskan residents in communities with consistent safe drinking water have a ten-fold reduction in staph infections

and a 2.5-fold reduction in hospitalized skin infections versus residents in communities with little water service. Rural Alaskans in communities with limited water service also have hospitalization rates of infants that are five times the national average with lung infections or the very serious respiratory syncytial virus (RSV), and 11 times the national average with pneumonia. ARUC's services help dramatically reduce these disease rates.

This winter numerous rural Alaskan communities dealt with major water system freeze-ups due to very cold temperatures and high heating fuel cost. Some Alaskan communities lost water service to most residents for weeks or months. ARUC communities, however, experienced none of these major freeze-ups. This is a testament to the ARUC principal that preventative maintenance and prior planning, when applied in a systematic and professional manner, will make water/sewer systems more efficient, dependable, and sustainable. Operator training and retention, an adequate inventory of spare parts, adequate revenue to purchase fuel in bulk and professional management all play an important role in the operational success of ARUC water/sewer systems.

3. Scheduled Project Activities/Important Dates for next quarter:

Describe your planned activities for next quarter.

This grant period is complete. ARUC will continue to operate the water/sewer systems in these 11 communities, however. Operations will be funded by user fees paid by water/sewer customers.

4. a. How many villages joined the RUC/ARUC during this reporting period?

Five communities joined ARUC during this grant period, for a total of 11 communities.

5. Villages currently online with the RUC/ARUC program.

Chevak, Chignik Lake, Goodnews Bay, Grayling, Lower Kalskag, Russian Mission, Savoonga, South Naknek, Sleetmute, Toksook Bay and Upper Kalskag.

Villages that will be coming online with the RUC/ARUC program

We continue to recruit new communities. This is possible thanks to funding for management and new community startup from agencies such as EPA and the Administration for Native Americans (ANA). We are only funded to start up five new communities per year, however. If more funding can be found, we would be able to recruit and start up more communities. Once each community is through the

start up phase, they become self sustaining, so funding in the short term assures health benefits for rural Alaskans for many years to come.

6. Please identify any problems or changes in your project that will affect the budget, scope or timeline of the project. Is your project on schedule? What are the reasons for any difficulties or delays? Are you over budget/under budget? Have you had to change the initial scope?

Please provide an explanation to this change and your resolution to the variance.

The ARUC learned many important lessons during this grant. Three communities that joined the RUC are no longer members. These communities are Alukanuk, Kwethluk, and Holy Cross. These lessons learned include:

- It is essential to know all revenues and expenses before assuming operations of any water/sewer system. Hidden business deals can make a utility unsustainable.
- It is extremely difficult to collect revenue in honeybucket communities, because it is impossible to shut off a honeybucket. Outside funding is necessary for such communities.
- Washeterias in communities where most homes have piped water and sewer is not financially viable. ARUC no longer operates washeterias.
- It is critical that there be community understanding of the costs and benefits of water and sewer. If many residents do not understand the true cost of operations, they will not support the water system and it is bound to fail.

Based on these lessons learned, ARUC has changed the way we do business. All communities must join the Billing Assistance program, where we bill their customers for a period of months to evaluate revenues, before they are invited to join ARUC. We also review previous years' revenue and expense data to complete a rate study to determine water/sewer rates necessary for each community to be self-sustaining. Evidence of self-sustaining revenues is needed in order for communities to join ARUC.

New communities take about three years to obtain near 100% collection rate. A collection rate of 100% is essential for sustainability. Start up funds are critical to provide funding to allow the systems to be sustainable until year three. After year three, revenues support system operations.

An outside revenue source is found for honeybucket communities until they are connected to piped water. This period needs to be short, because these communities have very low collection rates until piped water allows collection enforcement.

We have revitalized the ARUC Advisory Committee to help make operational decisions such as rate structure and level of service provided. The Advisory Committee members are also critical for communicating benefits and true costs of water/sewer to community members. The Advisory Committee meets four times per year, with one representative from each community. The Committee members have become real advocates for safe drinking water and efficient operations.

7. How are you evaluating success?

We evaluated our success by the number of village members of ARUC. We have 11 member communities as promised.

8. Please identify areas that we can assist you in the future.

We are continuing to recruit new communities to put them on the path of efficient operations and sustainability. Our funding from agencies such as EPA and ANA only allow for start up of five new communities per year, however. If more funding can be found, we would be able to recruit and start up more communities. Once each community is through the start up phase, they become self sustaining after three years (see collection percentage data). Relatively small amounts of one-time funding will ensure health benefits for rural Alaskans for many years to come. Numerous rural Alaskan communities have had dramatic water system failures this winter and desperately need efficient management and operations to become self sustaining. Additional Denali Commission funding would allow ARUC to get these community water systems sustainable, as we currently do not have the funding to help all of these communities.

See the following pages for some ARUC operational data and pictures of water/sewer operations made possible by Denali Commission funding.

ANTHC Alaska Rural Utility Collaborative Comparing YK Delta Non-ARUC communities to ARUC

Operator Satisfaction	Non-ARUC (YK Delta)	ARUC
Benefits	None	Vacation and Retirement
Better range of pay	\$12.00 to \$13.50 (typical)	\$16.00 to \$26.54
Operator turn over	15% annually in 5 years*	4% annually in 5 years
Villages with certified operator (water treatment)	50% have certified operators	91% have certified operators
System Sustainability		
RUBA compliance necessary for grant funding	36% are RUBA compliant	100% RUBA compliant
Operating expenses		Down 7% in last year despite fuel cost increases
Fuel Storage	Some communities flying in fuel due to shortages	Average of 2 years fuel stored on-site to ensure no fuel shortages
User collections rate	40% average at \$43.00 per customer	Over 40 months - 100% 20-40 months - 73% 0-20 months - 55%
Money in reserves adequate for annual bulk fuel purchase	Unknown*	100% of communities
Money in reserves adequate for equipment repairs	Unknown*	100% of communities
Reliability	Operator turnover is high, non operator certification is common	Improved operator training Certified operators Two operators per system Scheduled Maintenance
	Reduced level of service*	Improved delivery of service
Records	Almost non existent*	Accurate and reliable accounting records

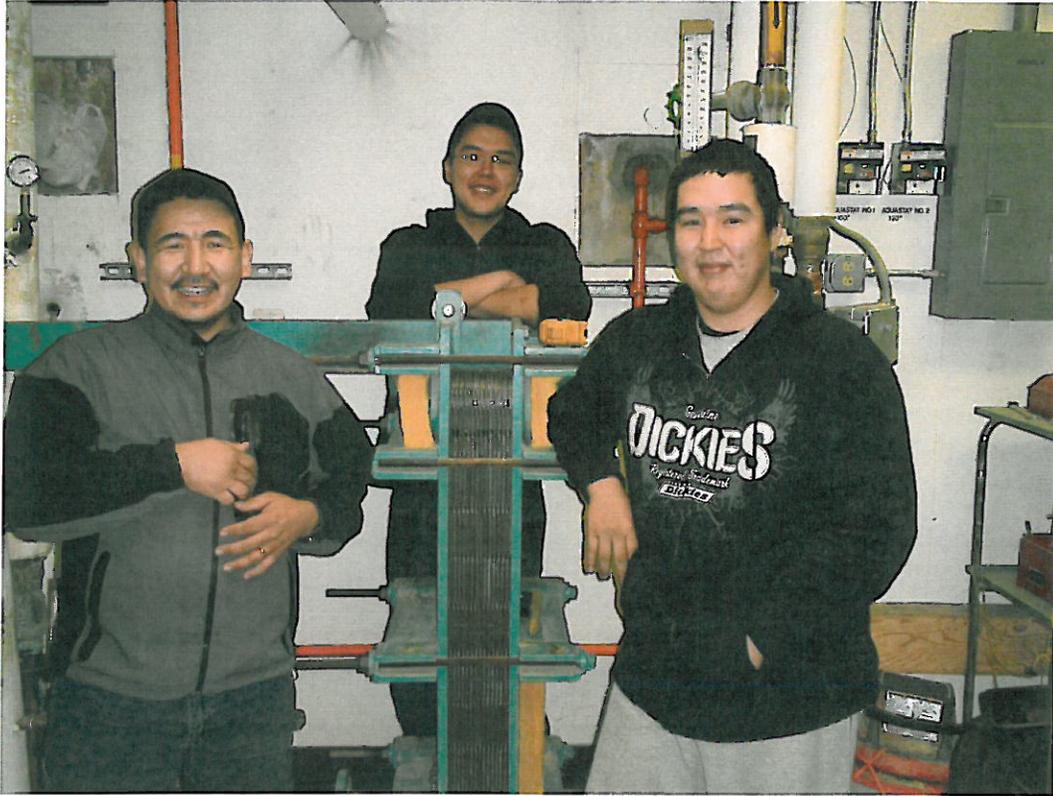
*Based on control group of 13 non-ARUC YK Delta villages



Toksook Bay water plant operator Jeffrey Curtis repairing plumbing in the water plant.



Lower Kalskag water plant operator Paul Evan in the midst of installing new water plant equipment.



Goodnews Bay operators Roy Roberts, Larry Small and Daniel Roberts rebuilding a heat exchanger. This heat exchanger uses waste heat from the electrical plant to keep the drinking water from freezing.



Russian Mission water plant operator Fred Tinker modeling his brand new ARUC work jacket.



Water treatment plant sign in Toksook Bay. This sign is located on the water treatment plants in ARUC communities. Notice that "Regional Utility Cooperative" is now the Alaska Rural Utility Collaborative (ARUC) to reflect that ARUC is statewide. We look forward to adding new rural Alaska communities to ARUC to ensure sustainable water/sewer systems.