

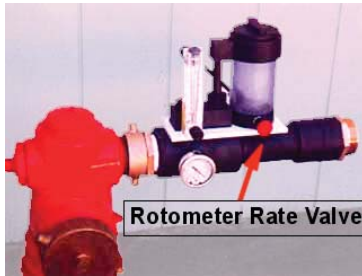
Pumphouse Pipeline

Volume 29 Issue I
January - April 2009



WHY CRITICAL SPARE PARTS ARE “CRITICAL” BY PIERRE COSTELLO

What the Heck is it?



(See page 10 for answer)

Inside This Issue:

RUBA Assesment	3
Rose Bowl Parade	4
Utility Business Support Specialists	5
Certification Corner	6
Boiler Operations Class	7
ATCEM Update	8
Goodnews Bay Repairs	9
Answers	10
Calendar	11
Upcoming & Recent Training	11
Views From the Field	12

A True Story

The sound of the alarm at 4:00 a.m. in the morning from the water treatment plant (WTP) was louder than normal in the minus 26 degree air. Herbert woke immediately when he heard the sound, threw on his cold weather gear and headed immediately to the WTP. Under his feet the snow was crisp. He looked up at the crooked limbs from the barren trees silhouetted against the full moon and they somehow predicted a disaster.

As he walked into the dark plant he smelled a thin wisp of carbon in the air and recognized the corner “No Flow” light illuminated on the panel and his heart stopped for a split second. There is little time to waste he thought. This meant that heated water was not circulating in the aboveground water line. In this weather water service lines could start freezing within the hour.

Herbert opened the panel and found the heater tripped but was unsuccessful at resetting the pump. He quickly diagnosed a failed motor. It was unfortunate that the backup pump was not working as that pump had problems that summer and was never repaired. No problem he thought to himself. “I think there is one on the shelf” he thought to himself.

It was no where to be found!

The situation was now an emergency. Writing the model numbers down on a piece of paper he frantically left a message on the phone of the Alaska Utility Supply Center (AUSC) hoping that a pump could be found in Anchorage that day and with luck he would have the pump by that night. By the time morning rolled around and parents were getting their kids ready for school, the first phone calls came to the water plant by

WHY CRITICAL SPARE PARTS ARE “CRITICAL”

BY PIERRE COSTELLO

(continued from front page.....)

irate customers complaining that they had no water to their homes.

Things started to go downhill fast. By the middle of the day the majority of the service lines were frozen. Without the capability of circulating water the water mains would freeze soon. Herbert reluctantly decided to drain the mains to prevent the entire system from freezing. The plan was to revive the heated circulating line when the new pumps arrived.

When the new pump was installed, Herbert found out that some water that had remained in the circulating line had frozen and needed to be thawed. Using a hotsy and a jetter it took a week of work with 5 laborers to keep the operation going. The cost of labor, fuel and equipment was a cost the community could not afford.

The damage to the city was approximately \$20,000, with 42 homes without water service for two weeks, and the embarrassment to the water and sewer utility world. Customers demanded a refund on their monthly water and sewer bill – a further blow to water and sewer revenues.

This is a cost that could have easily been averted with simply having a \$300 - \$400 spare pump on the shelf.

Do You Have A Critical Spare Parts List?

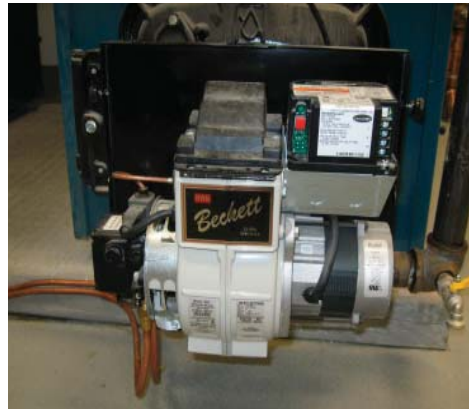
Every facility should have a list of critical spare parts that are on the shelf that is checked at least monthly especially prior to the winter season.

These are parts that are critical to making the facility function. These are parts that you cannot simply do without. Some examples of these parts may be circulation pumps, replacement burner units for each boiler or a spare well pump and cable.

The spare parts list will let you know how many of that part you should have and it will also tell you how many you actually have. This could simply be a clipboard or a part of your normal recordkeeping. It is important that when you use the part that it is

replaced immediately.

As the operator you are probably the best person to know what you need on the shelf in case of an emergency. Consult with your Remote Maintenance Worker if you need help or Tribal Utility Support Services to help develop that list. They will be glad to help.



RUBA ASSESSMENT? NOW MORE IMPORTANT THAN EVER

This is a good time for rural community administration and councils to start planning for the 2009 Rural Utility Business Advisor (RUBA) assessments.

REGARDING: Getting the benefits of passing the quarterly RUBA assessment.

Starting in 2008, if a rural community is not evaluated by the RUBA assessment* and in compliance with RUBA standards, they are not eligible for sanitation project funding through the State of Alaska Village Safe Water (VSW) Capital Improvement Project (CIP) program.

As stated in the current Sanitation Deficiency System Handbook* under the section on VSW-CIP application criteria, "In order for a community to be considered eligible, a Management Capacity Assessment must be completed by the RUBA program by a Local Government Specialist (LGS). All essential indicators must be met by June 6, 2008.

Please disregard this notice if your community is not having trouble passing the RUBA assessment at this time. The VSW-CIP Application* can be found at the bottom of the page.

There is also an ANTHC Tribal Utility Support (TUS) program called the Alaska Rural Utility Collaborative (ARUC) Program*. What the ARUC program does for rural communities is to assist them first by providing a monthly billing program for water and sewer. Once this criterion is met, the ARUC program manages the utility to help meet RUBA requirements.

Please note: As in the past, being assessed and/or meeting the standards of RUBA is not an eligibility requirement for Indian Health Service or USDA Rural Development sanitation project funding.

If you have questions on the RUBA Assessment, please contact the State of Alaska LGS assigned to your rural community or contact TUS for assistance.

Business Address:

Chris Kiana, Utility Business Support Specialist
Division of Environmental Health & Engineering
Tribal Utility Support
1901 Bragaw St., Suite 200
Anchorage, AK 99508

Phone (907) 729-4501, Fax (907) 729-4089. E-mail: ckiana@anthc.org.

*Rural community RUBA assessments for your rural community can be found at: <http://www.commerce.state.ak.us/dca/ruba/ruba.htm>

*Sanitation Deficiency System Handbook (2008), VSW-CIP application information, pp. IV – Application for Deadline & pp. V – Eligibility Criteria for all Construction projects. The VSW-CIP Program application can be found at the following webpage site: <http://www.dec.state.ak.us/water/vsw/VSWGGrantApplication.htm>

*ARUC Program information can be found at the following webpage site: <http://www.anthc.org/cs/dehe/vilctct/>

A MEMBER OF TRIBAL UTILITY SUPPORT WAS IN THE ROSE BOWL PARADE!

Alice Moses, wearing a blue head dress pictured in the back row, is a part of the dance group that was in the parade.

Here is a copy of the article that was in the Juneau Empire:

STATE FLOAT FEATURED IN ROSE BOWL PARADE

By Jeremy Hsieh | JUNEAU EMPIRE
The Iditarod is coming to Southern California.

Never mind that snow there is a rarity and that the forecast for today's Rose Parade calls for a balmy high of 69 degrees. For these sled dogs, wilting is probably the biggest worry.

Made of flowers and other vegetation over metalwork, the sled dogs are part of a float commissioned by the Anchorage Convention & Visitors Bureau to represent Alaska for the first time in the annual Rose Parade in Pasadena, Calif. The parade is one of the events tied to college football's Rose Bowl.

The float, which is officially named "Celebrating Alaska - Spirit of the Wild," is 55 feet long and 18 feet high. It features a grizzly bear and moose with animatronic heads, salmon, king crab, puffins, a whale, an Alaska Railroad engine and Native Alaskan masks. Ten Native Alaskan drummers and dancers will perform alongside the float.

Construction on the float began in October in California and cost \$215,000. It's a lot of money, but well worth the publicity for Alaska if you ask Julie Saupe, president of the visitors bureau.

"It is a large chunk of money, but we're reaching a worldwide audience of 40 million viewers," she said. Two of the big three television networks plus many other media will cover the parade.

In contrast, 30 seconds of advertising time during the Super Bowl this year, which nearly 100 million people are expected to watch, will cost \$3 million, The Wall Street Journal has reported.



Pictured in the front row, L to R: Julianne Tumulak, Danielle Shavings, and Stephan Blanchett. **In the middle row, L to R:** Ossie Kairaiuak, Debra Dommek, Chris Tom, and Ben Crew. **In the back row, L to R:** David Thomas, Lori Beans, and Alice Moses.

Wednesday afternoon, Saupe said she already had interviews with National Public Radio and a Chinese newspaper. Mushing magazines have also been interested because Libby Riddles, the Iditarod's first female winner, will be riding on the float behind the artificial sled dogs, Saupe said.

Having a float in the parade is a fairly exclusive privilege. Officials limit the parade to less than 50 floats and select applicants by invitation only. Saupe said the bureau has been applying to be in the parade for several years, but thinks the float's ties to the state's 50th anniversary celebration is what finally won over parade officials this time.

Saupe said once an organization is invited, they can keep the spot indefinitely as long as they participate every year, though the bureau does not have definite plans to be back in 2010.

"I think this is just a one-shot deal, but we'll see. We'll see what kind of response we get and consider it," Saupe said.

After the parade, the float is likely to be disassembled and the float frame reused, though the Alaska State Fair has asked to have it. Saupe said the fair would be a great use of the float, though shipping it to Palmer may be cost prohibitive.

The float's sponsors include the Alaska Railroad Corp., Anchorage Statehood Celebration Committee, Alaska Travel Industry Association and the Alaska Statehood Celebration Commission.

FIRST THREE YEARS OF TRIBAL UTILITY SUPPORT (TUS) ASSISTING RURAL COMMUNITIES WITH WATER & SEWER PROGRAMS

By Utility Business Support Specialist (UBSS) - Jennifer John and Chris Kiana
Overseen by Art Ronimus, Senior Consultant/Supervisor



The TUS program first started working with several rural communities assisting the Division of Environmental Health and Engineering (DEHE) program in 2005. The DEHE TUS started getting more projects during the first year and TUS worked on the Rural Utility Business Advisor (RUBA) assessment, tracking a total of seventeen villages and increased up to thirty-seven villages by the middle of the second year in 2006. By the end of 2007, TUS was assisting fifty-one rural communities with RUBA, mainly on water and sewer projects.

At first, TUS noticed in several rural communities there was high employment turn-over primarily on city and tribal administrators plus their staff who were responsible for running their utility programs in rural Alaska. TUS management estimated that the UBSS program could assist rural communities with increasing their water and sewer grants between \$7M to \$10M over the first year. The UBSS assisted rural communities with just over \$26M in 2006. For the second year, the projection for assisting rural communities is between \$10M to \$15M. With UBSS and DEHE engineer's support, UBSS assisted rural communities with over \$40M in 2007. Rural communities are keeping their water & sewer grants open by passing the RUBA assessment. For 2008, UBSS has continued to assist their customers in rural Alaska with this effort for increasing their water & sewer grants.

Through the UBSS, Jennifer John and Chris Kiana, they continue to work with fifty-one rural communities. Under this program, partnering with the RUBA program, they have assisted rural communities with freeing up over \$100M earmarked for water and sewer infrastructure (adding the three combined years together). This effort has reduced the turnover of city and tribal administrators along with staff. This combined effort has had a positive impact beginning with the knowledge and experience of the city and tribal administrators. This effort is providing their community with a more efficient water and sewer project.

What happens when a rural community administrator or a staff member resigns?

If the administrator or staff replacement has experience, maybe the rural community gets set back a quarter of a year on passing the RUBA assessment. If they are new without much experience in administrating water and sewer projects, it could take a half-year to a year for a community to pass the quarterly RUBA Assessment. Why? Because city and tribal administrators often need utility and manager's training classes and staff often need QuickBooks training plus gaining work experience in their current utility positions.

We at TUS and DEHE are proud of the rural community administrators and their staff for staying on to continue to do good work for their communities. Because of this, the communities will continue to grow in providing premium services to our Native People of Alaska. Thank you!

UBSS Monthly Reminder

A monthly RUBA Assessment check list is sent to rural communities to review as a reminder of what Essential Indicators they may need to work on. If you need a RUBA Assessment, it is advisable for administrators to contact their Local Government Specialist (LGS) to give them permission to do a quarterly RUBA assessment. If administrators have questions for TUS DEHE, please do not hesitate to call (907) 729-4501. The UBSS Email for Alaska Native Tribal Health Consortium is: ckiana@anthc.org. Also, remember to submit Essential Indicator paperwork to the State of Alaska, Department of Commerce LGS on a pre-arranged basis with them. Please call your LGS for any questions on the RUBA you may have.

This article was written by Jennifer John, Chris Kiana and Art Ronimus in a collaborative effort. As of this printing Jennifer John has taken a position in California. We will miss her, but we wish her the best.

CERTIFICATION CORNER

Water Distribution

Perform Administrative Duties (Class I)

1. The SDWA defines a public water system that supplies piped water for human consumption as one that has
 - a. 10 service connections or serves 20 or more people for 60 or more days per year
 - b. 15 service connections or serves 20 or more people for 90 or more days per year
 - c. 10 service connections or serves 25 or more people for 30 or more days per year
 - d. 15 service connections or serves 25 or more people for 60 or more days per year
2. The most common water complaints are taste, odor, and
 - a. pH level
 - b. Faucet pressure
 - c. Colored water
 - d. Leaking pipes
3. What US agency establishes drinking water standards?
 - a. AWWA
 - b. USEPA
 - c. NIOSH
 - d. NSF
4. Why should the operator contact area companies with underground utilities before starting an underground repair job?
 - a. To determine if there have been recent excavations in that location.
 - b. To ask the companies to locate and mark the location of their utilities in the area of the repair job.
 - c. To determine if they also have excavating to do in the area.
 - d. To ask if they will help route traffic while you are doing the repair job.
5. According to the USEPA regulations, the owner or operator of a public water system that fails to comply with applicable monitoring requirements must give notice to the public within
 - a. 1 week of the violation in a letter hand-delivered to customers.

- b. 45 days of the violation by posting a notice at the town hall.
- c. 3 months of the violation in a daily newspaper in the area served by the system.
- d. 1 year of the violation by including a letter with the water bill.

Water Distribution

Perform Administrative Duties (Class II)

6. Your department uses 80 units of an item per week. You are required to maintain a 10-week reserve of this item at all times and it requires 4 weeks to obtain a new supply. What is the minimum reorder point?
 - a. 320 units
 - b. 800 units
 - c. 1,120 units
 - d. 2,240 units
7. What is the maximum contaminant level goal for chloride?
 - a. 2.5 mg/L
 - b. 25 mg/L
 - c. 250 mg/L
 - d. 2,500 mg/L
8. What is the median value of the following data: 100, 300, 580, 250, 275, 335, 580
 - a. 250
 - b. 300
 - c. 346
 - d. 580
9. The National Primary Drinking Water Regulations apply to drinking water contaminants that may have adverse effects on
 - a. Water color
 - b. Water taste
 - c. Water odor
 - d. Human health
10. Which of the following is considered an acute risk to health?
 - a. Two Tier 2 violations
 - b. One Tier 2 violation
 - c. Two Tier 1 violations
 - d. One Tier 1 violation

(Answers on Page 10)

BOILER OPERATIONS & MAINTENANCE CLASS

Held in Fairbanks, October 13-15, 2008



In Attendance:

Michael Sam, Tetlin, AK
James Roberts, Tanana, AK
Earnest Arnold, Tanacross, AK
Dennis Charley, Tanana, AK
Malvin Fajardo, Cordova, AK
Matthew Ignatius, Nunam Iqua, AK

Duane Solomon, Fort Yukon, AK
Patrick Smith, Minto, AK
Arlo Beetus, Hughes, AK
Cliff Wiehl, Sr., Tanana, AK
Vernon Madros, Jr., Nulato, AK
William Joseph, Fairbanks, AK

TRIBAL MEMBERS MEET IN ANCHORAGE TO DISCUSS CHANGING ENVIRONMENT

BY EMILY WILDER

The three-day 2008 Alaska Tribal Conference on Environmental Management (ATCEM), held in Anchorage in October, focused on environmental sustainability in changing times and climate. The Alaska Native Tribal Health Consortium (ANTHC) and the Environmental Protection Agency (EPA) co-sponsored the 14th annual event. The conference provides an opportunity for tribal organizations to come together and work on solutions to environmental challenges in rural Alaska.

Speakers discussed topics such as weatherization, renewable energy, recycling, and even cloth diapering in rural Alaska. Attendees enjoyed performances by Native music and dance groups throughout the conference as well. “We all have to do what we can, and more of it, to try to slow down what’s going on in the world today,” said Peter Captain Sr., Vice President of the Tanana Chiefs Conference, in the opening keynote address.

Daily field trips to Total Reclaim, an electronics recycling facility, were another conference highlight. Gary Smith of Total Reclaim spoke to attendees about recycling different kinds of light bulbs, refrigerants, batteries, plastics and electronics. He also demonstrated how to safely package certain items, such as used lead-acid batteries and large electronics, to ship away from villages for recycling. “Everybody buys these machines,” Smith said, “but doesn’t know what’s in them.” Certain components can be harmful, he explained, like the lead in computer monitors that protects the user from radiation. “But it’s all recyclable.”

Chefornak Elder Theresa Abraham delivered the closing keynote address in Yup’ik, with Katherine Ellanak from the Sun’aq Tribe of Kodiak translating. Abraham, born in 1941, spoke about how the climate and public health have changed over her lifetime. She thanked the audience for coming, and encouraged everyone to continue to work together to do a better job on our environment. She received a standing ovation.

Emily Wilder is a Technical Writer for the Division of Environmental Health and Engineering.



Opening Ceremony Dancers



Closing Ceremony Dancers



Environmental Awards Ceremony



Emcee Speaker, Andrea Gusty



Walter Porter Luncheon Key Note speaker

GOODNEWS BAY REPAIRS AVEC HEAT EXCHANGER

BY JACK WILLIS



Pictured from left to right: Roy Roberts, Larry Small and Daniel Smith

At the beginning of January 2009, the AVEC heat exchanger in Goodnews Bay, AK, developed a glycol leak in the plate stack. This caused the water plant to run the boilers to provide heat for the water treatment plant building instead of using waste heat from the local AVEC plant at a cost of about \$250 per day. Larry Small, Primary Water Plant Operator contacted Frank Neitz, ARUC Supervisor, in Bethel to help with this problem.

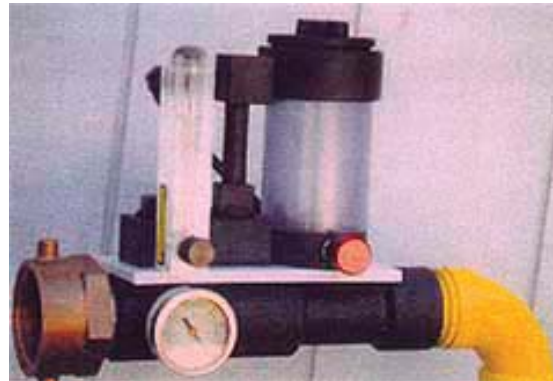
Goodnews Bay, like most villages, is suffering from high fuel costs and getting this heat exchanger repaired quickly could save thousands of dollars worth of fuel. A new set of 29 plates and gaskets were ordered and shipped from New York as fast as possible and arrived a day after Jack Willis, ARUC Utility Operations Specialist, on January 28, 2009. Then Larry Small, Daniel Smith, and Roy Roberts, Goodnews Bay Water Plant Operators and Jack Willis were able to complete the disassembly before the new plates arrived and installed the new plates immediately after they arrived. This was a large job accomplished by the operators that will save the water plant money that would have been used on fuel. Pictured above are the water plant operators and the repaired heat exchanger.

CERTIFICATION CORNER

Answers for page 6.

1. d. 15 service connections or serves 25 or more people for 60 or more days per year
2. c. Colored water
3. b. USEPA
4. b. To ask the companies to locate and mark the location of their utilities in the area of the repair job
5. c. 3 months of the violation in a daily newspaper in the area served by the system
6. c. 1,120 units
7. c. 250 mg/L
8. b. 300
9. d. Human health
10. c. Two Tier 1 violations

WHAT THE HECK IS IT??



Answer: It is called a “Bazooka” These are handy units used to “De-chlorinate” water lines after shock chlorination and disinfection. Tablets of sodium sulfate, ascorbic acid or sodium ascorbate tablets are added to the unit to eliminate high concentrations of chlorine prior to wasting the water to the surface and into drains and streams.

JANUARY 2009

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY 2009

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

MARCH 2009

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

APRIL 2009

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

UPCOMING TRAINING:

January

21-23 Electrical Controls, Dillingham
(Contact Paul Arne or Bill Justice)

February

9-13 Cross Connection Controls, Fairbanks

23-27 Boiler Operation & Maintenance, Bethel

March

2-6 Electrical Controls, Anchorage

16-20 Lift Station Operations, Bethel

23-27 Lift Station Operations, Sitka

Mar. 30-Apr. 3 Electrical Controls, Juneau

Mar. 30-Apr. 3 Lift Station Operation, Juneau

(These two classes are back to back in Juneau)

April

6-10 Water Distribution System Field Operations, Dillingham

20-24 Water Distribution System Field Operations, Fairbanks



Alaska Native Tribal Health Consortium
Division of Environmental Health and Engineering
Tribal Utility Support
1901 Bragaw Street, Suite 200
Anchorage, AK 99508-3440

If you have any questions please call:

Michaela S. Straughn

907-729-3515 Voice

907-729-4506 FAX

800-560-8637 Extension 3515

www.anthc.org or www.dehe.org

Views From The Field

By Jack Willis

A hole was found in the bottom of the hydro-pneumatic pressure tank. The operator performed a temporary fix by using a jack and rubber gasket material. This slowed the leak to a few drops per minute and allowed a new tank to be ordered and a replacement to be schedule for installation in the summer.

