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Subject: Hydroflow

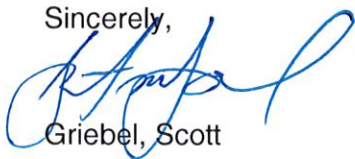
Over the last couple of years we have incorporated the use of Hydroflow devices for a variety of needs. The most notable was for a scale build issue in our boilers at Soldotna Prep School. We had experienced cracking in the heat transfer tubes and were forced to replace a number of tubes over the course of several years. The contractor who performed the tube replacements noted that there was a moderate level of mineral buildup on the water side of the exchange tubes, consisting of iron, manganese and calcium. They commented that we would continue to experience cracking if we did not resolve the mineral scale problem. Additionally, the scale was likely affecting the exchange efficiency of the boilers. We looked into a number of solutions involving chemical treatment, but were concerned for both the initial cost and the potential cost related to disposal, if we were in need of draining the system. We decided to consult Mike Colton, with Hydroflow Alaska, to see if the Hydroflow device had an application here; he assured us that it did. Mike recommended that we clean the tubes manually first. In the end we installed the device without the initial cleaning. Upon re-inspection after one year, we were delightfully surprised that the tubes were free of the former scale. It is suspected that the Hydroflow broke the calcium and the rest of the scale broke up with it. The remainder is managed by regular blowdown.

Another application was an algae bloom that we experienced in two of our potable water storage tanks at our Nikiski High School facility. It was determined by our water operators that it was due to a tank storage flow design flaw. Following the install of a Hydroflow device, our operators reported that after one month the bloom issue had been resolved. There was no longer any visible sign or odor of the algae present.

In a third application, one was installed on the pool water loop at Skyview Middle School in order to treat an algae growth in some of the pool liner caulking. In addition to mostly resolving the algae growth (we predict eventual complete eradication), it is reported by the District Pool Supervisor that the clarity of the pool water has been dramatically improved and the scale buildup on the deck and gutters has been greatly reduced. She also believes that the chemical usage has gone down. Although, this is assumed due to incomplete historical tracking of product use. It is our intent, once a baseline usage is confirmed, to eventually disconnect the unit for a couple of months and test the chemical usage effect.

We are currently experimenting with Hydroflows in other applications with generally good results. Overall, we are very happy with this technology and believe it to produce a value benefit that justifies its cost.

Sincerely,



Griebel, Scott
Director of Maintenance
Kenai Peninsula Borough