Exhibit 5

Pinellas County Utilities
St. Petersburg, Florida

SOUTH CROSS BAYOU WRF
FILTRATION SYSTEM INSPECTION

October 22-24, 2014

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Pittsburgh, Pennsylvania
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INTRODUCTION

Severn Trent Services (STS) visited the South Cross Bayou WWTP operated by Pinellas County Utilities (PCU) October 22-24, 2014 for a comprehensive filter system inspection. A Plant Operator was always available to assist with the inspection which was very helpful and appreciated. STS helped start up the filtration system in 2001. It has twelve 9'-8" x 85' denitrification filters. The design basis flow is 33 MGD adf and 66 peak, filter influent nitrate of 9 mg/L and effluent of 2, and filter influent TSS of 20 mg/L with effluent TSS of 5 mg/L. The spatial arrangement of the filters is shown below:

West 12 11 10 9 8 7 6 5 4 3 2 1 East

A clearwell, mudwell, blower room and control room are on the east side of filter 1. There is a filter influent channel on the south side of the filters with a distribution weir for each filter. The influent channel is fed from its east side by the clarifier effluent header.

OPERATION

Many of the filters have been experiencing high levels, difficulty processing flow and seemed to need frequent backwash. All filters were being backwashed daily, much more than the three to five filters daily after the plant was started up. This prompted the request for filter inspection.

Operators mentioned that the filter influent channel has overflowed sometimes. If the function does not already exist, a high level float or sonic level indicator should be added to the filter influent channel before it splits off to individual filters to warn the Operators of a high level developing there. This should cause an audible and visual alarm on all control system screens.

<u>Methanol Utilization</u>
We examined plant records from May 1, 2014 through October 24, 2014 which revealed the average plant flow was 23.04 MGD, methanol flowmeter average was 0.28 gal/min, filter influent nitrate-nitrogen was 11.1 mg/L, and effluent nitrate-nitrogen averaged 0.65 mg/L. Actual methanol deliveries were estimated at approximately 6000 gal per week.

The methanol flowmeter readings are probably reading about 50% low. Actual usage based on methanol deliveries averages about 0.59 gpm. A typical methanol dosage of 3 to 1 methanol to nitrate-nitrogen ratio would be produced at a methanol flow of about 0.64 gpm. This means the actual dosage is an efficient 2.77 to 1 ratio of methanol to nitrate. Our inspection later uncovered ways to improve methanol usage even more.

<u>TSS Removal</u>
Filter influent TSS from January 1 to October 18, 2014 averaged 6.5 mg/L. Effluent TSS records were not directly examined but Operators said they averaged from 1 to 2 mg/L which is normal for this type of filtration system.

INITIAL INSPECTION

When we first walked up on the deck of the filters on the first day of inspection, filters 4, 5, 6, 8, 9 and 12 were nearly full of water. Bumping the filters helped, but this was an unusual number of high filters. Flow had not even reached its morning peak yet.

We noticed that during the backwash of any filter, much backwash air would divert to filter 4, even though filter 4's backwash air valve appeared closed. The filter 4 backwash air actuator would move when commanded and so would not cause a valve failure alarm. However the connection between the actuator and valve must be broken and the backwash air valve must actually be stuck open. When filter 4 had backwashed just previously and filter 5 went into a backwash, the problem was especially severe with no backwash air reaching filter 5 and all the air diverting to the clean and low level filter 4. This problem was keeping filter 4 air scoured too often and all the other filters dirtier than they would have been especially filter 5.

Filter 4 was probably doing a poor job of removing nitrate or retaining TSS with the frequent air scours it received while trying to filter. Filter 4 would often become air bound from the backwash air leaks and its level would rise. When the level in filter 4 got high enough, some of the leaking backwash air would find an easier path out of the filter and would escape out with the filter 4 effluent. It would travel down the effluent header and would then release explosively in the clearwell as large slugs of air. This would create much turbulence and waves in the clearwell. We saw waves of water eject out of the screened vent windows on the north side of the clearwell and come splashing down into the north pipe gallery. There was staining and algae growth in the pipe gallery area from frequent splashing.

The broken filter 4 backwash air valve needed to be repaired as soon as possible. In the meantime, we took filter 4 out of service so it would not filter and would not try to backwash. However we also forced open its influent valve so that it would be flooded out with water well above the backwash troughs. This reduced the amount of backwash air it received when other filters backwashed. We were able to get some air agitation in backwashing filter 5 and it discharged very dirty backwash water.

We noticed filter 1 still receives less than half of the water that any other filter receives. This is a structural and hydraulic design problem from the way water enters the influent channel from the east end wall. The water level near the entrance weir to filter 1 is pulled down a little lower than the rest of the channel by the speed and momentum of entering water. When the water flow slows a little it can rise in depth, technically known as a "hydraulic jump." Near filter 2, higher elevation water flow continues downstream. A civil engineer should be retained to design a baffle system or some other solution so that filter 1 can take its share of the load.

We walked along the south pipe gallery and saw water spraying from external weld leaks on the stainless steel air headers of at least three filters. Each filter has a left and right side air header box going through the wall. The worst leak was on 3 right, followed by 5 right, and the smallest leak was on 10 left air header. These welds should be repaired before the leaks grow worse or damage other equipment in the pipe gallery. It may require draining all the water out of these filters to do the repairs.

The water levels in the filters are monitored by sonic level indicators. These replaced the original capacitance level probes. Operators often backwash whatever filter is highest. Get back to numerical order backwashing to aid consistency/troubleshooting.

We noticed a new piece of floor grating in the deck near the front of filter 6. Later we had filter 6 drained down and the original grating was visible where it had fallen into the influent box at the front of the filter. It could collect debris there and block the spent backwash discharge from filter 6. Remove the fallen grating.

FILTER SAND LEVELS

Design sand level is 147 inches below top of the backwash troughs. Sand levels were measured in three places in the filter from the top of handrail down to the sand. The handrails averaged about 77 inches above the top of the backwash troughs. Subtracting the difference, the filter freeboard from top of sand to backwash trough measurements were:

Filter #	South	Middle	North	Average
1	155 inch	152 inch	146 inches	151 inches
2	150	151	152	151
3	151	150	150	150
4	149	151	151	150
5	152	151	152	152
6	148	148	154	150
7	148	150	153	150
8	148	148	148	148
9	146	145	146	146
10	149	148	148	148
11	146	148	149	148
12	148 inch	150 inch	150 inch	149 inches

Sand level averages were still good and within 5 inches of design.

BACKWASH SEQUENCE

We changed a few backwash step times. Backwash step 2 is closing the effluent valve and opening the spent backwash valve. We increased this step from 10 to 15 seconds to allow more time for valve movement. Step 3 is opening the backwash air and backwash water valves. We also increased this step from 10 to 15 seconds. Step 4 is the backwash air scour. We lengthened it from 90 to 120 seconds to give more time for captured stored TSS solids to be broken up by the air agitation.

Later in the backwash, the water-only rinse step was 600 seconds and we shortened the timer to our design 300 seconds. However when tested later, the rinse was still lasting 600 seconds before the backwash pump speed began ramping down. It appeared the HMI screen time, at least for this step, was no longer being used to control the active step length. The long rinse step length does not remove much more solids and increases filter downtime and the recirculating flow load on the filters. A rinse step of 200 seconds is recommended. The slow ramp down after will make up for this.

BUMP SEQUENCE

The bump sequence's four step times were 15, 60, 15, and 30 seconds in length. Backwash valves for the previous and current filter were both open during the longest step 2. We changed the bump step lengths to 15, 15, 15 and 60 seconds for much better bump performance. The longest step is now in a step without valve movements and will not delay the flow transition between filters. These changes minimized the amount of time that backwash water was being split to two filters at low rates for each.

It would be good to save any online or offline PLC program backups with our optimized backwash and bump step times, so that old or unintended step times do not get automatically loaded back in again after a PLC fault or power failure reset.

The final bump on filter 12 includes about 4 minutes of ramp-down time for the backwash pump. This causes the filter level to rise higher than normal and the spent backwash valve to be tripped open most of that time. With the influent valve still open, 1/12 of the filter influent also dumps to the mudwell most of that time. In addition, the full bump flow of 5200 gpm flows into the mudwell at the same time. The influent water and the water on top of the filter media that is pushed out as overflow still contain a full dose of unreacted methanol. Sending this water to the mudwell is wasteful from the standpoints of lost methanol and pumping/retreatment costs for all the diverted water.

We tried a manual stress test where we closed the effluent valves on both filters 11 and 12 and allowed the still-open influent valves to fill them up as high as they would go. This simulated heavily loaded plugged filters at that end of the filter plant. Then we opened the backwash water valve on filter 12 and started the backwash pump as if we were bumping the filter. When the pump flow stabilized, filter 12 slowly rose higher and barely overflowed into filter 11 across their dividing wall, probably at only about a 500 gpm rate. This easily flowed back out the filter 11 influent valve. The other 4700 gpm of backwash water flow was able to flow backward out through the filter 12 influent valve and distributed efficiently down the influent channel to filters 1 through 10. This test shows that a single filter that overflows during bump will not cause a spill over the walls.

The opening of the spent backwash valve on a bumped filter in response to high level was intended as a last-ditch alarm response that was programmed before the slow ramping of backwash pump speeds was added. The alarm action needs to be adjusted to account for that. We recommend that the spent backwash valve on a bumped filter only open if two other filters in that half of the filter structure are already high when the bumped filter hits a high level. There is a structural dividing wall between filters 6 and 7 that is higher than the normal dividing walls between filters, so the two additional high filters would have to be detected in either filters 1-6 or 7-12 to trigger the spent backwash valve opening on a bumped filter in one of those groups of filters.

BACKWASH WATER SYSTEM

The backwash water rate setpoint was 5200 gpm, about 5.4% higher than the design backwash flow of 4930 gpm. We did a backwash water rise rate on filter 7 and got an actual backwash rate of 5060 gpm. The actual rate is only 2.6% higher than design which is acceptable. The backwash flow meter reads an additional 2.8% higher than the actual flow. These are acceptable variances but should be rechecked yearly with a rise rate test. At present filter 7 is the best choice to do a rise rate test in because of valve leak issues.

The backwash pumps used to be single speed pumps using a flow control valve. The flow control valve failed after several years and the system was used without flow control for some time. Now the pump motors have been converted to variable speed and include about a 4 minute ramp-up time at pump start in a backwash or bump. At the end of a bump, the backwash pump ramps down about 4 minutes before it stops. The ramp down time for a backwash is longer at over 11 minutes. This ramping was added to minimize the flow effects of starting and stopping the backwash pumps during backwashes and bumps on the downstream UV system.

As discussed earlier, the added ramp time causes some problems with the conclusion of the bump cycle and increases filter downtime and spent backwash water total volume. Some of the ramp time is not productive because the backwash pumps ramp slowly through lower flows at the beginning and ending of the current ramps. Start or end the ramps when the backwash pump can produce 1000 gpm flow or more. This will provide most of the benefits of smaller flow spikes along with reduced filter downtime.

BACKWASH AIR SYSTEM

There are three backwash air blowers with any two operating and one as a spare. Each can provide 50% of the backwash air flow requirement. The blowers operate during the backwash air scour and air/water scrub to provide essential agitation energy to clean the filters. By comparison, the relatively low velocity backwash water flow can remove very few solids on its own unless they have been broken loose by the backwash air. As a result, the major leak of backwash air into filter 4 had a large impact on all of the rest of the filters when they tried to backwash.

We opened the blower belt guard doors to check condition of the belts. The belts had burned through and fallen off inside the belt guard of the middle blower 0702. This was a combined belt with all the ribs joined together as one large band. One other blower had a combined belt, and the other blower had conventional individual belts. The failed blower would have cut the air flow in half for two out of three backwashes. There is a blower air flow meter, but the blower low air flow alarm had been accidently set to a 2400 second delay sometime in the past, so the backwash would have completed before this time elapsed. The alarm delay time was shortened immediately upon discovery.

Maintenance personnel attempting to replace the belts on blower 0702 opened a drain on the lower silencer and said a tremendous amount of water discharged. The blower also was actually seized up. It was removed for repairs with a heavy lift the next day by Plant Maintenance personnel and was found to be very rusty inside. We wondered if condensing moist outside air from the overhead inlet pipe had dripped into the blower over a long period while it was not running. We also examined the intake filter structures on the roof of the blower building for possible rain leaks but could find nothing suspicious.

There are check valves on each blower discharge that should have prevented water from intruding back from the filters. These should be inspected. A temperature gun might be able to determine if they are leaking small flows of hot gas back through when another blower has run for some time, as the piping upstream of the check valve would begin to heat up. Otherwise it may be necessary to pull the check valves out of the discharge pipes for a closer examination. Water does apparently back up close to the main air header sometimes. We saw water discharging from small leaks at the gasket on the downstream side of the filter 11 or 12 backwash air valves. Filter 4 could be a water intrusion source with its stuck-open backwash air valve. The horizontal header between the filters is the high point in the pipe, so it could run back down to the blowers.

Blower belt tension should be checked with a tension gauge. If single rib belts are used, a single barrel tension gauge should be used. The tension is often in the 10 to 15 lb range when the belt is deflected. Refer to gauge instructions. The amount of deflection is the span between motor and blower pulleys in inches divided by 64. For example if the span is 32 inches, then 32/64 or 0.5 inch of deflection is needed at the given tension. If multi-rib belts are used, it is even more important to use a tension gauge, but it must be a heavy duty one with several joined barrels as the required tension could be 10 to 15 lbs per rib for a much higher total tension. A good source for belt tension gauges is on the following website: http://www.hmc-international.com/

We noticed that when two blowers did start, their starts were not far enough apart and were not coordinated properly with the automatic unloading valve. The present sequence is to start one blower and close the unloading valve. The unloading valve is electric and takes a long time to close. Before the unloading valve has closed and before any air has appeared in the filter, the second blower starts. This means that the combined air flow from two blowers breaks through the sand surface at one time. This causes a very violent eruption and uneven air distribution at first. This is not good for gravel stability as it could slowly push gravel out of place at the bottom of the filter.

The blower startup sequence should be to start one blower and close the unloading valve. When the unloading valve has been closed for one minute (after sensing the valve's closed limit switch and with a backup timer), then start the second blower and begin timing the air scour step. Confirm good blower run signal and/or air flow rise for at least one blower before starting air scour step timer.

VALVE INSPECTION

We heard instrument air leaking from several valve actuators. These included the spent backwash valve on filter 1 and the clean backwash valve on filter 11. These leaks need to be repaired to keep these valves reliable.

Filter 1's influent valve actuator had failed in the open position and had been disassembled. This caused a valve failure alarm every time the filter went into backwash and then caused the influent flow for that filter to divert into the mudwell. This valve should be repaired as soon as possible. Its part number is 9401694R001.

We operated all the valves from the main or local control cabinets and found some abnormalities. Filter 1's effluent valve closes when power is switched to local control. It has a wiring problem and cannot be opened from the local panel. Filter 2's spent backwash valve cannot be opened from the local control panel switch due to another wiring problem. We also found that filter 11's spent backwash valve is slow to open. It may be getting stuck in its seat or has other actuator problems. Correct these valve problems before they cause problems for the Operators during a critical time.

We had already determined that the backwash air valve on filter 4 was stuck open. We used a temperature gun to look for temperature rises downstream of closed backwash air valves. Filter 4's air valve was the only one allowing the downstream pipe to get warmer. We did not see backwash air leak into other filters during our inspection days**.**

We also conducted a series of tests to check for water leaks through closed valves. The main part of this involved raising the filters exactly to backwash trough level and looking for rises or subsidence with all valves on a filter closed. We would vary valve positions and levels on other filters to try to affect the filter we were checking. We could then drain the backwash troughs to verify influent and spent backwash valve leaks. In some cases we would estimate the leak rates either visually or by doing rise rate or draw down tests. Here was what we could determine:

Filter #	Valve Condition
1	Influent valve had failed open, and actuator had been removed
1	Effluent valve leaks 370 gpm (all valve leaks are for closed valves)
1	Effluent valve closes and cannot be opened when local control energized
2	Effluent valve leaks 440 gpm
2	Spent backwash valve cannot be opened from local control panel
3	No leaks on any valve
4	Backwash air stuck open and leaks much air even if showing closed
5	Spent backwash leaks 10 gpm
5	Influent valve leaks 30 gpm
6	Influent valve leaks 150 gpm
6	Effluent valve leaks 120 gpm
7	Clean backwash leaks (rate not known; will reduce other filters' bw rates)
8	Influent valve leaks 40 gpm
9	Influent valve leaks 100 gpm

10	Influent valve small leak estimated 2 gpm
11	Influent valve leaks 200 gpm
11	Spent backwash sticks in seat and is slow to open
12	Influent valve leaks 100 gpm

Valve leaks make it hard to isolate and work on a filter. Adjust closed mechanical stops to lessen leaks. Replace valve if necessary. Influent valve leaks will waste water and unreacted methanol to the spent backwash tank during backwashes. Effluent valve leaks will bleed away clean backwash water during backwash and make backwashes less effective for that filter. Clean backwash valve leaks will take clean backwash water away from any other filter that is trying to backwash and make their backwashes less effective. Spent backwash valve leaks will waste water and unreacted methanol to the mudwell at all times during the filtration cycle. Backwash air valve leaks will cause the affected filter to become air bound, reduce its ability to retain solids, reduce its ability to denitrify, and will reduce backwash air to any other backwashing filter.

INSTRUMENT AIR SYSTEM

We noticed the instrument air compressors were running almost constantly. Check all piping connections, pneumatic valve actuators and other users of instrument air for leaks to reduce air compressor wear and operating cost. After our visit the compressors were taken offline and air was being supplied by a new line from the maintenance shop.

Clean dry instrument air is vital for proper operation of the filtration system valves. We checked the inlet and outlet of the instrument air refrigerated dryer and both were warm. The discharge side should be slightly cooler if working normally. We drained water from a drip leg just downstream of the dryer so it is not removing moisture. A warning light was illuminated on the dryer. It may be low on refrigerant and overloaded by high air flow due to all the leaks. Diagnose and repair or replace the instrument air dryer.

METHANOL SYSTEM

The methanol storage and feeding system components have been converted to almost all stainless steel including the storage tank and piping. Previously there was a carbon steel tank, pvc piping above ground, and fiberglass discharge pipe below ground that had raised concerns. The underground section of the old discharge pipe had developed a break. One of the two large methanol pumps has been changed to a smaller pump. The control system switches to the smaller pump during low flow periods for better control. Some good thought has been put into improving the methanol system.

When the west methanol pump runs, the pressure gauges pulsate on both the west and east pressure gauges. The gauges are upstream of the back pressure valves. The downstream pressure pulses that get back upstream past the east backpressure valve indicates that it at least is no longer sealing properly. Correctly operating backpressure valves help the chemical feed pumps deliver precise dosing. They also provide another guard against backflow to the methanol tank. Clean, repair or replace both backpressure valves and set them at 10 psi backpressure.

There is a pulsation dampener remaining on the west pump only. These devices can reduce stress on all components including pump diaphragms, pressure gauges, backpressure valves and discharge piping. They allow the methanol to flow steadily through its long discharge pipe instead of requiring that entire mass of fluid to start and stop with each pump stroke. Pulsation dampener diaphragms periodically need to be pumped back up with a hand air pump and can eventually break. The remaining dampener is not working presently and probably has failed. Install new pulsation dampeners at the discharge of each methanol pump. Adjust air pressure in them with a hand pump to close to the backpressure setting, until pressure fluctuations reduce.

Consult with Pulsafeeder or another reputable supplier for the current correct models of backpressure valves and pulsation dampeners for this application including compatibility with methanol. Refer to the following pumping system design guide for additional information: http://www.pulsa.com/pulsa-docs/Pulsar-Series-Pulsa-Series-Installation-Specifications-EN.PDF

BACKWASH INTERVAL

As the filtration system removes suspended solids and nitrate-nitrogen from the water, flow resistance increases in the filters. The accumulation of TSS solids and denitrifying biomass eventually will approach the maximum loading capacity of the filter. The backwash interval (time between successive backwash starts) can be predicted by calculating how long one filter would run if the entire plant flow was filtered through it.

$$\text{Backwash Interval} = \frac{\text{Specific solids loading x single filter area x conversion factors}}{\text{TSS and nitrate reduction x filter plant flow}}$$

The specific solids loading of these filters is about 1 lb per square foot of filter area per backwash based on actual experience of other plants. At 9.67 ft x 85 ft, each filter has 822 ft^2 surface area. Use this report to optimize the filter plant condition. Then based on actual plant performance that TSS reduces from 7 mg/L to 1 mg/L, nitrate-nitrogen reduces from 11 mg/L to 0.7 mg/L and plant flow is 23 MGD, the backwash interval is:

$$\frac{1\ \text{lb/ft}^2\cdot\text{bw x } 822\ \text{ft}^2 \text{ x } 454\ \text{g/lb x } 1000\ \text{mg/g x gal/3.785L x MGD}\cdot\text{day}/10^6\ \text{gal x } 24\ \text{hr/day}}{[(7 - 1) + (12 - 0.7)]\ \text{mg/L x } 24\ \text{MGD}}$$

The product of the top terms can be considered a constant for this plant, equal to 2366. The units cancel to give hours between backwashes. Use the following simplified form:

$$\text{Backwash Interval (For 2014 conditions)} = \frac{2366}{[(7 - 1) + (12 - 0.7)]\ \text{mg/L x } 23\ \text{MGD}} = 5.7\ \text{hrs/bw}$$

Divide this interval into a 24 hour day and round up to get about 5 backwashes daily. Adjust for changing flows or water quality. Expect to do more backwashes on higher flow/rainy days. Try to backwash filters in numerical order to keep track better.

CONCLUSIONS

1. Filter 4 had a stuck-open backwash air valve that reduced air flow to the other filters when they backwashed. A failed blower cut air flow in half for 2/3 of all backwashes. The bump cycle had the backwash flow splitting to two filters at a time for too long. Inefficient backwashing and bumping caused high water levels in the filters and difficulty processing filtration flow.

2. Nitrate-nitrogen is removed well by the filters from about 11 mg/L to 0.7 mg/L.

3. Methanol utilization compares well to other denitrification filter plants but can be improved, primarily by reducing diversion and leaks of methanol-dosed filter influent back to the Plant.

4. TSS is reduced well by the filters from about 6.5 mg/L to 1 to 2 mg/L.

5. Sand levels in the filters were fairly uniform and still within 5 inches of design.

6. Filter 1 filters very little water due to a hydraulic design problem at the filter influent channel entrance that pulls the water down lower near the filter 1 weir.

7. Filter 1's failed open influent valve allows influent to divert to the mudwell when the filter backwashes.

8. The 600 second backwash rinse step was too long but did not change when we shortened the step on the HMI. A 200 second step would take better advantage of the long flow ramp down that follows, cutting water use and filter down time.

9. We tested overflowing filter 12 during a manual bump and found that it would safely overflow to other filters.

10. The backwash water flow rate is close to design. The backwash water flow meter accuracy is good.

11. The backwash air blowers start too close together which causes a violent and uneven start to air scour flow in the filter. This could slowly damage gravel layers in the filters.

12. All filters except for filter 3 and 10 had significant valve leaks. These leaks make it hard to isolate a filter for maintenance. They can decrease backwash efficiency and increase methanol consumption and pumping costs.

13. Multiple instrument air leaks were increasing air compressor run time and wear.

14. The instrument air dryer was not working and water was found in a drip leg downstream. Clean dry instrument air is a must for reliable valve operation.

RECOMMENDATIONS

1. Repair the broken backwash air valve on offline filter 4 as soon as possible so that the filter may be used again.

2. Repair the failed blower 0702 as soon as possible. Determine if blower check valves are sealing against water intrusion. Repair external air header weld leaks.

3. Adjust blower start sequence so that only one blower runs until 1 minute after the unloading valve closes. Then start a second blower. Confirm blower run signal or air flow rise for blower starts. When one blower runs well, start air scour timer.

4. Adjust the bump cycle to not open the spent backwash valve on high filter level unless two other filters in that half of the filter structure are also high.

5. Repair instrument air leaks. Repair or replace the instrument air dryer.

6. Repair the filter 1 influent valve to avoid diversion of influent to the mudwell.

7. Design and implement an engineered solution for the low flow into filter 1.

8. Install high level alarm in the influent channel. Remove fallen grating at filter 6.

9. Adjust valve closed mechanical stops slightly to slow the worst identified valve leaks. Replace valves that cannot be adjusted successfully.

10. Determine what is needed to get filter 11 spent backwash valve to open better.

11. Fix local control problems for filter 1 effluent and filter 2 spent backwash valve.

12. Start/stop backwash pump ramping at 1000 gpm to reduce low flow ramp time.

13. Back up backwash/bump step timing and other program improvements so that they are preserved if PLC is upset or the program needs to be reloaded.

14. Check backwash water rate yearly with a rise rate test in filter 7.

15. Adjust blower belt tension using a tension gauge. Multi-rib belts will need a high capacity type of gauge. This is vital for belt longevity and blower reliability.

16. Replace pulsation dampeners and backpressure valves on both methanol pumps. Adjust backpressures to 10 psi.

17. Backwash about 5 filters daily for current conditions, in numerical order. Recheck backwash interval when inlet TSS, nitrate or flow loadings change.

18. Have STS inspect the filtration system yearly to help optimize operation.