Edward Farrar Utility District
Monday August 2, 2018
Steele Community Room; 4:30 p.m.
Minutes

Present: P.H. Flanders, C. Parks, R. Finucane, N. Sherman, and L. Sayah, Commissioners; B. Woodruff PWD, K. King, S. Lotspeich, Staff; and J. Siegel, P. Hutchins, W. Hooper, Public

P. Flanders called the meeting to order at 4:30 p.m.

Public: no comments

Consider Bids for Replacement of the Elm Street Sewer: B. Woodruff shared details relating to the three received bids for the replacement of sewer lines on Elm Street in anticipation of the Main Street Reconstruction project. Four firms were invited to bid the project with a July 23rd deadline. GW Tatro Construction, ECI, Kingsbury Construction & Dubois Construction. Three submitted bids (GW Tatro did not). **C. Parks made a motion to authorize the Municipal Manager to issue a "notice of award" to ECI, the apparent low bidder at $228,270.00. R. Finucane seconded the motion; a vote was held and passed unanimously.**

Review Waterbury Wastewater Treatment Facility Inspection Report: Very positive report, thoroughly detailed and constructive. C. Parks stated she spoke to Nick Giannetti who complimented P. Krolczyk as one of the best operators in the State with very large shoes to fill upon his retirement. P. Flanders would like P. Krolczyk or B. Woodruff to come to a future meeting and explain the working procedures of the plant for public and board members that have not been there recently.

Capital Soccer Request for Additional Fields at the Ice Center: P. Hutchins came to present the Commissioners with the leagues request to explore the possibility of building two additional fields located near the Ice Center. Discussion followed which included deterioration of the (Town) road, lack of parking and current uses for ice time, soccer, volleyball and biking. The Commissions by consent agreed to consider the expansion of soccer fields located at the Ice Center.

Update on Management of the Dog Park: W. Hooper, new Chair for the Waterbury Dog Park came to meet the Commissioners and establish clear lines of communication. Both parties would like a Memorandum of Understanding drafted for consideration. **R. Finucane nominated N. Sherman to act as liaison between the Dog Park Board and the EFUD Commissioners. L. Sayah seconded, a vote was held and passed unanimously.**

Meeting Minutes: **R. Finucane made a motion to approve the minutes of July 23rd, 2018; C. Parks seconded the motion; a vote was held and passed unanimously.**

R. Finucane made a motion to adjourn at 6:25pm. C. Parks seconded the motion; a vote was held and passed unanimously.

Respectfully submitted,

Karen King, Secretary

Approved: P Howard Flanders Date: Sept 17, 2018

Edward Farrar Utility District
Commissioners Meeting

Thursday Aug 2, 2018
4:30 pm at Steele Community Room
28 North Main St
Waterbury VT

Agenda

4:30 pm	Opening
4:30 pm	Public
4:35 pm	Consider Bids for Replacement of Elm Street Sewer
5:00 pm	Paul Hutchins - Capital Soccer Request for Additional Fields at the Ice Center
5:30 pm	Natalie - Report on Update on Management of the Dog Park
5:45 pm	Review Waterbury Wastewater Treatment Facility Inspection
5:55 pm	Minutes
6:00 pm	Adjourn

Village of Waterbury
Elm Street Sewer Main Replacement
Bid Results

30-Jul-18

Unit Item #	Description	Unit	QTY	Kingsbury		Dubois		ECI	
				Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
1	8" SDR 35 PVC Sanitary Sewer Pipe	LF	15	100	$1,500.00	100	$1,500.00	130	$1,950.00
2	15" SDR 35 PVC Sanitary Sewer Pipe	LF	360	145	$52,200.00	150	$54,000.00	145	$52,200.00
3	16" DR 41 C905 PVC Sanitary Sewer pipe	LF	45	200	$9,000.00	300	$13,500.00	175	$7,875.00
4	6" SDR 35 PVC Service lateral Connections and fittings for house service	LF	175	200	$35,000.00	130	$22,750.00	82	$14,350.00
5	15" x 6" SDR 35 PVC WYE	EACH	8	1000	$8,000.00	400	$3,200.00	350	$2,800.00
6	4' I.D. Sanitary Sewer Manhole	EACH	3	8500	$25,500.00	15000	$45,000.00	6170	$18,510.00
7	6' I.D. Sanitary Sewer Manhole	EACH	1	12500	$12,500.00	25000	$25,000.00	10700	$10,700.00
8	Remove existing sewer manhole	EACH	3	2000	$6,000.00	2000	$6,000.00	1200	$3,600.00
9	Temporary Bituminous Concrete Pavement	SY	250	25	$6,250.00	22	$5,500.00	36	$9,000.00
10	Bituminous Concrete Pavement	TON	75	200	$15,000.00	170	$12,750.00	168	$12,600.00
11	Portland Cement Concrete Sidewalk	SY	75	90	$6,750.00	60	$4,500.00	64	$4,800.00
12	Subbase of Crushed Gravel, Fine Graded	CY	55	60	$3,300.00	20	$1,100.00	55	$3,025.00
13	Subbase of dense graded Crushed Stone	CY	120	55	$6,600.00	40	$4,800.00	45	$5,400.00
14	Rock Excavation	CY	10	240	$2,400.00	230	$2,300.00	200	$2,000.00
15	Boulder Excavation	CY	10	50	$500.00	50	$500.00	85	$850.00
16	Exploratory Excavation	CY	130	50	$6,500.00	75	$9,750.00	52	$6,760.00
17	Wood Sheeting left in place	MBF	1	1	$1.00	1500	$1,500.00	75	$75.00
18	Steel Sheeting left in place	TON	1	1	$1.00	1500	$1,500.00	4000	$4,000.00
19	Flaggers	HOUR	600	30	$18,000.00	32	$19,200.00	40	$24,000.00
20	Sewer Cleanout	EACH	1	1000	$1,000.00	300	$300.00	350	$350.00
21	Excavation Below normal grade and crushed stone refill	CY	25	50	$1,250.00	50	$1,250.00	67	$1,675.00
22	Mobilization, Miscellaneous Work & Clean Up	LS	1	113000	$113,000.00	73000	$73,000.00	40750	$40,750.00
	Allowance for Uniform Traffic Officers				$1,000.00		$1,000.00		$1,000.00
	TOTAL				**$331,252.00**		**$309,900.00**		**$228,270.00**

Vermont Department of Environmental Conservation
Watershed Management Division
Wastewater Program
1 National Life Drive, Main Building, 2nd Floor
Montpelier, VT 05620-3522

Facility Inspection Report

Permittee Name & Address:	Village of Waterbury 51 South Main Street Waterbury, VT 05676		
Facility Name & Location:	Village of Waterbury Wastewater Treatment Facility 187 Route 2 Waterbury, Vermont 05676		
Inspection Type:	Compliance Evaluation Inspection	**Date Announced:**	June 7, 2018
Inspection Date:	June 21, 2018; 9:00 AM – 1:00 PM & June 25, 2018; 10:30 AM – 1:00 PM		
State Permit Number:	3-1160		
NPDES Permit Number:	VT0100463		
Permit Type:	NPDES Discharge Permit		
Permit Expiration Date:	December 31, 2009		
Facility Grade:	II		
Facility Class:	Domestic		
Onsite Representative/Title:	Peter Krolczyk, Chief Operator		
Responsible Official/Title:	William Shepeluk, Municipal Manager	**Contacted:**	No
Official Email:	wshepeluk@waterburyvt.com	**Phone:**	(802) 244-7033
INSPECTION RATING:	**Acceptable**		

Guidelines for wastewater treatment facility and pretreatment facility inspection ratings:
http://dec.vermont.gov/sites/dec/files/wsm/wastewater/docs/Inspection.PDF

Nicholas Giannetti Environmental Analyst (802) 490-6186 nick.giannetti@vermont.gov	**Vermont ANR/DEC/Watershed Management Division** **Phone: 802-828-1535**	Date: July 25, 2018

Areas Evaluated:

X	Permit		Compliance Schedules		Stormwater
X	Records/Reports	X	Laboratory		Combined Sewers Overflows
X	Facility Site Review	X	Operations & Maintenance		Sanitary Sewer Overflows
X	Effluent/Receiving Waters		Sludge Handling/Disposal		MS4
X	Flow Measurement		Pretreatment		
X	Self-Monitoring Program		Pollution Prevention		

Inspection Attendees / Facility Contacts:			
Name	**Title**	**Grade**	**Participated in Inspection?**
Peter Krolczyk	Chief Operator	Domestic V	Yes
Bill Woodruff	Public Works Director	NA	Yes
Matt Hunt	Operator	*No Provisional - sitting for Domestic II test next month*	Yes
Brandon Guyette	Operator	Domestic II	No

Sample(s) Collected

None.

Notes: *NA*

Corrective Actions:

Required:

1. The July 2017 and June 2017 Monthly Average Effluent Flows were calculated using the zeros from days there were no discharge. The correct Monthly Average Flow for the month of July 2017 is 0.465 MGD. The correct Monthly Average Flow for the month of June 2017 is 0.374 MGD. Monthly Average shall be calculated as the sum of all daily discharges measured during a calendar month, divided by the number of daily discharges measured during that month. In addition, on June 12, 2017, the afternoon pH reading was reported to the Wastewater Program as 7.3 SU, the bench sheet reads either 7.05 SU or 7.03 SU (difficult to read). This was likely a clerical error. **Resubmit revised WR-43s forms for the months of July 2017 and June 2017 with the correct pH & effluent flow calculations. You may submit these forms to me via email at Nick.Giannetti@Vermont.gov.**

2. During a review of flow records, contract lab reports, and bench sheets, Settleable Solids was not reported on the bench sheet the following operational days: April 11, 2018; April 23, 2018; June 30, 2017; June 22, 2017; June 12, 2017. This is a significant finding. **The Permittee is required to maintain records of measurements on bench sheets for all required analyses, in accordance with Condition I.F.5. of the Discharge Permit #3-1160.** Condition I.F.5. states: *The permittee shall maintain records of all information resulting from any monitoring activities required, including:*
    a. *The exact place, date, and time of sampling;*
    b. *The dates and times the analyses were performed;*
    c. *The person(s) who performed the sampling or measurements;*
    d. *The analytical techniques and methods used, including sample collection handling and preservation techniques;*
    e. *The results of all required analyses.*
    f. *The records of monitoring activities and results, including all instrumentation and calibration and maintenance records;*
    g. *The original calculation and data bench sheets of the individual who performed analysis of the influent or effluent pursuant to requirements of this permit.*

The results of monitoring requirements shall be reported (in the units specified) on the Vermont reporting form WR-43 or other forms approved by the Secretary.

3. Effluent composite samples are collected approximately 24 feet prior to the effluent V-notch weir. Adjust the effluent sampling location so that it is representative of the final effluent discharged to receiving waters. The Location must be near the center of the flow stream, near mid-depth, and in a well-mixed area. The corners of the channel, stagnant areas, obstructions in flow, etc. must be avoided. Also, the location must be downstream of all treatment processes, including disinfection.

   In addition, to ensure you are collecting representative effluent samples, clean or replace the composite sampler tubing to eliminate the accumulated debris within the sample line. Remove the sag in the line prior to the sample carboy to prevent effluent water remaining stagnant in the line. This buildup / debris has the potential to influence sample results.

Recommendations:

1. The Wastewater Program supports the update of the Town's Sewer Use Ordinance, as it is an important tool to protect the collection system, wastewater treatment facility, and receiving water from adverse impact, interference, and pollutant overloading. It is recommended to review and potentially include the EPA's General and Specific Prohibitions into the revised Ordinance. The General and Specific Prohibitions, specified in 40 CFR Part 403.5(a) and 40 CFR Part 403.5(b), apply to all non-domestic dischargers that discharge wastewater to a publicly owned treatment works (POTW), such as the Town of Waterbury. The General Prohibition forbids the discharge of any pollutant(s) to a treatment works that can cause pass through or interference. The Specific Prohibitions forbid the following:
   a. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR Part 261.21.
   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such discharges.
   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference.
   d. Any pollutant, including oxygen demanding pollutants (biochemical oxygen demand, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW.
   e. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 °C (104 °F) unless the approval authority (State), upon request of the POTW, approves alternate temperature limits.
   f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through.
   g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems.
   h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

2. The current Chief Operator will be eligible for retirement in approximately 8 months. Being that the together the aerated lagoons and CoMag system are such complex treatment processes, it is recommended that the Town begin succession planning to ensure that proper operation and

maintenance continues following the current Chief Operator's retirement. When the Chief Operator retires, the WWTF will require at least a Grade II certified to serve as Chief Operator. No operational decisions can be made at the plant without the supervisor of a qualified Chief Operator.

Also, during the summer, collection system projects, stormwater projects, and other public works department tasks require operators to spend part of their time away from the wastewater treatment facility. When the facility is discharging, the wastewater treatment facility requires a significant amount of process control to ensure proper operation, especially with seasonal pH changes throughout the lagoon. The Town may want to consider hiring a part-time seasonal employee (at the minimum) to help with operations or field work.

For your reference, the Wastewater Program requires adequate staffing in accordance with Condition II.A.3.b. and II.A.3.c. of NPDES Discharge Permit #3-1160, which state: *All waste collection, control, treatment, and disposal facility shall be operated in a manner consistent with the following:*
b. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance, and testing functions required to insure compliance with the conditions of this permit; and
c. The operation and maintenance of this facility shall be performed only by qualified personnel. The personnel shall be certified as required under the Vermont Water Pollution Abatement Facility Operator Certification Regulations.

In addition, Section 3(b) of the Department of Environmental Conservation's Operator Certification Rule (Environmental Projection Rule, Chapter 4) requires: *each wastewater treatment facility must have adequate staffing by certified operators to ensure proper operations and maintenance of the facility.*

The Wastewater Program currently considers the facility in compliance with these Conditions.

Notes / Discussion:

1. Under the Lake Champlain Total Maximum Daily Load (TMDL), the Town of Waterbury is allocated a new Total Phosphorus (TP) limit of 310 lbs/year (this is equivalent to a concentration of 0.2 mg/L TP at design flow). This new limit is 75% reduction from the current annual limit of 1,241 lbs/year. The Wastewater Program plans to include this new limit in the Town's renewed discharge permit, scheduled for issuance in 2020. The WWTF is currently meeting this new limit (in April 2018 the facility's TP loading for the previous 12-months was 89.9 lbs), largely due to the CoMag tertiary treatment system. Thank you for proactively exploring ways to reduce phosphorus at your WWTF in preparation for these new water quality based effluent limits.

   Many new requirements will be included in the next permit for this facility, specifically a requirement to write a Total Phosphorus Optimization Plan. The Department has produced a guidance document and tracking spreadsheet to assist facilities generate their optimization plans and track their TP loading. The Wastewater Program will be holding Phosphorus Optimization workshops in coordination with the Vermont Rural Water Association (VRWA) to review these resources and help facilities prepare for these stringent phosphorus limits and permit conditions. Please contact VRWA for more information about these upcoming classes. The optimization guidance document is available at our website, here: http://dec.vermont.gov/sites/dec/files/wsm/wastewater/docs/PhosphorusOptimizationPlanGuidance.pdf.

Inspection Findings

Self-Monitoring Data Review Period:	May 2017 – April 2018

There was one violation during the monitoring data review period and two reporting errors:

- On the week of July 9 – July 15, 2017 the Weekly Average Total Residual Chlorine = 1.10 mg/L.
- The July 2017 and June 2017 Monthly Average Effluent Flows were calculated using the zeros from days there were no discharge. The correct Monthly Average Flow for the month of July 2017 is 0.465 MGD. The correct Monthly Average Flow for the month of June 2017 is 0.374 MGD. Monthly Average shall be calculated as the sum of all daily discharges measured during a calendar month, divided by the number of daily discharges measured during that month. **See the Requirements section.**

Visual Observation of Effluent:	Clear.

Facility Operations, Equipment Condition, and Operational Status:

Collection System / Main Pump Station

- A lot of work has been performed to eliminate infiltration and inflow (I&I). Currently, the Town has planned the replacement of collection system lines on Elm Street and Main Street. In addition, a few pipes under the influence of the Thatcher Brook and Winooski River have been addressed, partly because of the State Complex refurbishment. Operations staff believe there is at least one more pipe receiving I&I from the nearby surface waters, causing high influent flows during periods of snowmelt and precipitation.
- The Chief Operator cited fats, oils & grease (FOG) as a recurring issue, affecting laterals and siphons throughout the collection system, as well as the Main Pump Station. As a result, the Chief Operator is currently in the process of planning a FOG sampling program for businesses throughout the commercial area of the Village. The Chief Operator hopes to begin sampling soon. In addition, the Chief Operator has updated and modified the Town's Sewer Use Ordinance to enable more control over the discharge of FOG from users. The revised Sewer Use Ordinance is currently awaiting review by the Town Sewer Commission. **The Wastewater Program supports updating the Town's Sewer Use Ordinance and recommends including the EPA's General and Specific Prohibitions; see the Recommendations section for more detail.**
- Siphons are cleaned and inspected via camera once every two years. Annually, pipe crossings at stream beds are visually inspected for evidence of leaks, excessive erosion, or scour during low-flow conditions.
- The facility has a robust collection system and pump station inspection and cleaning schedule. The facility's Operation, Management and Emergency Response Plan (aka Sewage Spill Prevention Plan) is comprehensive and well followed by operations staff. Standard operating procedures for collection system operations were viewed at the time of the inspection. They are complete and thorough. Staff are trained on them.
- Operators check the Main Pump Station and clean the bar racks once or twice per day. The wet wells are vacuum-cleaned approximately two times per year.
- The Main Pump Station was recently upgraded following Irene.
    - The emergency back-up generator was raised outside of the flood zone.
    - 2-dry pit submersible pumps were installed about a year and a half ago. Pumps run lead-lag and operate when the wet well hits 7 feet. Pump and control panels are separated to the dry side of pump station.
    - The pump station control room and pumps are protected with a flood door. In addition, if the process logic control (PLC) for the pumps fail, the pump will continue to operate via floats

within the wet wells.
    - An additional bar rack was added to each wet well influent trough, totaling three on each side. Operators check the pump station and clean the bar racks once or twice per day. There is a final bar rack at the headworks of the aerated lagoon.
    - The next upgrade is currently being planned, which includes a new air exchange system and automated screen.
- The sump pump in the pump station dry pit discharges to the inactive chlorine contact chamber associated with the old Waterbury wastewater treatment plant. The inactive contact chamber was observed at the time of the inspection. The gate to the outlet of the contact chamber was closed. In addition, the operator states that the old effluent pipe was filled with concrete. The stormwater and sump water within the contact chamber is pumped out periodically.

Aerated Lagoons

- There are three aerated lagoon cells:
    - Cell 1 was fit with 2 GridBees, 6 aerators, and 2 splashers. A 3rd splasher was down, operators are in the process of fixing the motor.
    - Cell 2 was fit with 1 GridBee and 2 aerators.
    - Cell 3 acts as a quiescent zone and includes 1 aerator.
    - In the winter splashers are removed to prevent damage caused by icing.
- At the time of the inspection the lagoons were operating at 11 feet. The WWTF typically discharges for 3 – 4 days when the lagoons reach approximately 12 feet. The operating depth is 13.5 feet.
- Process control includes alkalinity, pH, and dissolved oxygen. Lime is distributed throughout the lagoon in the springtime to buffer pH. Dissolved oxygen profiling was complete 5 years ago.
- Bank maintenance and weed control is performed at the end of May and July. Operations staff are certified pesticide applicators for various products. They are currently using Round Up.
- Cell #3 acts as a quiescent zone to facilitate sludge settling. During a cleanout, wastewater from cell #2 can be diverted to the CoMag tertiary treatment system while cell #3 is dewatered and cleaned out. The last sludge cleanout was performed in 2011.

Tertiary Treatment – Ballasted Flocculation via Evoqua CoMag

- Polyaluminum chloride (PAC) and caustic are injected to the CoMag influent. The facility maintains multiple back-up chemical injection pumps.
- Each day, operators view CoMag influent pH, PAC/polymer dosage, turbidity, and magnetite concentration to ensure proper operation of CoMag system. Operators will pull a grab sample daily from process tank 3 to observe polymer consistency and settling characteristics.
- Magnetite loss is tracked throughout the clarifier, waste tank and chlorine contact chamber. The operators are considering batch wasting to recover additional magnetite via the recovery drum. Magnetite loss to the chlorine contact chamber / effluent is approximately 1 pound per day.
- The clarifier is taken down and cleaned once per year. The facility installed a pump to drain the clarifier into the headworks of the plant, which makes taking down the tank extremely efficient.
- Recycle pumps are prone to clogging typically as a result of taking in fish remains. The pumps clog and are taken down approximately once per year.

Chlorine Disinfection System

- The chlorine contact chamber is cleaned out a couple of times per month. The contact chamber can be drained to the lagoon for cleaning.

- Sodium hypochlorite injection is not flow paced or connected to the SCADA system, it is manually set when the plant is discharging. Operators take a Total Residual Chlorine (TRC) sample multiple times per day to ensure they are achieving the appropriate dosage to meet effluent limitations and achieve adequate disinfection.

Supervisory Control and Data Acquisition System (SCADA)

- Following the CoMag upgrade, some of the SCADA controls for the wastewater process, pumps, and process alarms were not functioning properly. The facility brought in a control systems firm to address many of the problems associated with the SCADA controls for the wastewater process and pumps. This summer the facility plans to fix of the remaining SCADA alarm settings, connect the effluent chlorine addition system, and fix a communication error with the influent CoMag caustic pump.

Emergency Power / Standby Generator

- The Main Pump Station standby generator has the capacity to run the entire pump station in the event of a power outage. The generator exercises off-load once per week and on-load once per year, during its annual service.
- The WWTF standby generator has the capacity to run the entire WWTF in the event of a power outage. The generator exercises once per week off-load and is exercised once per year on-load, during its annual service.
- When the facility loses power, operators will receive an alarm. Currently, two or three aerators are not programmed to come back online when the plant switches to generator power. This is okay because the facility has multiple aerators, mixers, and splashers throughout the lagoons, in addition to the CoMag tertiary treatment system. The facility plans to connect these aerators to the generator when performing the improvements to the SCADA system.

Onsite Data Review:

- The current Discharge Permit; Electrical Power Failure Plan; Operation, Management & Emergency Response Plan; and three years of records were observed and complete. The facility's records were well organized.
- Flow records, contract lab reports, and bench sheets were reviewed for the months of June 2017 and April 2018. The following errors were found:
    - Settleable Solids was not reported on the bench sheet the following operational days: April 11, 2018; April 23, 2018; June 30, 2017; June 22, 2017; June 12, 2017
    - On June 12, 2017, the afternoon pH reading was reported to the Department as 7.3 SU, the bench sheet reads either 7.05 SU or 7.03 SU (difficult to read). This was likely a clerical error.

See the Requirements section.

Maintenance Program:

- The facility appears to have an exceptional maintenance program.

Sludge Management:

- The facility appears to have an exceptional sludge management program.

Safety Program:

- The facility appears to have an exceptional safety program in place.
    - The pump station is monitored for air quality prior to entry.
    - Chemicals are stored in secondary containment.

Buildings and Grounds:

- The buildings and grounds are well maintained. The Chief Operator maintains a robust cleaning program. The facility and pump station is clean, well-kept, and organized.

Laboratory, Sampling and Analytical Procedures:

- Influent samples are collected in the influent trough, next to the bar screen.
- Effluent composite samples are collected approximately 24 feet prior to the effluent V-notch weir. The effluent composite sampler had a large sag in the line prior to the sample carboy. There was some evidence of debris / buildup in the sampler tubing. **See the Requirements section.**
- Laboratory equipment was last calibrated on May 15, 2018 and is calibrated annually.
- The laboratory manual was observed and well organized.
- The effluent flow check procedure using a J-hook was observed and is acceptable.
- The pH measurement and calibration procedure is acceptable. Operators maintain a back-up probe.

Operator Certification and Staffing:

- The facility currently has one certified operator (Chief Operator) that operates the WWTF and collection system full-time. Two additional operators (one is certified Domestic Grade II and the other is sitting for Domestic Grade II exam in August) split time at the WWTF and with other Town departments. Together these two part-time operators make up approximately one full-time position throughout the week.
- During the summer, stormwater projects and other public works department tasks require operators to spend part of their time away from the wastewater treatment facility. When the facility is discharging, the CoMag system requires a significant amount of process control to ensure proper operation, especially with seasonal pH changes throughout the lagoon. The Town may want to consider hiring a part-time seasonal employee (at the minimum) to help with operations or field work.
- In addition, the Chief Operator will be eligible for retirement in approximately 8 months. Being that the aerated lagoons and CoMag system are such complex treatment processes, it is recommended that the Town begin succession planning to ensure that proper operation and maintenance continues following the current Chief Operator's retirement. **See the Recommendations section.**