



MONTHLY OPERATING REPORT March 2011 <u>TOWN OF NEWTOWN WPCF</u>

EXECUTIVE SUMMARY

During the month of March the plant process performed well and the nitrogen removal process has greatly improved, and is operating below the plant's 6 mg/l design. Although due to the heavy rain and snow melt we only averaged greater than 80% removal. The open channel flow meters have been installed at the new locations 4 and 5. The data gathered will be inspected once per month. The meters were installed at the manhole near the plant and Commerce Road. The Hanover rd and Taunton Lake rd. area are the next areas of focus. The SCADA RFP is in final review. Below are some of the highlighted major operation and maintenance items that are currently in progress or completed.

OPERATION & MAINTENANCE

- Inspect all plant fire extinguishers, eyewash, and emergency exit lighting.
- Inspect and tested all generators and transfer switches.
- Hosed secondary wells and troughs.
- Cleaned the grit washer screen, and hopper.
- Cleaned the roto-mat and the rag hopper.
- Cleaned secondary tanks 1&2 draft tubes.
- Cleaned and inspect all Ultra Violet light systems and equipment.
- Cleaned and inspect Ultra Violet effluent channel.
- Cleaned gravity belt thickener belt.
- Inspect and service influent composite sampler.
- Inspect and service effluent composite sampler.

PUMP STATIONS

- Pumps were checked and are operating normally.
- Replaced faulty voltage regulator at Hanover rd. pump station.
- Inspect and test all generators and transfer switches.
- Hanover Rd. pump station generator's cooling radiator is weeping coolant and needs replacement asap.
- Hanover rd. pump station needs voltage potentiometer replacement.
- Inspect all of the fire extinguishers.
- Two grinder pumps were replaced at 55 Sugar st. rear lot March 11th.

- Inspected, washed down all pump stations, and FFH flume of grit March 30th.
- Replaced a grinder pump at Pitney Bowles March 31th.

ODOR ABATEMENT

There were no odor complaints for the month.

STAFFING

We are presently fully staffed.

TRAINING

All employees continued with our in house OHSA compliance safety training through PureSafety.

REGULATORY COMPLIANCE

The plant had no compliance problems during the month.

SOLIDS HANDLING

| Туре | Gallons This | Target | Gallons This | Target |
|-----------|--------------|---------------|---------------------|-------------|
| | Month | | Year | |
| Sludge | 32,500 | 40,625 gal/mo | 0.3293 MG | 0.488 MG |
| (SYNAGRO) | | 2 loads/wk | | 75 loads/yr |

ANALYSIS OF WASTED SLUDGE

| Waste Activated | Total | Min | Max | Average | Total |
|-----------------|---------|------|------|---------|--------|
| Sludge | Gallons | % | % | % | Pounds |
| SYNAGRO | 32,500 | 4.45 | 4.87 | 4.69 | 12,799 |

EMERGENCY CALL-OUTS

| Туре | Total This Month | Total for Year |
|-----------------|------------------|----------------|
| Sewer Backup | 0 | 1 |
| Pump Station | 0 | 3 |
| Plant | 2 | 9 |
| Odor | 0 | 0 |
| Grinder Systems | 0 | 6 |

PLANT MAINTENANCE

The following data is provided as a record of maintenance work order activities during the month.

| Туре | Total This Month | Total for Year |
|---------------------------------|------------------|----------------|
| Preventative Maintenance | 18 | 215 |
| Corrective Maintenance | 13 | 107 |
| Emergency Maintenance | 0 | 1 |
| Call-Before-You-Dig | 29 | 214 |
| (CBYD) | | |

FIELD OPERATIONS

| Туре | Monthly Ft | Total for Yr | Contract | Amount Left |
|----------------|--------------------|---------------------|--------------|-------------|
| Sewer Cleaning | 0 | 0 | 16,226 ft. | 16,226 |
| Scheduled | | | | |
| Sewer Cleaning | 0 | 0 | ****** | ***** |
| Unscheduled | | | | |
| Other | Monthly Qty | Total for Yr | Contract | Amount Left |
| Manhole | 0 | 0 | ***** | N/A |
| Inspections | | | | |
| Grinder | 3 | 10 | As Necessary | N/A |
| Replacements | | | | |
| New Grinder | 0 | 0 | ****** | N/A |
| Stations | | | | |

PUMP STATIONS

| Station | Baldwin | Hanover | Sandy Hook | Taunton Lake | Hawley- ville | Fairfield Hills Metering |
|---------------------------|---------|---------|---------------|-----------------|------------------|--------------------------------|
| Number Inspections/Mo. | 10 | 12 | 10 | 10 | 10 | 10 |
| Service Failures | 0 | 0 | 0 | 0 | 0 | 0 |
| Number Callouts | 0 | 0 | 0 | 0 | 0 | 0 |
| Maintenance & Repair | 2 | 4 | 2 | 2 | 2 | 2 |
| Flow (Total MG) | 0.153 | 0.677 | 2.147 | .858 | 0.656 | 7.531 |
| (Avg. Daily GPD) | 4,952 | 21,840 | 69,261 | 27,686 | 21,187 | 242,935 |

FINANCIAL STATUS – MAINTENANCE

| Item | Budget \$ | \$ Spent/Mo | \$ Spent/Yr | \$ Remaining |
|------------------|-----------|-------------|-------------|--------------|
| Preventative and | \$55,000 | \$4,692.41 | \$43,023.43 | \$11,976.57 |
| Predictive | | | | |
| Capital Repair | \$95,000 | \$6,989.02 | \$93,940.27 | \$1,059.73 |
| and Replacement | | | | |

FLOW AND LOADS TRACKING

| Budget Month/Yr | Influent Flow, | Influent BOD, | Influent TSS, | Calendar Month / | Average N, |
|-------------------|----------------|---------------------|------------------|----------------------------------|------------|
| | MGD | lbs | lbs | Year | lbs |
| July 2010 | 0.272 | 611 | 482 | January 2011 | 29 |
| August 2010 | 0.278 | 581 | 533 | February 2011 | 36 |
| September 2010 | 0.317 | 710 | 521 | March 2011 | 32 |
| October 2010 | 0.406 | 727 | 709 | April 2011 | |
| November 2010 | 0.449 | 846 | 656 | May 2011 | |
| December 2010 | 0.545 | 820 | 883 | June 2011 | |
| January 2011 | 0.477 | 954 | 761 | July 2011 | |
| February 2011 | 0.555 | 931 | 859 | August 2011 | |
| March 2011 | .684 | 632 | 631 | September 2011 | |
| April 2011 | | | | October 2011 | |
| May 2011 | | | | November 2011 | |
| June 2011 | | | | December 2011 | |
| Monthly Average | 0.442 | 757 | 671 | Calendar Year to Date Average | 33 |
| Contract | Average 0.53 | Avg. 999 | Avg. 703 | Contract | NPDES |
| | MGD | lbs/day | lbs/day | | Permit |
| | Adjustment = | Adjustment = | Adjustment | | Limit |
| | Change in | Change in | = | | = |
| | Flow in MG * | BOD in lbs * | Change in | | 19 |
| | \$17.83/MG | \$0.04/lb | TSS in lbs * | | Lbs/day |
| | | | \$0.16/lb | | · · · |
| Deviation % (+/-) | -16.5 | -24 | -4.6 | Deviation % (+/-) | 68 |

FAIRFIELD HILLS WTF

EXECUTIVE SUMMARY

The staff continues to improve equipment and standard operating methods to prevent Fairfield Hills WTP failures. Well # 3 is operating as the lead pump at 65 gallons per minute. In order to maintain the water quality; Sand filters were installed at Town Hall and The Youth Academy their addition has improved the water quality at each facility. **We flushed the lines to assure water quality.** Listed below are some of the highlighted major operation and maintenance items that are currently in progress or have been completed.

OPERATION & MAINTENANCE

- Youth Sports Complex is happy with the water quality.
- Inspect fire extinguishers at the water treatment plant.
- Work order has been placed for the corrosion control (phosphate) chemical feed pumps for the Water Treatment Plant.
- Working with Fuss & Oneill on the water supply plan.
- Newtown I.T. Department working with Charter cable on storage tanks connecting streaming video surveillance system.

STAFFING

Currently, all the regulatory required staffing positions are met for the Water Treatment Facilities.

REGULATORY COMPLIANCE

The Department of Health Monitoring Report did meet full compliance during the month.

EMERGENCY CALL-OUTS

| Туре | Total This Month | Total for Year |
|-----------------------------|------------------|----------------|
| Plant | 0 | 0 |
| Well Houses | 0 | 1 |
| Reservoirs (Storage) | 0 | 0 |
| Customer Service Issues | 0 | 0 |
| Water Main Breaks | 0 | 1 |

FAIRFIELD HILLS MAINTENANCE

The following data is provided as a record of maintenance work order activities during the month.

| Туре | Total This Month | Total for Year |
|------------------------------|------------------|----------------|
| Preventative Maintenance | 2 | 20 |
| Corrective Maintenance | 0 | 24 |
| Emergency Maintenance | 1 | 1 |

FIELD OPERATIONS

| Other | Monthly Qty | Total for Year |
|-------------------------------|-------------|----------------|
| Valve Inspections | 0 | 0 |
| Hydrant Inspections | 0 | 5 |
| Service Inspections | 0 | 0 |
| Call-Before-You-Dig (CBYD) | 5 | 22 |

FINANCIAL STATUS – MAINTENANCE

| Item | Budget \$ | \$ Spent/Mo | \$ Spent/Yr | \$ Remaining |
|------------------|-------------|-------------|-------------|--------------|
| Preventative and | \$15,500.00 | \$1,233.68 | \$10,648.59 | \$4,851.41 |
| Predictive | | | | |
| Capital Repair | \$20,000.00 | \$0.00 | \$13,537.46 | \$6,462.54 |
| and Replacement | | | | |

FLOW TRACKING

| Month/Yr | Well No. 3 | Well No. 7 | Well No. 8 | Plant Production |
|-----------------|------------|------------|------------|------------------|
| | Gallons | Gallons | Gallons | Gallons |
| July 2010 | 1,197,000 | 4,200,200 | 0 | 5,397,200 |
| August 2010 | 1,176,000 | 4,522,200 | 0 | 5,698,200 |
| September 2010 | 1,184,000 | 4,366,900 | 0 | 5,550,900 |
| October 2010 | 1,028,000 | 4,366,600 | 0 | 5,394,600 |
| November 2010 | 790,000 | 3,939,800 | 0 | 4,729,800 |
| December 2010 | 1,002,000 | 4,351,000 | 0 | 5,353,000 |
| January 2011 | 830,000 | 3,828,900 | 0 | 4,658,900 |
| February 2011 | 850,000 | 3,776,900 | 0 | 4,626,900 |
| March 2011 | 874,000 | 4,029,300 | 0 | 4,903,300 |
| April 2011 | | | 0 | |
| May 2011 | | | 0 | |
| June 2011 | | | 0 | |
| Monthly Average | 992,333 | 4,153,533 | 0 | 5,146,422 |
| Daily Average | 28,193 | 129,977 | 0 | 158,170 |