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Fred Hurley,  
*Director*

**TOWN OF NEWTOWN**  
WATER AND SEWER AUTHORITY

Marianne Brown,  
*Chairman*  
Louis Carbone  
George Hill  
Alan Shepard  
Eugene Vetrano  
Richard Zang  
Carl Zencey

THESE MINUTES ARE SUBJECT TO APPROVAL BY THE WATER AND SEWER AUTHORITY

The Water and Sewer Authority held a regular meeting directly following its public hearing on May 14, 2015 at the Waste Water Treatment Plant, 24 Commerce Road, Newtown, CT. Chairman Brown called the meeting to order at 8:06pm.

**Present:** Dick Zang, Gene Vetrano, Marianne Brown, Carl Zencey, Alan Shepard

**Absent:** Lou Carbone, George Hill

**Also Present:** Director of Public Works Fred Hurley, Julio Segarra of United Water Environmental, Mike Burton, Peter Scalzo, Kurt Mailman of Fuss & O'Neill, 2 members of the public and 2 members of the press

**Public Participation** - None

Approval of the Minutes – The previously distributed minutes of the public hearing on 4/9/15 and the regular meeting on 4/9/15 were unanimously approved.

**UNFINISHED BUSINESS**

*10-22 Washington Avenue* – Mr. Shepard recused himself from this topic. Mr. Zang moved that the WSA request the applicant 10-22 Washington Avenue to resubmit mapping in accordance with the comments from Fuss & O'Neill and argument to use 2007 data for the 2 parcels outside the sewer service area. Mr. Zencey seconded, motion unanimously approved.

Mr. Zang moved that they confirm that the 5 properties, 10, 18, 20, 20A and 22 Washington Avenue are in the sewer service area as the August 12, 2012 map reflects. Mr. Vetrano seconded, motion unanimously approved.

*Hawleyville Sewer Extension* – Mr. Mailman provided and updated a flow data spread sheet (Attachment A). They have had additional parcels that have shown interest. This information shows that there is no pre dedicated use for the larger parcels and to set a cap on the flow in the agreement. One of the concerns looking at the flows is that if someone backs out that there is enough money to continue with the project, which there will be. Once they get the firm commitment from the property owners then they will work with them to iron out the specific design details for the properties.

Fuss & O'Neill has coordinated with DOT about pavement repair. Permitting is almost complete. They need to get agreements, sewer location forms and grinder pump agreement forms executed. They

are hoping to go out to bid June or July. Even if delayed until August, a contractor can be chosen and the project in the ground by fall.

*5 School House Hill Road* – Mr. Hurley explained that the Health Department’s recommendation is to get them into the sewer. They are going to pay benefit assessment and pay for a grinder pump and installation of a wet tap. The total cost to hook up will be less than the installation of a new septic. Mr. Zang moved that based on the Health Department’s recommendation, accept the homeowners proposal to extend sewer service to 5 School House Hill Road contingent upon the property owner paying for the installation and the benefit assessment and upon signing a sewer service extension agreement. Mr. Vetrano seconded motion unanimously approved.

*4 Berkshire Road* – That sewer project was mandated by the extension to the high school. 4 Berkshire Road choose not to hook up and has to pay admin charges. Mr. Hurley will look into how many properties are only paying the admin fees and let the board know what the impact will be. Mr. Zang moved to table 4 Berkshire Road, Mr. Shepard seconded, motion unanimously approved.

## **NEW BUSINESS**

*Committee Reports* – Dick Zang sent out a draft of the sewer use regulations dated May 10, 2015. Once members have had a chance to review it and give their input it will go to Attorney Grogins and Fuss & O’Neill for review.

*Report by United Water Environmental Services Inc.* – The plant is running well, report is attached (Attachment B).

*Report by Public Works Director* – None

Having no further business, meeting was adjourned at 9:16pm

Arlene Miles, Clerk

Attachment A

**TABLE 2**  
**HAWLEYVILLE FLOW CALCULATIONS**  
**GRINDER PUMP STATIONS & LOW PRESSURE SEWER**  
**NEWTOWN CT**

Apr-15

Assume total of 300,000 sq.ft. commercial/Industrial building for parcels (10 Hawleyville Road & 90 Mount Pleasant Road)

Property Type	Development Address	# of Homes or seats	Flow		Average Flow		Peak Hour Flow		Design Flow	E-One Grinder Pump Type
			gpd/unit	gpd	gpd	gpd*	gpm	gpm		
Commercial	10 Hawleyville Road (102.7 Acres)	Area (Sq. ft.) 300,000	0.1	20,000	14	112,000	78	78		Lift Station
Commercial	90 Mt. Pleasant Road (34.25 Acres)	100,000	0.1	10,000	6.9	56,000	39	39		QuadPlex s.2
Office****	115 Mt. Pleasant Road	6,128	20 gpd/Employee	613	0.4	3,432	2	2		Duplex (D-Series)
Retail	117 Mt. Pleasant Road	10,000	0.1	1,000	0.7	5,600	4	4		Duplex (D-Series)
Office****	121 Mt. Pleasant Road	3,818	20 gpd/Employee	382	0.3	2,138	1	1		Duplex (D-Series)
Gas Station	131 Mt. Pleasant Road (Gas Mart)	4,796	0.1	480	0.3	2,686	2	2		Duplex (D-Series, Explosion Proof)
Thai Delight Restaurant	133 Mt. Pleasant Road (40 seats)	40	45 gpd/seat	1,800	1.3	10,080	7	7		Duplex (D-Series)
Office/Residential*****	136 Mt. Pleasant Road		20 gpd/Employee	451	0.3	2,526	2	2		Duplex (D-Series)
Office*****	141 Mt. Pleasant Road	6,524	20 gpd/Employee	652	0.5	3,653	3	3		Duplex (D-Series)
Retail/House	142 Mt. Pleasant Road	6,931	0.1	693	0.5	3,881	3	3		Duplex (D-Series)
Retail	147 Mt. Pleasant Road	3,880	0.1	388	0.3	2,173	2	2		Duplex (D-Series)
Commercial	9 Covered Bridge (Future Restaurant)**	180	45 gpd/seat	8,100	5.6	45,360	32	32		Duplex (W-Series)
Commercial	9 Covered Bridge (Future Church)**	300	1 gpd/seat	300	0.2	1,680	1	1		Duplex (D-Series)
Town House/ Condos	9 Covered Bridge Road (Future Town House/Condo Complex)**	70	185 gpd/condo	12,950	9.0	72,520	50	50		Duplex (W-Series) s.4
Mobile Homes	160 Mt. Pleasant Road****	27	125 gpd/Mobile Home	3,375	2.3	18,900	13	13		GRAVITY Connection
Mobile Homes	160 Mt. Pleasant Road (Gravity 1/1)		300 gpd/in.dia/mile	341	0.2			0.2		
Residential	Mt. Pleasant Road (#135, one Bedroom)	1	185	185	0.1	1,036	1	1		Simplex
Residential	Mt. Pleasant Road (#137, two Bedrooms)	1	185	185	0.1	1,036	1	1		Simplex
Residential	Mt. Pleasant Road (#139, 3-Bedrooms)	1	185	185	0.1	1,036	1	1		Simplex
Residential	#2 Covered Bridge	1	185	185	0.1	1,036	1	1		Simplex
Residential	#1 Hillcrest Drive	1	185	185	0.1	1,036	1	1		Simplex
Residential	#4 Hillcrest Drive	1	185	185	0.1	1,036	1	1		Simplex
Residential	#6 Hillcrest Drive	1	185	185	0.1	1,036	1	1		Simplex
Residential	#5 Hawleyville Road	1	185	185	0.1	1,036	1	1		Simplex
Residential	#3 Hawleyville Road	1	185	185	0.1	1,036	1	1		Simplex
<b>TOTAL*</b>				63,190	44	351,953	244	244	245	

Assume five percent (5%) future wastewater contributions from uncommitted properties along the route of the sewer extension

**Assumptions:**

- \* Assumes proposed commercial development limited to 300,000 sq. ft. (per DPW recommendation for parcels #27 & #33)
- \*\* Assumes proposed development will include (not solely) a Restaurant with approximately 180 seats serving breakfast, lunch and dinner
- \*\*\* Assumes proposed development will include a Church with approximately 300 seats
- \*\*\*\* Assumes 185 gpd/condo pursuant to proposed Newtown Sewer Use Regulation amendments in WSA Meeting Minutes dated December 29, 2014
- \*\*\*\*\* Number of units taken from Arrel Engineering Group, LLC Concept Plan 'C' drawing dated 8/22/14
- \*\*\*\*\* Assume 125 gpd/Mobile Home pursuant to proposed Newtown Sewer Use Regulation amendments in WSA Meeting Minutes dated December 29, 2014
- \*\*\*\*\* Assume 300 gpd/in.dia/mile for Inflow/Infiltration (Midway Home Estates only)
- \*\*\*\*\* Assume 20gpd/employee (Office avg. 200 sq. ft. gross area/person)
- \*\*\*\*\* 136 Mount Pleasant contains an office and a residential building. Flow for office calculated assuming 20gpd/employee (Office avg. 200 sq. ft. gross area/person) plus flow for residential building at 185 gpd
- \*\*\*\*\* Assume parking factor of 5.6 for peak hour
- \*\*\*\*\* Assume No 1/1 from the new proposed low pressure sewer due to butt fused joints
- \*\*\*\*\* #133 Mt. Pleasant Rd (Thai Delight, lunch & dinner) has 40 seats
- \*\*\*\*\* Areas of parcels 3, 4, 6, 8, 12 & 14 were taken from the Summary Appraisal prepared by Kern Fazio in November 2013 for Newtown WPCA.



Attachment B



**MONTHLY OPERATING REPORT  
APRIL, 2015  
TOWN OF NEWTOWN WPCF**

**EXECUTIVE SUMMARY**

During the month of April the plant process performed well. Nitrogen average pound per day during the month was **17.45**. The open channel flow meters have been removed from each location at a cross lot manhole on Taunton Lake Dr. coming from Diamond Dr. and directly prior to the Taunton Lake pump station. Over 8400 feet was jetted by public works and the lower portion was video inspected.

SCADA project is close to completion with just some minor adjustment through the pump stations and plant.

Pump stations and plant SCADA have been in operation and working well.

There have been no operational events due to the upgrade work being performed. The DEEP has been kept in the loop as the project proceeds.

We are operating ultraviolet treatment and alum dosing process from May 1<sup>st</sup> 2015 – September 30<sup>th</sup>.

**The main focus during the month of April was to maintain plant operations while preparing for the new compliance season.**

Plant ran well with no major issues.

Below are some of the highlighted major operation and maintenance items that are currently in progress or completed.

**PROJECTS**

**SCADA**

Full operations, Fire and security tie-in and tests remains

**SOLAR**

**Not operating**

- **Solar panels waiting for repair from service technician.**
- **Sound Solar may be our new service technicians.**

## **SEWER PLANT - OPERATIONS & MAINTENANCE**

- Worked on D.O. probe for Ditch #1
- Cleaned up glass in basement of Filter Building from UV lights.
- Inventory of UV bulbs
- Changed motor for Clarifier #2 driver
- Flushed out the Return Activated Sludge (RAS) tubes.
- Troubleshoot Plant drain pump
- Repaired hinge on door for flow control meter
- Knapp Engineering repaired control systems for the plant drain pumps
- Butterworth & Scheck repaired and replaced valves in GBT in Filter Building
- Calibrated all flow meter at plant
- Repaired hinge on door for flow meter control
- UV and alum system was placed on line as per permit
- Closed gate #2 in RAS splitter box
- Flushed out Return Activated Sludge (RAS) tubes on Clarifier #2
- Removed and cleaned A bank from UV channel
- Installed racks on banks A&B and tested UV systems
- Cleaned garage and maintenance area
- Changed tubing on influent sampler
- Lubricated TWAS pump
- Checked transducer in plant drain wet well.

## **COLLECTION SYSTEMS –**

### **PUMP STATIONS, GRINDER PUMP, SEPTAGE AND SANITARY LINE & MANHOLES**

**8400 feet was jetted by the Public Works Department.**

**The entire Taunton contract area was jetted.**

**The lower section of Taunton lake was video inspected in May.**

- Precision installed fire alarm at Hanover, Sandy Hook and Taunton Lake pump station
- The sewer line behind Newtown police department was jetted (300 feet) from the Bocce court up 300 feet found signs of grease build-up.
- Replaced grinder pump at 5 Oakview Rd.
- Travers Electrical made adjustment to power supply and pump #2 at Hawleyville Pump Station
- Calibrated meters at Hanover, Taunton Lake, Hawleyville, Sandy Hook, and Reset level of transducer at Taunton Lake
- Butterworth to repair manhole #4 at Washington and Riverside Avenue
- Jet and camera the sewers at the Taunton Lake area

## ODOR ABATEMENT

No odors this month.

## STAFFING

We are presently fully staffed for the month of May.

## TRAINING

All employees continued with our in house OSHA compliance safety training through Pure-Safety.

## REGULATORY COMPLIANCE

In Compliance

## PLANT - SOLIDS HANDLING

Type	Gallons This Month	Target	Total Gallons This Year	Target
Sludge (SYNAGRO)	26,000	40,625 gal/mo 2 loads/wk	.305 MG	0.527 MG 75 loads/yr

## ANALYSIS OF WASTED SLUDGE

Waste Activated Sludge	Total Gallons	Min %	Max %	Average %	Total Pounds
SYNAGRO	26,000	4.49	4.92	4.77	10,338

## EMERGENCY CALL-OUTS

Type	Total This Month	Total for Year
Sewer Backup	0	0
Pump Station	0	1
Plant	0	1
Odor	0	0
Grinder Systems	1	4

## PROJECT MAINTENANCE

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

Type	Total This Month	Calendar	Total for Year
Preventative Maintenance	33		126
Corrective Maintenance	24		92
Emergency Maintenance	2		3
Call-Before-You-Dig (CBYD)	58		123

## FIELD OPERATIONS

Type	Monthly Ft	Total for Yr	Contract	Amount Left
Sewer Cleaning Scheduled	8,748	8,748	*****	****10,000****
Sewer Cleaning Unscheduled	0	0	*****	*****
Other	Monthly Qty	Total for Yr	Contract	Amount Left
Manhole Inspections	33	49	*****	N/A
Grinder Replacements	1	6	As Necessary	N/A
New Grinder Stations	0	0	*****	N/A

## PUMP STATIONS

Station	Baldwin	Hanover	Sandy Hook	Taunton Lake	Hawleyville	Fairfield Hills Metering
Number Inspections/Mo.	8	8	8	8	8	8
Power Failures	0	0	0	0	1	0
Number Callouts	0	0	0	0	0	0
Maintenance & Repair	1	1	1	1	1	0
Flow (Total MG)	.124	.333	1.804	.688	.619	6.506
(Avg. Daily GPD)	4,138	11,102	60,136	22,941	20,651	216,883

## FINANCIAL STATUS – MAINTENANCE

Item	Budget \$	\$ Spent/Mo	\$ Spent/Yr	\$ Remaining
Preventative and Predictive	\$55,000	\$5,789.88	\$55,186.87	-\$186.87
Capital Repair and Replacement	\$95,000	\$11,789.71	\$141,400.02	-\$46,400.02

**HAWLEYVILLE SEWER DISTRICT**  
**EXECUTIVE SUMMARY - OPERATION & MAINTENANCE**

**INSPECTIONS**

Type	Total This Month	Total for Year
Hawleyville Pump Station		
Grinder Pump Station 1		
Grinder Pump Station 2		
Grinder Pump Station 3		
Grinder Pump Station 4		

**EMERGENCY CALL-OUTS**

Type	Total This Month	Total for Year
Hawleyville Pump Station		
Grinder Pump Station 1		
Grinder Pump Station 2		
Grinder Pump Station 3		
Grinder Pump Station 4		

**HAWLEYVILLE MAINTENANCE**

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

Type	Total This Month	Total for Year
Preventative Maintenance		
Corrective Maintenance	1	2
Emergency Maintenance		

**FIELD OPERATIONS**

Hawleyville District	Monthly Qty	Total for Year
Service Inspections		
Call-Before-You-Dig (CBYD)	0	0

**HAWLEYVILLE - FINANCIAL STATUS – MAINTENANCE**

Item	Budget \$	\$ Spent/Mo	\$ Spent/Yr	\$ Remaining
Preventative and Predictive				
Capital Repair and Replacement				

## FLOW AND LOADS TRACKING

Budget Month/Yr	Influent Flow, MGD	Influent BOD, lbs	Influent TSS, lbs	Calendar Month / Year	Average N, lbs
July 2014	.422	828	746	January 2015	22.73
August 2014	.351	695	513	February 2015	17.43
September 2014	.299	589	586	March 2015	19.02
October 2014	.351	650	607	April 2015	17.45
November 2014	.421	753	850	May 2015	
December 2014	.604	947	815	June 2015	
January 2015	.534	732	607	July 2015	
February 2015	.487	684	603	August 2015	
March 2015	.575	803	726	September 2015	
April 2015	.553	614	678	October 2015	
May 2015				November 2015	
June 2015				December 2015	
Monthly Average	.460	770	674	Calendar Year to Date Average	19.15
<b>Contract</b>	Average 0.53 MGD Adjustment = Change in Flow in MG * \$17.83/MG	Avg. 999 lbs/day Adjustment = Change in BOD in lbs * \$0.04/lb	Avg. 703 lbs/day Adjustment = Change in TSS in lbs * \$0.16/lb	<b>Contract</b>	NPDES Permit Limit = 42 Lbs/day
Deviation % (+/-)	-13.26	-26.97	-4.11	Deviation % (+/-)	-54.38

## FAIRFIELD HILLS WTF

### EXECUTIVE SUMMARY

The staff continues to improve equipment and standard operating methods to prevent Fairfield Hills WTP failures. Well # 7 is operating as the lead pump. The water treatment plant operated very well in April.

GHD and Fuss & O'Neill are working to comply with the DPH upgrade requests and all temporary repairs or modifications have been completed. Pictures of the completed work were sent to the DPH.

Check and maintain calibrations of all equipment.

Listed below are some of the highlighted major operation and maintenance items that are currently in progress or have been completed.

### OPERATION & MAINTENANCE

- Monthly Water meter readings
- Precision alarm working at Well #7 and Hawleyville
- Calibrated pH meter at the water treatment plant
- Opened water valves for all the irrigation systems for the Parks & Recreation
- Installed new gas line for generator and wired

## 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

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

## FAIRFIELD HILLS MAINTENANCE

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

Type	Total This Month	Total for Year
Preventative Maintenance	9	40
Corrective Maintenance	1	6
Emergency Maintenance	1	2

## FAIRFIELD HILLS WATER - FIELD OPERATIONS

Other	Monthly Qty	Total for Year
Valve Inspections	2	3
Hydrant Inspections	0	1
Service Inspections	2	26
Call-Before-You-Dig (CBYD)	7	17

## FINANCIAL STATUS – MAINTENANCE

Item	Budget \$	\$ Spent/Mo	\$ Spent/Yr	\$ Remaining
Preventative and Predictive	\$15,500.00	\$645.66	\$17,075.51	-\$1,575.51
Capital Repair and Replacement	\$20,000.00	\$29,155.81	\$108,927.47	-\$88,927.47

## WELL PRODUCTION

Month/Yr	Well No. 3 Gallons	Well No. 7 Gallons	Well No. 8 Gallons	Plant Production Gallons
July 2014	456,000	6,014,500	0	6,470,500
August 2014	1,000	5,589,800	0	5,590,800
September 2014	0	6,124,500	0	6,124,500
October 2014	0	6,215,200	0	6,215,200
November 2014	93,000 ***	2,257,500 ***	0	2,350,500 ***
December 2014	889,000	6,019,600	0	6,908,600
January 2015	0	3,674,700	0	3,674,700
February 2015	0	7,070,400	0	7,070,400
March 2015	0	4,430,500	0	4,430,500
April 2015	0	5,154,400	0	5,154,400
May 2015			0	
June 2015			0	
Monthly Average	143,900	5,255,110	0	5,426,189
Daily Average	0	171,813	0	171,813

\*\*\*Water reading were only two weeks' worth of operation due to holiday schedules