

AGENDA
BOARD OF SEWER COMMISSIONERS

January 22, 2014

4:30 PM

Water Pollution Control Facility

115 Water Street

Newburyport, MA 01950

1. **Appointments**

2. **Approval of Minutes/Bills/Transfers**
 - Minutes of November 20th, 2013

3. **WPCF Report/Updates**
 - OPM Pieter Hartford, P.E., MPH Environmental

4. **Sewer Superintendent's Report – Jamie Tuccolo**

5. **Pretreatment Report – Joseph Dugan**

6. **Chief Operator's Report – Joseph Dugan**

7. **Director's Report – Anthony Furnari**

8. **City Engineer's Report – Jon-Eric White, P.E.**

9. **Old/New Business**

10. **Executive Session**

11. **Confirm Next Meeting**

MINUTES OF THE BOARD OF SEWER COMMISSIONERS

November 20, 2013

4:30 P.M.

115 Water Street

Wastewater Treatment Facility

MEMBERS ATTENDING: Sewer Commissioners, David Hanlon, John Tomasz, and Robert Cook

STAFF: Director Tony Furnari, Sewer Collections Superintendent Jamie Tuccolo, Chief Operator Joe Dugan, Assistant Chief Operator Robert Bradbury, and Lisa Valcich Business Manager

AGENDA ITEM #1 Appointments

None

AGENDA ITEM #2 Minutes/Bills/Transfers

A motion was made by Commissioner Tomasz and seconded by Commissioner Cook to accept the October 23rd 2013 minutes as presented.

Vote: unanimous

AGENDA ITEM #3 WWTF Expansion Project

The WWTF report was given by Pieter Hartford. Updates from the previous meeting were as follows:

Contract 1 Construction status:

- Punchlist remains at \$41,035 (see attachment)
- Waterline lighting subcontractor on-site November 19th to address Deficiencies observed during LEED Cx
- Waterline working w/GBS to provide LEED Documentation for construction phase

Contract 2 Status:

- Marked improvements to Fournier press operation
- Demobilized temporary sludge dewatering system
- Final pavement placed
- Building, Electrical, Fire protection and plumbing inspections performed by the City Building Insp. within the last week to obtain temporary occupancy permit
- Two-Phased approach for modifications to sludge conveyor
- Primary clarifier No.1 expected back in-service this week.
- Completion of primary clarifier No.2 still expected by the end of the year.

Project Budget Status

Summary of project costs

Execution of MPH Amendment No.6 for LEED peer review and documentation services provided by Green Building Systems

AGENDA ITEM #4

Sewer Superintendent's Report

The Sewer Superintendent's report was presented by Jamie Tuccolo. Mr. Tuccolo noted the following:

- Multiple meetings with Mayor, regarding PI.
- Test pits for Graf Road force main completed on September 26/27. Upon uncovering the force main it was noted the size of the FM was larger than anticipated. The OD on the existing force main is 19.6 AC pipe. After lengthy discussions with our engineer and contractor. Connecting to the existing force main is not an option at this time. Attached is a memo with cost options along with construction phases. The only viable options are to construct two new force main's. One for Graf Rd and one for Hale.
- Attached are the results from our research for property 55 P.I. Turnpike (pump issue).
- MVPC along with PI operator inputting GIS location of vents on the island is completed, waiting to review results.
- Ordered two new pumps for Whites and VFD to convert from single to three phase. This work was completed October 29th 2013.
- AIRVAC started winter timing on 11/12/13; completion date is set for 11/22/13

Commissioner Cook made a motion, seconded by Commissioner Tomasz to accept the Sewer Superintendent Report as presented.

Vote: unanimous

AGENDA ITEM #5

Pretreatment Report

Reports due for the month of September have been received from the following industries and found to be in good order; Electronic Products Inc., PCI Synthesis, Strem Chemical and Micrometal Technologies Corp.

I conducted the Annual Inspection of Strem Chemical.

I conducted an inspection of Rochester Electronics 10 Malcolm Hoyt facility.

I attended the annual EPA Pretreatment Coordinator Workshop Conference in Chelmsford Ma.

A motion was made by Commissioner Tomasz seconded by Commissioner Cook to accept the Pretreatment Report. Vote: Unanimous

AGENDA ITEM #6

Chief Operator's Report

Monthly effluent BOD for October 2013 was 30 mg/l with 92% removal.

Monthly average effluent suspended solids average for September 12 mg/l with 97% removal.

Our acute toxicity testings having passed for more than the last four quarters. We will be writing EPA to request a reduction in this testing. We are now having the analysis performed quarterly and hope to reduce the testing to 2 times yearly.

Odor Complaints

Some odor complaints were received in October due to pressing of sludge and wet hauling sludge from the plant. We expect odors to be less with the Fournier presses in use and the temporary sludge outdoors eliminated.

Sewer Calls

1 total Sewer calls 0 regular hours 2 overtime hours – 1 house plugs

Plum Island calls 2 total calls – 0 regular hours and 14 overtime hours

Project Repairs

Staff continues weekly coordination meetings for phase two contractor and engineers.

The Fournier presses seem to be running well and we have achieved the desired throughput. Our cake solids were much higher than previously reported and have reached from 22 to 25 percent. Training from Fournier went well last week with staff. Fournier representatives were on site for most of the week.

We will be switching primary tanks for repairs and upgrades and staff are also cleaning and switching gravity thickeners.

Staff has received several hours of training in the past month related to equipment, presses, scada and controls.

All of the temporary dewatering equipment has been removed from the plant and terminated.

A motion was made by Commissioner Tomasz, seconded by Commissioner Cook to accept the Chief Operator's Report. Vote: Unanimous

AGENDA ITEM #7 Director's Report

- Monthly meetings with Mayor and Staff for operational, capital projects and budget issues with various divisions.
- Employees sent to various seminars in reference to their department.
- Attend Mayor's monthly department head meetings
- Continued monthly meetings with City Planner, Building Commissioner and Health Director to review city projects
- Monthly meeting with Construction and Engineering staff on water issues.
- Attend monthly construction progress meetings for the WWTP.
- Monthly meetings with OPM reviewing WTP Project.
- Monthly inspection of WWTP with Mayor, OPM and Consultants.
- Attend Budget and Finance meetings.
- Attend City Council/Neighborhood meetings.
- Meetings with Mayor/Staff/Legal/Outside engineer regarding proposed repairs on Plum Island.
- Business manager and staff attending MUNIS training this month.
- Test pits completed for Graf Road Force main project. The anticipated scope for this project has changed warranting a discussion needed for new options.
- Location documentation of the GIS vents on PI properties completed under the supervision of the Sewer Superintendent.
- Coordination meetings for the building layout for new Administration Building.
- The last gravity thickener has been reassembled for operation at the WWTP.
- Fournier presses are on line. Staff has been training on operations.
- Stock has been ordered for the upgrading of electrical and pumps for the Whites Court pumping station.
- Paving around the new building has been completed. Final stages of finish work have started.
- Second meter policy has been taken out of committee for this year. Councilor Herzog said it will be revisited next year with the new council.

A motion was made by Commissioner Cook, seconded by Commissioner Tomasz to accept the Director's Report. Vote: Unanimous

AGENDA ITEM #8

City Engineer's Report

N/A

AGENDA ITEM #9

Old/New Business

Collection System Manager Jamie Tuccolo passed out a Draft Memorandum to the Commission on the Graf Road Force Main – Construction Alternatives Memorandum (See Attachment)

A Presentation to the Commission by Jamie on the Proposed Three Phase Graf Road Force Main Construction (See Attachment)

A motion was made by Commissioner Tomasz and 2nd by Commissioner Cook to make funds available in the amount of \$101,088.50 from the Graf Rd, project for the Engineering for dual force mains.

Vote: unanimous

A Plum Island Grinder pump Analysis was handed out to the Commission. (See Attachment) A letter will go out to the Residents who currently have grinder pumps in regards to winterizing the pumps if not in use.

AGENDA ITEM #10

Executive Session

None

AGENDA ITEM #11

Confirm next Meetings

December 18th 6:00 pm

ADJOURN

The Commission motioned to adjourn at 5:56 pm.

Submitted by:
Dawn Gettman
Newburyport DPS

PRETREATMENT REPORT
January 13, 2013

Monthly Reports

Reports due for the month of December have been received from the following Industry and found to be in good order; Electronic Products Inc. and Strem Chemical. Reports have not been received from PCI Synthesis and Micrometal Technologies Corp. Reports are due the 15th day of the month.

Sampling:

Electronic Products Inc., 12/11/13 — OK, did not exceed Federal or local limits for metals.

PCI Synthesis Inc., 12/4/13— OK, did not exceed Federal limits for VOC's (624).

Micrometal Technologies Inc.,12/5/13—OK, did not exceed Federal or local limits for metals.

Strem Chemical, 12/13/13— OK, did not exceed Federal limits for VOC's (624).

I sampled Dianne's Fine desserts for FOG. No violation to report.

In previous FOG sampling, Mission Grille and Port Tavern were found to be in violation. Both will be notified of the violations.

I have received Zero Discharge Confirmation Letters from Circle Finishing and Dynachrome.

Respectfully,

David McGrath
Pretreatment Coordinator

January 2014 Operations Report

Monthly BOD effluent for December was **25.4 mg/l** with **92** per cent removal.

Monthly average effluent Suspended Solids for December averaged **32.2 mg/l** with **88** per cent removal.

Some of the parameters exceeded limits due to gravity thickener problems, clarifier problems, and aerobic digester problems. Due to dewatering and units which had to be removed from service and dewatered this caused some upsets of plant. Because of weather and freezing we had to empty tanks quicker than usual. Limits that were out of range were suspended solids effluent and enterococci.

Odor Complaints

Odors were noticed around December 25, due to a leaking back into temporary digester. We have closed the valve manually and hope this will be eliminated on the aerobic digester now online.

Sewer Calls December 2013

Sewer Calls **5** total calls **0** regular -- **22** hours overtime
4 house plug. **1** Street.

Plum Island Calls **1** total calls **6** hours overtime.

Projects Repairs

Staff continues weekly coordination meetings for phase two contractor and engineers.

We are dewatering primary clarifier 2 again because of a balance problem with the rake arm and skimmer. This will be checked over by contractors to see if they can align it better. Primary clarifier 2 is back in service as of today and back in working order.

We are still waiting for repair of gravity thickener 2 drive gears that failed. The unit is in the hands of the manufacturers.

We had a failure of the heating unit in the new operations building. The service company informed us the compressor and control panels for the unit are no good. The lead time for parts and equipment is 4 to 5 weeks. We will temporarily be looking into temporary electric heating.

The new channel grinder for backup was seized up and jammed. This has not been used but will be examined this week to check for problems.


Preparing costs for budget on chemicals, and plant line items.

Final work on the sludge conveyors is finished as of last week and seems to be working well.

We are encountering problems in the odor control (potassium Permanganate system for Fournier presses. Mixing has been poor and settling and blockage of pipes shuts down the odor control system to presses. Mixers have loosened off the shaft and have been the largest part of the mixing problem. Also the size and amount of mixers in the tank is not satisfactory.

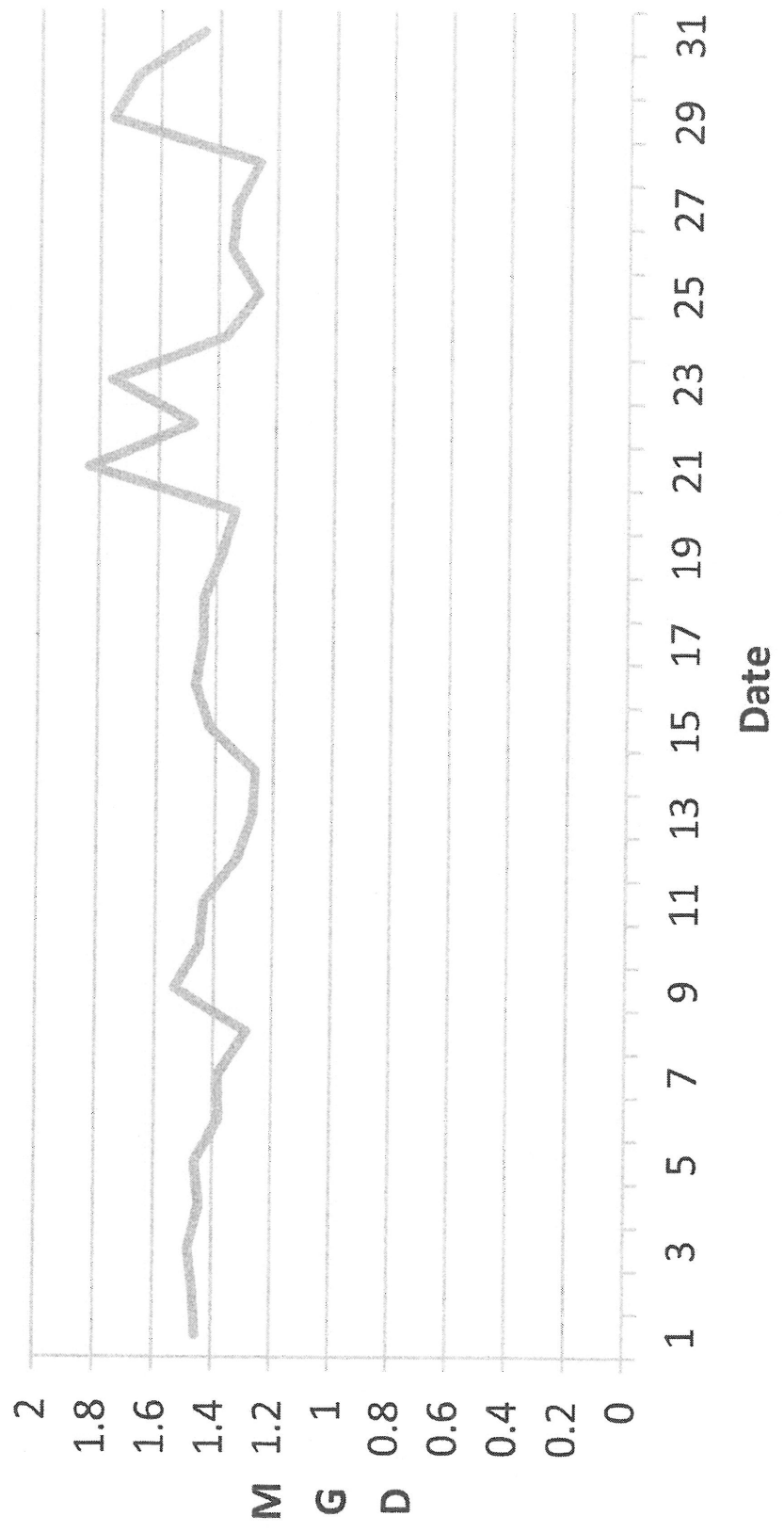
Primary clarifier number 2 dewatered and cleaned for inspection. There still seems to be an imbalance of the rake arm and Paul McNevin has noted this.

Sincerely,



Joseph Dugan,
Chief Operator, Newburyport WPCF

December 2013 Effluent Flow



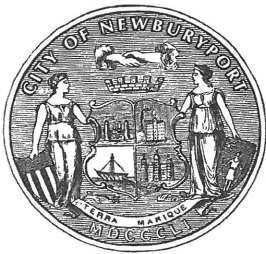
parameter	May-2013		June-2013		July-2013		August-2013		September-2013		October-2013		November-2013		December-2013	
	inf	eff	inf	eff	inf	eff	inf	eff	inf	eff	inf	eff	inf	eff	inf	eff
arsenic	0.002	nd	0.004	nd	0.003	nd	nd	nd	0.003	nd	0.003	nd	0.002	nd	0.002	nd
cadmium	nd	nd	0.0007	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
chromium	0.004	nd	0.01	nd	0.006	nd	0.003	nd	0.006	nd	0.003	nd	0.005	nd	0.005	nd
cobalt	nd	nd	0.003	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
copper	0.11	0.022	0.31	0.019	0.12	0.007	0.83	0.023	0.12	0.007	0.83	0.023	0.12	0.007	0.83	0.023
lead	0.005	0.0008	0.013	0.0005	0.007	nd	0.006	nd	0.007	nd	0.006	nd	0.007	nd	0.006	nd
mercury	0.056	nd	0.21	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
nickel	0.009	0.004	0.017	0.005	0.008	0.002	0.003	0.002	0.008	0.002	0.003	0.002	0.003	0.002	0.003	0.002
silver	nd	nd	0.002	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
zinc	0.34	0.064	0.42	0.012	0.2	0.01	0.95	0.01	0.2	0.01	0.95	0.01	0.2	0.01	0.95	0.01
cyn total	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
chromium hex	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
nitrogen a	nd	22	nd	8.8	nd	16	nd	22	nd	16	nd	22	nd	16	nd	22
nitrogen nitrite	nd	0.34	nd	0.74	nd	0.48	nd	0.33	nd	0.48	nd	0.33	nd	0.48	nd	0.33
nitrogen Nitrate	nd	5	nd	11	nd	3.4	nd	4.4	nd	3.4	nd	4.4	nd	3.4	nd	4.4
Nitrogen TK	nd	23.5	nd	10.3	nd	18.3	nd	26.8	nd	18.3	nd	26.8	nd	18.3	nd	26.8
parameter	Sep-13	Sep-13	Oct-13	Oct-13	Nov-13	Nov-13	Nov-13	Nov-13	Nov-13	Nov-13	Nov-13	Nov-13	Nov-13	Nov-13	Nov-13	Nov-13
arsenic	0.005	nd	nd	nd	nd	nd	na	na	nd	nd	na	na	nd	na	na	100
cadmium	0.0007	nd	nd	nd	nd	nd	na	na	nd	nd	na	na	nd	na	na	na
chromium	0.012	nd	0.002	nd	0.0007	nd	100	100	0.0007	nd	100	100	0.005	nd	100	100
cobalt	0.002	nd	nd	nd	nd	nd	na	na	nd	nd	na	na	nd	na	na	na
copper	0.26	0.008	0.052	0.009	0.086	0.009	82	82	0.086	0.009	82	82	0.084	0.016	81	81
lead	0.023	nd	0.003	nd	0.007	nd	100	100	0.007	nd	100	100	0.006	0.0007	88	88
mercury	0.48	nd	0.037	nd	nd	nd	100	100	nd	nd	100	100	0.053	nd	100	100
nickel	0.013	0.002	0.004	0.003	0.01	0.003	25	25	0.01	0.003	70	70	0.006	nd	100	100
silver	0.003	nd	nd	nd	nd	nd	na	na	nd	nd	na	na	nd	na	na	na
zinc	0.43	0.025	0.11	0.013	0.11	0.013	88	88	0.11	0.013	88	88	0.11	0.016	85	85
cyn total	nd	nd	nd	0.02	nd	0.02	*	*	nd	0.02	*	*	nd	0.005	*	*
chromium hex	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
nitrogen a	nd	20	nd	20	nd	20	nd	20	nd	20	nd	20	nd	20	nd	30
nitrogen nitrite	nd	0.53	nd	0.73	nd	0.73	nd	0.73	nd	0.73	nd	0.73	nd	0.16	nd	0.16
nitrogen Nitrate	nd	4.9	nd	5.1	nd	5.1	nd	5.1	nd	5.1	nd	5.1	nd	1.5	nd	1.5
Nitrogen TK	nd	21	nd	20	nd	20	nd	20	nd	20	nd	20	nd	28	nd	28

Parameter Code	Parameter Name	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type	
		Value 1	Value 2	Units	Value 1	Value 2	Value 3				Units
00310	BOD, 5-day, 20 deg. C	Smpl. = 305	= 408.3	lb/d	= 25.4	= 30.8	= 34	mg/L	0	03/07	24
1 - Effluent Gross											
Season: 0	Req.	<= 851 Monthly Average	Req Mon Daily Maximum	Pounds per Day	<= 30 Monthly Average	<= 45 Weekly Average	Req Mon Daily Maximum	Milligrams per Liter	0	Three Per Week	COMP24
NODI:											
00310	BOD, 5-day, 20 deg. C	Smpl. = 372.2	= 468.5	lb/d	= 303	= 358.3	= 303	mg/L	0	03/DW	24
EG - Effluent Gross											
Season: 0	Req.	<= 1276 Weekly Average	Req Mon Daily Maximum	Pounds per Day	Req Mon Monthly Average	Req Mon Weekly Average	Req Mon Daily Maximum	Milligrams per Liter	0	3 Days Every Week	COMP24
NODI:											
00310	BOD, 5-day, 20 deg. C	Smpl. = 3285	= 468.5	lb/d	= 303	= 358.3	= 303	mg/L	0	03/07	24
G - Raw Sewage Influent											
Season: 0	Req.	Req Mon Monthly Average	Req Mon Daily Maximum	Pounds per Day	Req Mon Monthly Average	Req Mon Weekly Average	Req Mon Daily Maximum	Milligrams per Liter	0	Three Per Week	COMP24
NODI:											
00310	BOD, 5-day, 20 deg. C	Smpl. = 358.3	= 468.5	lb/d	= 303	= 358.3	= 303	mg/L	0	03/DW	24
O - See Comments											
Season: 0	Req.	Req Mon Weekly Average	Req Mon Weekly Average	Pounds per Day	Req Mon Weekly Average	Req Mon Weekly Average	Req Mon Daily Maximum	Milligrams per Liter	0	3 Days Every Week	COMP24
NODI:											

Code	Parameter Name	NODI	Quantity or Loading		Quality or Concentration		Units	# of Ex.	Freq. of Analysis	Smpl. Type
			Value 1	Value 2	Value 1	Value 2				
00400	pH	Smpl.	=	6.76	=	7.14	SU	0	05/07	GR
1 - Effluent Gross										
Season: 0	Req.		>=	6.5 Minimum		<=	8.5 Maximum	Standard Units	Weekdays	GRAB
NODI:										
00530	Solids, total suspended	Smpl.	=	387.18	=	1173	lb/d	2	02/02	24
1 - Effluent Gross										
Season: 0	Req.		<=	851 Monthly Average		<=	45 Weekly Average	Milligrams per Liter	Twice Per Week	COMP24
NODI:										
00530	Solids, total suspended	Smpl.	=	751.93			lb/d	0	02/02	24
EG - Effluent Gross										
Season: 0	Req.		<=	1276 Weekly Average			Pounds per Day		Twice Per Week	COMP24
NODI:										
00530	Solids, total suspended	Smpl.	=	3067.2	=	37.55	lb/d	0	02/02	24
G - Raw Sewage Influent										
Season: 0	Req.						Pounds per Day		Twice Per Week	COMP24
NODI:										

Parameter Code	Name	NODI	Value 1	Quantity or Loading Value 2	Units	Value 1	Quality or Concentration Value 2	Value 3	Units	# of Ex.	Freq. of Analysis	Smpl. Type
00530	Solids, total suspended	Smpl.	= 2942.5		lb/d					0	02/07	24
O - See Comments												
Season: 0		Req. Weekly Average			Pounds per Day						Twice Every Week	COMP24
NODI:		NODI										
00610	Nitrogen, ammonia total [as N]	Smpl.	= 370.29		lb/d		= 30		mg/L	0	01/30	24
1 - Effluent Gross												
Season: 0		Req. Monthly Average			Pounds per Day		Req Mon Daily Maximum		Milligrams per Liter		Monthly	COMP24
NODI:		NODI										
00630	Nitrite + Nitrate total [as N]	Smpl.	= 20.4		lb/d		= 1.66		mg/L	0	01/30	24
1 - Effluent Gross												
Season: 0		Req. Monthly Average			Pounds per Day		Req Mon Daily Maximum		Milligrams per Liter		Monthly	COMP24
NODI:		NODI										
50050	Flow, in conduit or thru treatment plant	Smpl.	= 1.44		MGD					0	99/99	RC
1 - Effluent Gross												
Season: 0		Req. Monthly Average			Million Gallons per Day						Continuous	RCORDR
NODI:		NODI										

Parameter Code	Name	NODI	Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units	# of Ex.	Freq. of Analysis	Smpl. Type
50050	Flow, in conduit or thru treatment plant	Smpl.	= 1.72	= 1.83	MGD					0	99/99	RE
EG - Effluent Gross												
Season: 0	Req.	<= 3.4 Annual Average		Req Mon Daily Maximum	Million Gallons per Day						Continuous	RECORD
NODI:												
50060	Chlorine, total residual	Smpl.		= 0.09				= 0.27	mg/L	0	05/WK	GR
1 - Effluent Gross												
Season: 0	Req.			<= .23 Monthly Average							Five Per Week	GRAB
NODI:												
51087	Nitrogen, Kjeldahl, total [TKN] [water]	Smpl.	= 345.6		lb/d					0	01/30	24
1 - Effluent Gross												
Season: 0	Req.	Req Mon Monthly Average			Pounds per Day						Monthly	COMP24
NODI:												
61211	Enterococci	Smpl.		= 211						2	05/07	GR
1 - Effluent Gross												
Season: 0	Req.			<= 35 Monthly Average Geometric							Weekdays	GRAB
NODI:												



CITY OF NEWBURYPORT
DEPARTMENT OF PUBLIC SERVICES

16A PERRY WAY
NEWBURYPORT, MA 01950

ANTHONY J. FURNARI, DIRECTOR
ANDREW LAFFERTY, DEPUTY DIRECTOR

PHONE: 978-465-4463
FAX: 978-465-1623

January 13, 2014

Sewer Superintendent Monthly Report

- Multiple meetings with Mayor, regarding PI.
- MVPC along with PI operator inputting GIS location of vents on the Island is completed results are positive.
- AIRVAC completed the timing on the Island on 11/22/13. Attached is the AIRVAC operator's report.
- Reviewing Graf Rd force main replacement options. There have been changes since we last spoke they are as followed:
 - Graf Rd lift station is at capacity, which will affect the force main replacement as far as changing pipe size, pumps etc., Beta who is the company in the process of rewriting the lift station report, has submitted a proposal for the work. Jon Eric, Tony and I are in the process of reviewing.
 - Before any work is done on the force mains a complete hydraulic review needs to be done at Graf and Hale list stations. Once the hydraulic analyses are completed is when the size of the pumps and mains will be determined.
- Reviewing Low st data for low assessment recently completed, with regards to capacity.
- All test have been performed at the stations, the new station analysis should be completed mid-February. Beta is completing this task.
- Had meeting with Joe, Brad, Dave H, Lisa and Katie about PO's issues. The PO's used during the work day will be sent to Katie ASAP, if a PO is used after working hours or during the weekend it will be sent the following work day.
- 12/16/13 Meeting with Mayor, CDM Smith, DEP, and staff JEW, DL, TF, regarding what are the next steps in the process of repairing the water and sewer system on the Island.
- 1/7/14 Meeting in Boston with R&R, Mayor, Jew, TF, and DL regarding PI.

- 1/13/14 Meeting with Town of Newbury, Mayor, TF,DL regarding erosion issues (Southern side) of the Island.

Respectfully Submitted,

Jamie Tuccolo

Collection System Superintendent



BILFINGER

Jamie Tuccolo
Collection System Manager
City of Newburyport Sewer
157 Water Street
Newburyport, MA 01950

6 December 2013

Jamie:

This report is written using our service technician's notes from his time onsite which was November 11th through November 21st. This report is intended to confirm what services our technician, Matt Nard, rendered during his trip including his findings and repairs.

Matt's first day onsite was November 11th, and he went right to work visiting and inspecting system valve pits. Everything went well and Matt only a few valve pits that needed a timing adjustment along Sunset Drive and Old Point. He also found several valve pits off of Northern Blvd. Inner and outer that needed adjustment. While looking over pits on Northern Blvd., Matt did encounter one valve pit that would not fire. Matt brought this pit to Norman's attention and a new controller was placed into service which fixed the issue. On Matt's last day on-site, he and Norman encountered another valve pit that would not operate. While replacing the valve and controller on this valve pit they noticed that the valve wye body was cracked at the threads and leaking, so a new wye body was also installed along with the valve and controller. Matt finished all system valve pit inspections on Thursday, November 21st.

With the exception of some valve pit timing adjustments that needed to be made, Matt found the vacuum system to be running very well and in overall very good shape. In Matt's conversations with Norman it also sounds that call-outs due to hung open valves have been very low. As we found and stated in last year's report, we believe the Plum Island vacuum sewer system continues to be operated and maintained at a high level which is a testament to the

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BILFINGER

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system operators and others involved in making sure the system continues to operate as efficiently as possible.

Thank you for allowing us the opportunity to visit the system and perform the service work described in this report. Please feel free to contact us with any questions you have in regards to this report, or from Matt's time spent visiting and inspecting the system.

Best regards,

Mike Moss
Assistant Service Manager

Bilfinger Airvac Water Technologies Inc.

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CITY OF NEWBURYPORT

DEPARTMENT OF PUBLIC SERVICES

16A PERRY WAY

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ANTHONY J. FURNARI, DIRECTOR

Director's Report January 2014 Sewer Commission

→ NEXT 2 YEARS?
MADISON ST.
FORCE MAIN

- Monthly meetings with Mayor and Staff for operational, capital projects, and budgets issues with various divisions.
- Employees sent to various seminars in reference to their department.
- Attend Mayor's Monthly Department Head meetings.
- Continued monthly meetings with, City Planner, Building Commissioner, and Health Director to review city projects.
- Attend monthly construction progress meetings for the WWTP.
- Attend Budget and Finance meetings.
- Attend City Council /Neighborhood meetings.
- Continued meetings with Mayor/Staff/Legal/Outside engineer regarding proposed repairs on Plum Island.
- Meetings with Mayor to discuss upcoming budget cycle and capital projects.
- Staff SCADA (Supervisory Control and Data Acquisition) training for the use of controls on the primary drives and controls for the Fournier presses has been completed.
- Primary Clarifier # 2 is in the process of completion.
- New ferric chloride controls are running and compatible to the SCADA system.
- DEP toured the plant after our monthly meeting in December to review lab and process controls of the plant.
- Meetings with Mayor, DPS Staff and Town of Newbury officials regarding emergency procedures for shutting down utilizes during a storm or weather event. Also reviewing the final version of the IMA.
- Final stages for the WWTP project of finish work have started. Punch list items are being completed.
- Reviewing with staff revised final layouts for New Administration Building. Architect is scheduling with Planning and Con Com to flag site. (Andrew Lafferty to present plans to commission next month.
- Working with Human Resources regarding closing out a compensation issue of sewer collections employee so we can refill position.
- Preparing for FY15 budget and capital items and projects with staff.

Respectfully Submitted,
Anthony J. Furnari

AGENDA

BOARD OF SEWER COMMISSIONERS

Wednesday, January 22, 2014

4:30 P.M.

NEWBURYPORT DEPARTMENT OF PUBLIC SERVICES

115 Water Street

Wastewater Treatment Facility Improvements Project:

- **Contract 1 Status**
 1. Punchlist Reduced to \$4,000
 2. City Staff Working w/Merrimack Valley Corp. to Address Repairs to HVAC System and Inlet/Exhaust Change to Ductwork
 3. Waterline Completed Submittal of LEED Documentation to GBS

- **Contract 2 Status**
 1. Substantial Completion as of November 20, 2013
 2. Monetized Punchlist Valued at \$175,600 as of December 31, 2013
 3. Completed Replacement of Primary Clarifier No. 2 Drive Mechanism
 4. On-going Repairs to Gravity Thickener No. 1 Drive Mechanism & Primary Clarifier No. 1 Rake Arm Assembly
 5. Completed Modifications to Sludge Conveyor

- **Project Budget Status**
 1. Summary of Project Costs

DESIGN PHASE (INELIGIBLE) COSTS

	Current Budget	Costs thru 1/20/14	Remaining Budget	Additional Costs	Cost @ Completion
Design Engineering	\$2,631,951	\$2,630,151	\$1,800	(\$1,800)	\$2,630,151
Value Engineering	\$65,595	\$65,595	\$0		\$65,595
Former DPS Director	\$15,040	\$15,040	\$0		\$15,040
Owner's Project Manager	\$94,100	\$92,061	\$2,039		\$94,100
Land Costs	\$1,350,000	\$1,350,000	\$0		\$1,350,000
Legal/Other Costs	\$60,000	\$62,573	(\$2,573)	\$5,000	\$65,000
Environmental Assessment Services	\$64,992	\$64,992	\$0		\$64,992
Miscellaneous Costs	\$135,000	\$125,109	\$9,891		\$135,000
Issuance Costs		\$37,228		\$30,000	\$67,228
Public Records Request		(\$467)			(\$467)
NGRID Rebates		(\$114,152)			(\$114,152)
Sale of Surplus Land		(\$23,400)			(\$23,400)
TOTALS	\$4,416,678	\$4,304,730	\$11,157	\$33,200	\$4,349,087

Note:

Initial local borrowing = \$4.38M

SUMMARY OF PROJECT COSTS AS OF JANUARY 20, 2014

Budget Components	Anticipated Costs/Credits	Design Phase	Construction Phase		Total Costs
			Contract 1	Contract 2	
Construction Cost					
Rental of Mobile Sludge Dewatering Trailer Unit plus Contingency @ 5%			\$12,332,756	\$11,482,296	\$23,815,052
Total Construction Cost			\$12,332,756	\$12,212,040	\$24,544,796
Change Order No. 1: (\$115,948.72)				\$5,507	\$5,507
Bonds & Insurance for FSB Adjustment				(\$231,898)	(\$231,898)
Cost Reduction Measures (COR Nos. 2-4, 7-9, 13, 24 & 25)				\$69,360	\$69,360
Project Enhancements (COR No. 11)				\$41,083	\$41,083
Additional Work Items (COR Nos. 10, 18, 20 & 22)				\$33,000	\$33,000
Additional Time for Rental of Mobile Sludge Dewatering Unit					
Change Order No. 2: \$462,667.91					
Cost Reduction Measures (COR Nos. 12, 17, 19, & 43)				(\$66,522)	(\$66,522)
Project Enhancement (COR No. 14)				\$405,355	\$405,355
Additional Work Items (COR Nos. 28, 30-34, 39, & 45-46)				\$123,840	\$123,840
Additional Time for Rental of Mobile Sludge Dewatering Unit				\$16,500	\$16,500
Change Order No. 3: \$141,159.41					
Additional Work Items (COR Nos. 21, 26, 29, 36, 47-48, 51-52, 54 & 56)				\$128,468	\$128,468
Credits for Deleted Work Items (COR Nos. 42, 44 & 50)				(\$12,692)	(\$12,692)
Change Order No. 4: \$56,410.56					
Additional Work Items (COR Nos. 57-62, 70-71, 74-76, 78-82, & 85)				\$78,003	\$78,003
Credits for Deleted Work Items (COR Nos. 67 & 69)				(\$21,592)	(\$21,592)
Proposed Change Order No. 5: \$27,036.68					
#38 Revise Odor Control Piping in Sludge Garage				\$3,369	\$3,369
#63 Ceiling Changes from GWB to ACT Tiles				\$6,861	\$6,861
#65 Add Ceramic Tile to Shower Stalls				\$2,924	\$2,924
#86 Added Seismic Clips				\$8,986	\$8,986
#87 Door Lock/Key Revisions				\$4,896	\$4,896
Revised Construction Cost			\$12,332,756	\$12,225,488	\$24,558,245
Revised Contingency				(\$13,448)	(\$13,448)
Revised Total Construction Cost			\$12,332,756	\$12,225,488	\$24,558,245

SUMMARY OF PROJECT COSTS AS OF JANUARY 20, 2014

Budget Components	Anticipated Costs/Credits	Design Phase	Construction Phase		Total Costs
			Contract 1	Contract 2	
Engineering Services		\$2,630,151	\$1,914,000	\$1,044,000	\$5,588,151
OPM Services		\$109,140	\$292,400	\$92,452	\$493,992
VE Services		\$65,595			\$65,595
Land Costs (Including \$65K for Legal Costs)		\$1,415,000			\$1,415,000
LSP Services		\$64,992	\$125,000		\$189,992
Miscellaneous Costs		\$135,000			\$135,000
Police			\$11,040		\$11,040
Allowance for HVAC Duct Work Change in OCL Building			\$25,000		\$25,000
Additional Contingency for Phase 2					\$167,985
Total Project Costs		\$4,419,878	\$14,700,196	\$13,361,940	\$32,650,000
less Green Infrastructure Funding					(\$3,055,000)
less ARRA Funding (11.72% of Contract 1 less \$3.055M)					(\$1,358,666)
plus Issuance Costs					\$67,228
less Public Records Request					(\$467)
less NGRID Rebates					(\$114,152)
less Surplus Land Revenue					(\$23,400)
TOTAL REFLECTED PROJECT COST					\$28,165,543