



## **PAINESVILLE WATER DIVISION**

**May 2011**

### **OVERVIEW AND HIGHLIGHT**

The Water Division repaired six main breaks in the month of May. On May 11, 2011 the 43 year old 2" cast iron main at the end Valleyview Dr. was discovered with a hole, which was caused due to corrosion. On May 13, 2011 the 51 year old 8" cast iron main at 603 Williams St. was located with a hole in the main that was also due to corrosion. On May 24, 2011 the 23 year old 8" ductile iron main on Mourning Dove Ln. had a hole on it due to corrosion. On May 27, 2011 the 50 year old 6" cast iron main at 144 Tiber Dr. also had a hole on it due to corrosion. On May 31, 2011 the 80 year old 18" cast iron main at 174 Chester St. was found to have a 10' long split on it due to a water hammer in the system. Also on May 31, 2011 the 49 year old main at 525 N. St. Clair St. also had a 2' long split on it due to a water hammer in the system. All these breaks were in the City of Painesville except for the one on Mourning Dove Ln., which is in Concord Township.

On May 6, 2011 the 49 year old 4" cast iron main was repaired on S. St Clair St. due to the fact it was hit by the contractor doing the directional drilling for the gas company. On May 24, 2011 the bolts were replaced on a 4" dresser coupling on Morrell Ave. by the intersection of Carson Ave. On May 26, 2011 the angle valve was replaced on a service line serving a drinking water fountain in Recreation Park.

There were eight services installed for the month of May. Three of them were in the City of Painesville and five were in Concord Township.

There were four hydrants repaired in the system in the month of May. Three of the hydrants repaired were in the City of Painesville, and one of the hydrants was in Concord Township.

The road repairs and treelawn restorations from the work performed during the winter months are almost completed. They should be done by the end of next week (6-10-11).

**Training** – Frank McKeon, Danine Schultz, Jeff Bearer, Terry Baideme and Carmen Campana attended a seminar on May 12, 2011 explaining the Ohio EPA Stage II Disinfection Disinfectant by-product rules.

### **Goals achieved**

#### **Water Distribution #1 and Water Plant Goal #1- To maintain a safe, reliable and high quality water supply to our customers/Optimize Water Plant operations**

Actions - All breaks were repaired

Actions - Continued Uni-Directional flushing

Actions - Potassium Permanganate feed screw installed and calibrated

Actions - #2 floc and flume cleaned

Actions - Low service pump #2 installed and placed into service with a new 1 year warranty.

Actions – Continued repairs to filter #6 surface sweeps and installation of new lens on turbidimeter.

Actions – Performed Jar Tests to ensure correct coagulant dosages

Actions – Preventative Maintenance plan begun by plant mechanic: Vacuum primer pump oiled, greased #4 and #5 high service cone valves, cleaned raw VFD filters, etc.

## **Water Distribution #2- Optimize system operations**

Actions - Distribution employees working in Lab and Plant operations

Actions - Distribution employees Bruce Hook and Leonard Crosby are helping with plant maintenance and plant employee Edward Bardell helping with maintenance at tanks and pump stations.

Actions - Ronald Foresi (Heavy Equipment Operator) is hauling sludge from the plant on a regular basis.

## **Water Distribution #3 and Water Plant Goal #4 – Responsiveness to the community/Employee relations and communications**

Action - Meet with employees every morning

## **Water Distribution Goal #4 and Water Plant Goal #5 - Provide the highest qualified, professional workforce/Responsiveness to the community**

Action - Requested from customers and received Backflow tests

Action - Performed new service line inspections

Action - Susan Fuerst attended all Lake County Safety Council meetings

Action - Verifying pool slips

## **Water Plant Goal #2- Good working relationship with the EPA and being in compliance with all regulations.**

Action - Had several discussions with EPA representative Stephen Bopple.

Action – Completed and sent Consumer Confidence Reports to Ohio EPA for their review.

Action - T.O.C. phosphate and nitrate collected and sent to Alloway for monthly compliance.

**Water Plant Goal #6 - Organize Plant procedures in the laboratory, maintenance and operations.**

Action - Performed weekly chemical analysis of Elm St.

Action - Monthly laboratory quality controls on all laboratory equipment.

Action - Quarterly turbidity meter calibration.

**Pumpage, Turbidity & Chemical Use**

MAY 2011



**Pumpage (MG)**

Finished Flow	97.30
Raw Flow	102.89
Wash Water	2.04
Plant Usage Service water	3.45

**Turbidity**

Average Raw	25.50
Average Applied	1.89
Average Tap	0.10

**Chemicals Use (LBS)**

Alum	18716
Zinc OrthoPhosphate	2503
Potassium Permanganat	135
Fluoride 65%	1156
Chlorine	2732
Cationic Polymer	173
Caustic *	5113

**Chemical Use Dosage (mg/L)**

Alum	21.81
Zinc OrthoPhosphate	2.92
Potassium Permanganat	0.16
Fluoride 65%	0.82
Chlorine	3.18
Cationic Polymer	0.20
Caustic *	5.96

Chemical	Price / lb	Total Chem Cost	Cost / MG
Alum	\$ 0.14905	\$ 2,789.62	\$ 27.11
Zinc OrthoPhosphate	\$ 0.5570	\$ 1,394.17	\$ 13.55
Potassium Permanganate	\$ 2.9800	\$ 402.30	\$ 3.91
Fluoride 65%	\$ 0.4250	\$ 491.30	\$ 4.78
Chlorine	\$ 0.2390	\$ 652.95	\$ 6.35
Cationic Polymer	\$ 0.5600	\$ 96.88	\$ 0.94
Caustic *	\$ 0.4200	\$ 2,147.46	\$ 20.87
<b>TOTAL</b>	\$ 5.33	\$ 7,974.68	\$ 77.51

AVERAGE CHEMICAL COST/MG FINISHED	\$	81.96
AVERAGE CHEMICAL COST/MG	\$	77.51
AVERAGE DAILY CHEMICAL COST	\$	257.25
TOTAL CHEMICAL COST FOR THE MONTH	\$	7,974.68

**Electrical Usage Per Million Gallons High Service**

KW'S/MG	1405.98
MAX DEMAND	267.90
COST / MG	\$168.77



**DIVISION OF WATER**  
**May 2011 REPORT**  
 ALL FLOW IN MILLION GALLONS

**Finished Water Pumped to System**

**(Million Gallons)**

**Water Purchased from AquaOhio**

**Water Sold to AquaOhio**

**Chestnut Pump Station**

**Crile Pump Station**

**Hermitage Pump Station**

**New Service City**

**New Service Outside City**

**Abandon Service City**

**Abandon Service Outside City**

**Service Line Replaced With**

**Copper Or Plastic**

**Footage New Main Installed City**

**Footage New Main Installed Out of City**

**Hydrants Repaired**

**New Hydrants installed**

**Inspector Hours billed**

**Inspector Hours worked**

**Water Main Breaks:**

- 5-6-11- S. St Clair St, Contractor hit 4" C.I. pipe
- 5-11-11- 485 Valleyview Dr, Hole in 2" Galv. Pipe
- 5-13-11-603 Williams St, Hole in 8" C.I.
- 5-24-11-Mourning Dove Ln, Hole in 8" D.I.
- 5-24-11-Morrell at Carson Ave, Bolts on 4" Dresser
- 5-27-11-144 Tiber Dr, Hole in 6" C.I.
- 5-31-11-174 Chester St, 10' Split on 18" C.I.
- 5-31-11-525 N. St Clair St, 2' Split on 6" C.I.

**Miscellaneous:**

- Repaired 4 hydrants
- Installed 8 new service lines
- Continued Unidirectional Flushing

	<b>Last Year To Date</b>	<b>This Year To Date</b>	<b>This Month Last Year</b>	<b>This Month</b>
	484.12	367.93	107.36	102.888
	4.563	4.211	1.127	1.133
	3.243	0.005	0.094	0.001
	108.000	110.856	23.000	24.902
	56.000	57.029	14.660	14.659
	0.699	0.335	0.176	0.012
	19	11	7	3
	13	13	1	5
	2	1	1	0
	0	1	0	0
	1P, 2C.	3-C.	0	0
	0	0	0	0
	PR1-.775' of 8" D.I. Pub.-1,020' of 8" PVC	0	PUB.-3,050' of 8" PVC	0
	12	14	0	4
	2	2	1	0
	357 Reg. 48 O.T.	0	115 Reg. 7.5 O.T.	0
	115 Reg. 7.5 O.T.	0	0	0

- (City)
- (City)
- (City)
- (Concord)
- (Grand River)
- (City)
- (City)
- (City)

- (City)
- (City)
- (City)
- 97 Backflow Tested
- 5 Service line inspections
- 203 O.U.P.S Tickets completed

**George P. Ginnis**  
**Mark Connor**  
**Frank Mckeon**

**Water Division Superintendent**  
**Water Distribution Supervisor**  
**Water Treatment Plant Chief Operator**