

Water /Sewer Systems Concession Lease Update

Presented by:

City of Allentown

Office
of
Compliance

Department
of
Public Works



610-437-7587

December 19, 2018

Wastewater Treatment Plant

		Performance Standards	NPDES Discharge Permit Effluent Limitations		
Parameter	LCA	Monthly Average Effluent Concentration	Monthly Average Effluent Limit	Weekly Average Effluent Limit	Instantaneous (Daily) Maximum Effluent Limit
Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	Met Requirement	≤ 12 mg/L	20 mg/L	30 mg/L	40 mg/L
CBOD5 Percent Removal	Met Requirement	≥ 90 %	≥90 %	---	---
Total Suspended Solids (TSS)	Met Requirement	≤12 mg/L	30 mg/L	45 mg/L	60 mg/L
TSS Percent Removal	Met Requirement	≥90 %	≥90 %	---	---
Ammonia Nitrogen (NH ₃ -N) May 1 to October 31	Met Requirement	≤4.0 mg/L	5 mg/L	---	10 mg/L
Ammonia Nitrogen November 1 to April 30	Met Requirement	≤12.4 mg/L	15 mg/L	---	30 mg/L
Fecal Coliform May 1 to September 31	Met Requirement	200/100 ml geometric mean			
Fecal Coliform October 1 to April 30	Met Requirement	2,000/100 ml geometric mean			
Residual Chlorine	Met Requirement	≤0.5 mg/L			
pH	Met Requirement	6.0 to 9.0 SU			
Dissolved Oxygen	Met Requirement	5.0 mg/L minimum			



Wastewater Treatment Plant



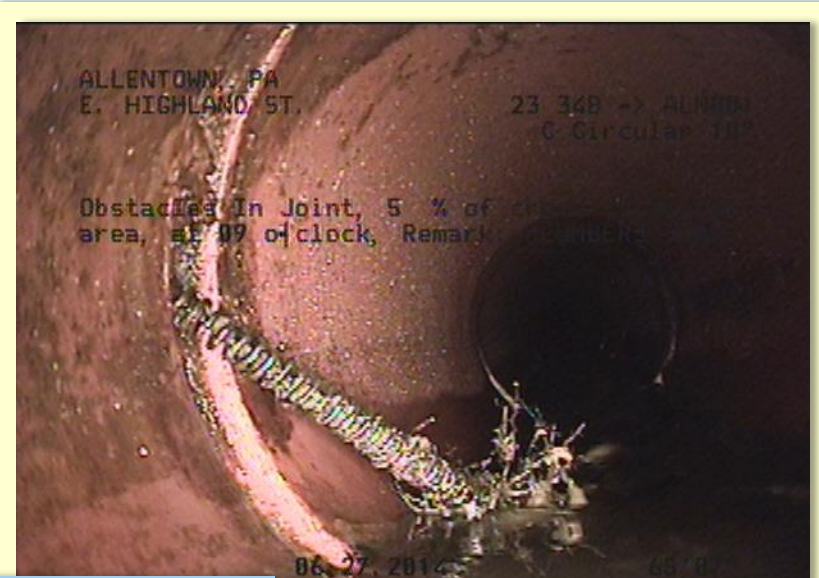
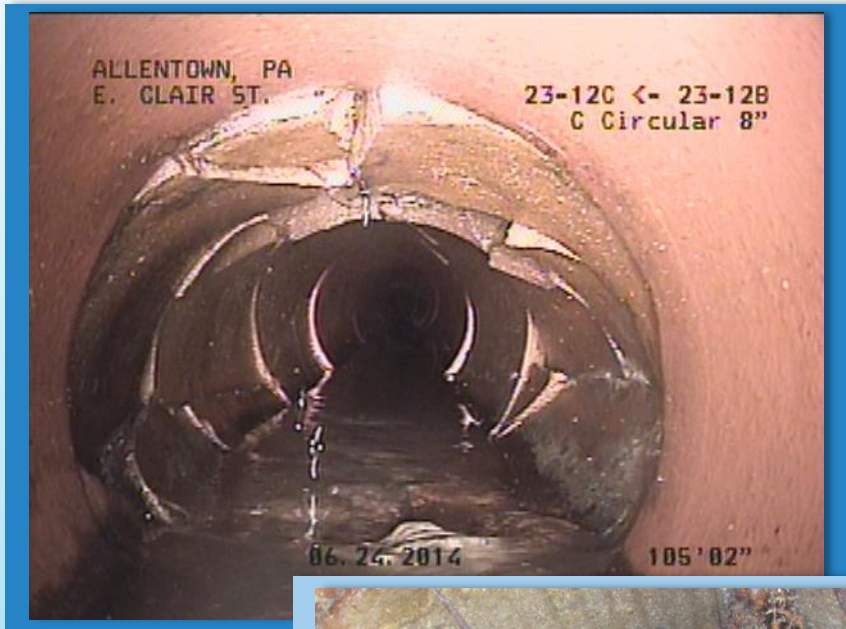
pennsylvania
DEPARTMENT OF ENVIRONMENTAL
PROTECTION

In
November
2016,
comments to
the 3rd draft
NPDES Permit
were submitted
to PaDEP.
No response
has been given.



Regulatory Update

Sewage Collection System



**CCTV Minimum
linear footage
requirement:
55,000 feet**



Drinking Water Treatment and Production

Turbidity:

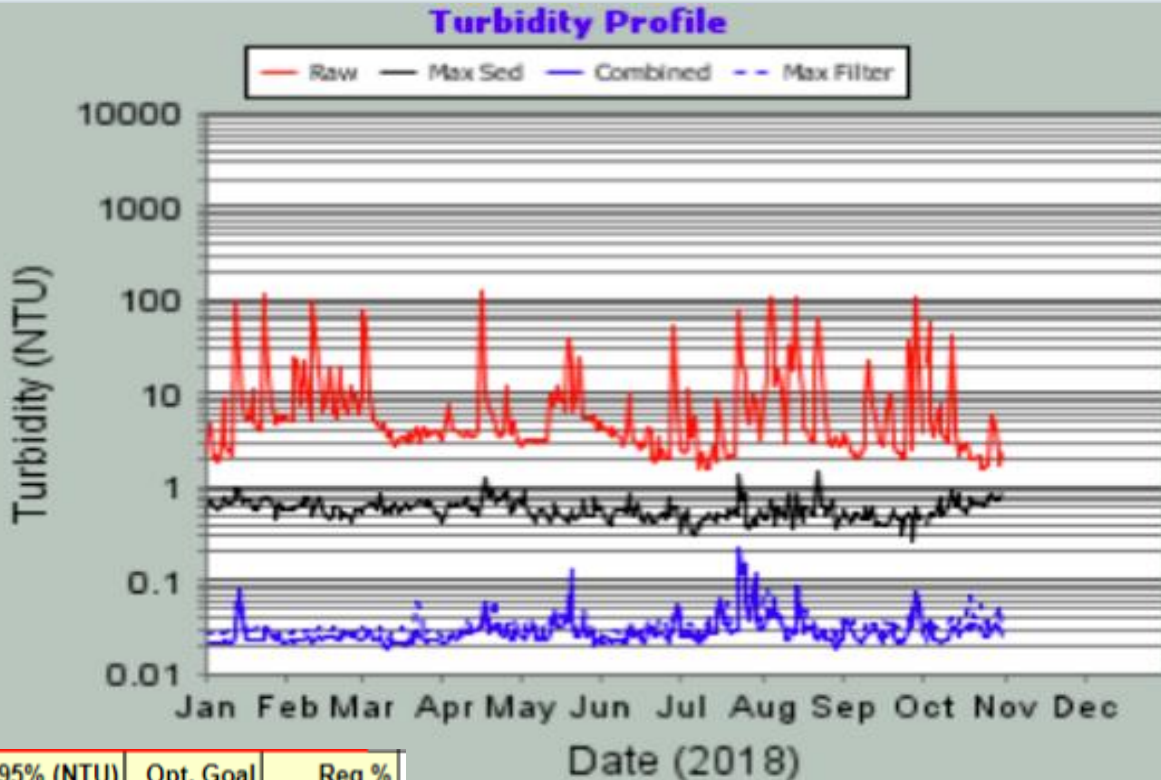
Law: Less than

Or equal to **0.3 NTU**

Partnership: Less than
or equal to **0.1 NTU**

Allentown:

Equal to **0.03 NTU**



ANNUAL DATA	Avg (NTU)	Min (NTU)	Max (NTU)	RSQ	95% (NTU)	Opt. Goal % Values	Reg % Values
Raw Turbidity	10.96	1.53	122.38	n/a	51.23	n/a	n/a
Max. Settled Turbidity	0.59	0.27	1.43	0.08	0.82	100	n/a
Max. Filtered Turbidity	0.036	0	0.147	0.02	0.065	98.6	n/a
Combined Filtered Turbidity	0.03	0.019	0.228	0.69	0.052	98.6	100

RSQ = Correlation Coefficient for two selected data sets.

95% = 95th Percentile value for data set.

Opt. Goal = % of values in data set that are less than or equal to the selected optimization turbidity goal.

Reg. = % of values in data set that are less than or equal to the regulated turbidity requirement.

Partnership for Safe Water



Drinking Water Treatment and Production



**NO
Maximum
Contaminant
Levels
were exceeded.**



Contaminant Testing

<https://lehighcountyauthority.org/wp-content/uploads/ALD.pdf>



Drinking Water Distribution System

Hydrants

Inspected

995

and

Tested

107.88

Miles of Pipe

Checked

for

leaks

1,319

**Valves
Exercised**

Metrics Update

Notices of Violation



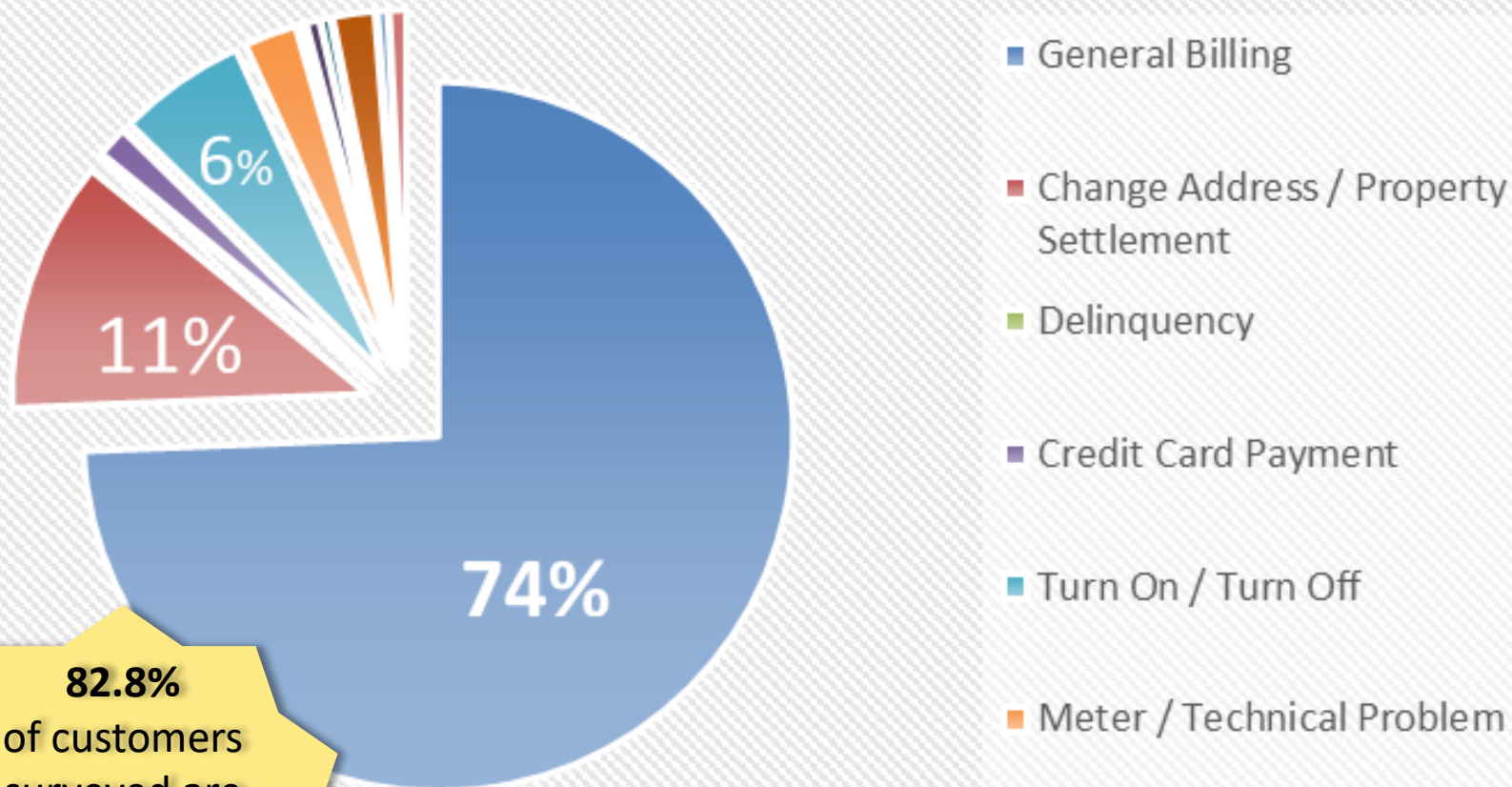
Security

A security breach
occurred

2/23/2017



Customer Service Calls: Jan - June 2018



82.8%
of customers
surveyed are
"Satisfied or
Very
Satisfied"

CHANGE of LAW

Change of Law is the impact of a means either (A) the enactment, adoption, promulgation, modification or repeal after the Bid Date of **any federal, state or local Law**, or the change in interpretation (as evidenced by a final official action of a Governmental Authority having jurisdiction or a decision of a court with jurisdiction over the subject matter and with respect to which no appeal is pending or may be taken) **after the Bid Date...**

Section 7.1 Imposition of Service Charges

(g) Change of Law. The Schedule of Service Charges shall be subject to prospective **annual adjustment, upward or downward**, on account of any Change of Law in order to reflect any changed cost or expense related to the System and incurred by the Concessionaire as a result thereof, all as may be reasonably **agreed to by the City and the Concessionaire.**

CHANGE OF LAW – Revised Total Coliform Rule



Cost: \$16,443.67
2018 Ratepayer expense:
\$0.004/1,000g

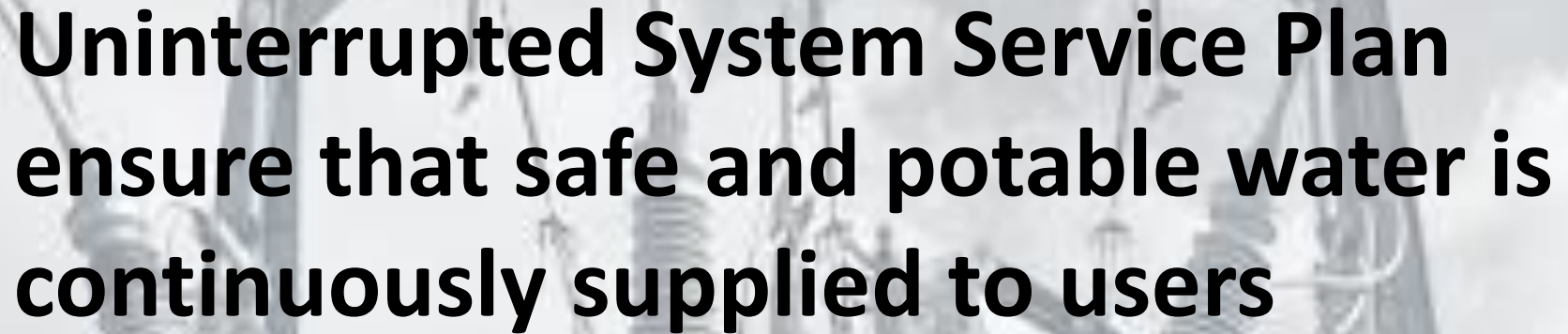
CHANGE OF LAW



DISINFECTION REQUIREMENTS RULE



Cost: \$21,010.39
2019 Ratepayer expense:
\$0.00587/1,000g



**Uninterrupted System Service Plan
ensure that safe and potable water is
continuously supplied to users**

Potential for 2020

“Restoration Work” and “Uncompleted Work” is planned work not completed by the transfer date.

“Required Capital Improvements” “Schedule 7” are Major Capital Improvements required by the Concession Lease Agreement to be completed by Winter 2017.

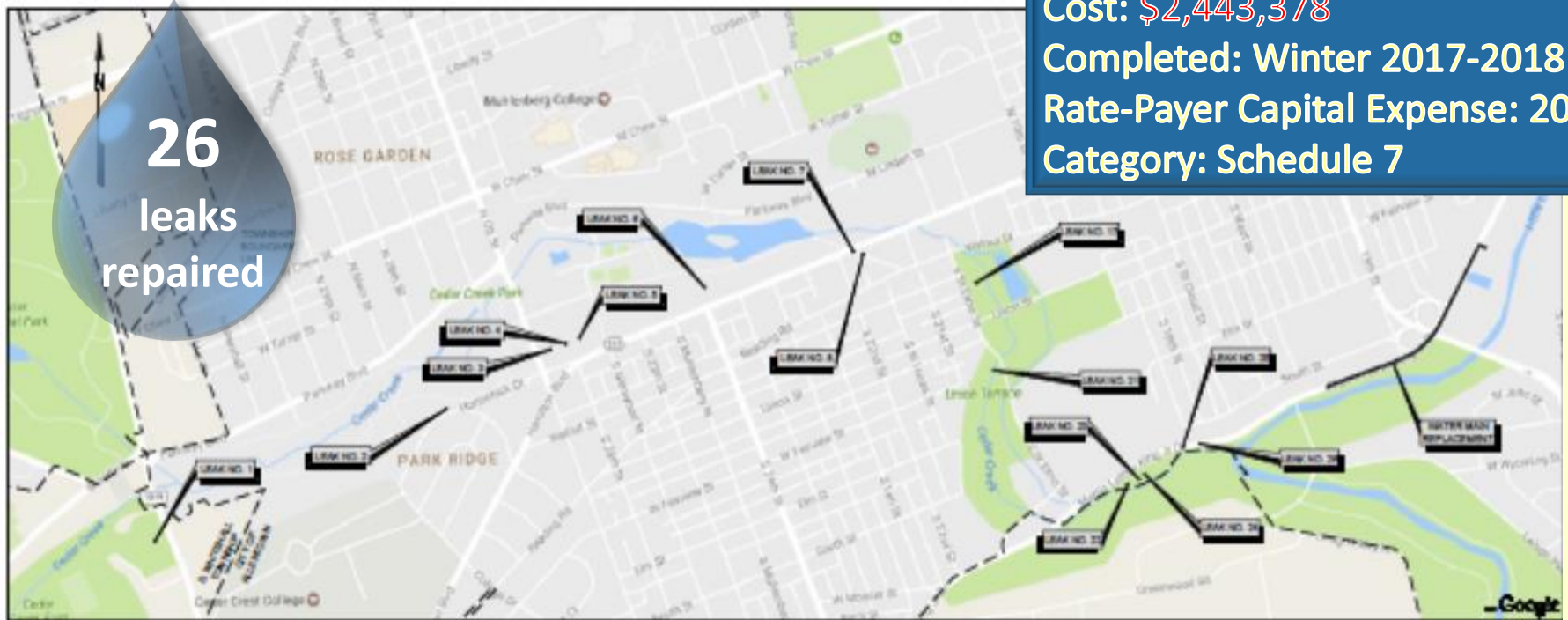


“Administrative Order Projects”
Projects planned to comply with
the Administrative Orders.

Major Capital Improvements are those projects, approved by the Office of Compliance which cost more than one million + CPIU (Consumer Price Index for Urban).

Water Filtration Capital Projects - 2017

Schantz Spring Water Main Replacement Project



Distribution System Capital Projects - 2016

Cycle IV- Water Main Replacement Project



Cost: approx. 2,000,000.
Anticipated Completed: Dec 2018
Rate-Payer Capital Expense: 2020
Category: MCIP

Water Main Replacement

The Pipe Prioritization Assessment Program identifies mains that will need to be replaced using various sources of data: pipe age, break history, geology and ground subsidence history.



Inoperable Valves Replacement Project

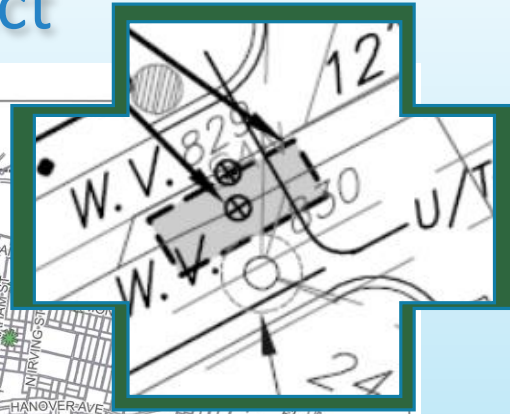
Inoperable Valves Replacement Project

Cost: \$1,110,000

Complete: December 2018

No Rate-Payer Capital Expense

Category: Uncompleted Work



Replacing 55 inoperable valves in multiple locations throughout the City.

Wastewater Treatment Plant Capital Project - 2017

Primary and Secondary Digesters Replaced anaerobic floating covers



Estimated Cost: \$3,012,225
Completed: Fall of 2017
Rate-Payer Capital Expense: 2019
Category: Schedule 7

Wastewater Treatment Plant Capital Project - 2019

Replacement of the 480V Substation No. 2



Estimated Cost: \$2,847,500

Anticipated Completion Date: End of 2019

Rate-Payer Capital Expense: 2021

Category: MCIP

Administrative Orders



**Borough of Alburtis
Borough of Emmaus
Borough of Macungie
City of Allentown
Coplay-Whitehall Sewer Authority
Hanover Township
Lehigh County Authority (LCA)
Lower Macungie Township
Lowhill Township
Salisbury Township
South Whitehall Township
Upper Macungie Township
Upper Milford Township
Weisenberg Township**

Administrative Orders

- CWA-03-2007-0332DN
- CWA-03-2009-0313DN

QUESTIONS



Happy Holidays

