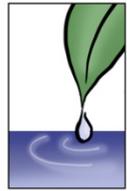


97 North Penryn Road  
Manheim, PA 17545



**NWLC**A  
Northwestern Lancaster County Authority

Phone: (717) 665-4508  
Fax: (717) 665-4108

## AGENDA

**July 18, 2016, 7:00 P.M.**

1. Call to Order- David W. Stewart, Chairperson
2. Residents'/Guest Comments
3. Approval of Minutes for June 20, 2016
4. Treasurer's Report
  - Invoices
  - GO Bond Report
5. Communications
  - MAWSA Reports
  - DEP Monitoring Reminder
6. Report from Severn Trent Environmental Services
7. Engineer's Report
  - Item 4, authorize staff to sign and send the Holly Tree Farms Apartments Revised Plans sewer capacity exemption letter
  - Item 22, authorize bidding the Fruitville Pike capped sanitary sewer installation project
  - Item 31, approve the Auto Zone Plan sanitary sewer and public water design and execute the MOU.
8. Other Business
9. Adjournment

**Next Meeting- 7pm, Monday, August 15, 2016**

**Next SWPP Committee Meeting, September 19, 2016, 1:00 p.m., Penn Township Municipal Building**

## MINUTES OF THE MEETING OF JUNE 20, 2016

### ATTENDANCE:

David Stewart (Chairman)  
Herbert Mattern Jr. (Vice-Chairman)  
Paul Steinweg (Treasurer)

### Absent:

Jeffrey Sweater (Secretary)  
Rob Kurtz (Member)

### ALSO IN ATTENDANCE:

Mark Hiester, Township Manager  
Dan Becker, Becker Engineering  
Michael Wolgemuth, STES  
Connie Weidle, Recording Secretary

### Call to Order- David W. Stewart, Chairperson

### Residents'/Guest Comments - None

### Approval of Minutes for May 16, 2016

A motion was made by H. Mattern, with a second by P. Steinweg, to approve the Minutes of the May 16, 2016 Meeting. The motion passed unanimously.

### Treasurer's Report

The Treasurer's Report was presented. This included the NWLCA checking account, G.O. Bonds Water Project account and report, and the Water and Sewer Fund reports. Also included were the Becker Engineering Invoices. On motion by D. Stewart, with a second by H. Mattern, the Treasurer's Report was unanimously approved as presented. The full report is available at the Township Office.

### The following Communications were reviewed:

- MAWSA Reports
- Lead & Copper Rule Letter from DEP
- P3 Water Projects Offer Letter from PFIC
- PMAA Letter

On motion by H. Mattern, with second by P. Steinweg, it was unanimous to appoint David Stewart as the Voting Delegate at the PMAA Annual Conference.

### Report from Severn Trent Environmental Services

M. Wolgemuth presented STES' monthly written operations report to the Authority. In addition to the written report, the following items were verbally reported:

- The flowmeter at Pump Station 3 failed during a storm in May. A quote was received to replace the amplifier and an insurance claim will be filed.
- Flushing and hydrant exercising for both the main distribution system and the Fruitville Pike system was completed.
- The 2015 Water Quality Report has been posted on the Township Website.
- There has been a good response to the Lead and Copper Monitoring Letters that were sent to customers.

- A small Boil Water Advisory was issued May 27, 2016 to three customers on Doe Run Road. This was due to a repair that was made to a service lateral that was dug into by a contractor working on the water line extension project. The water was sampled and tested. The results were absent for total coliform so the advisory was rescinded on May 30, 2016.
- The faulty water meter that was removed from the property at 124 Sunny Slope Lane is scheduled to be repaired in July.

On motion by P. Steinweg, with a second by D. Stewart, it was unanimous to approve the report from Severn Trent Environmental Services as presented.

### **Engineer's Report**

D. Becker reported on the following items:

- It is anticipated that the developer for the Holly Tree Subdivision will be submitting PADEP planning documents and at the next Authority Meeting they may be considered for execution and submission.
- Blackford Development is interested in constructing a bank in Phase 2 of their development. They may ask for temporary sanitary sewer service connection until the remaining buildings in Phase 2 are completed.
- On motion by D. Stewart, with a second by H. Mattern, it was unanimous to authorize execution and submission of the Highway Occupancy Permit to PennDOT for the Fruitville Pike, Temperance Hill and Holly Tree Roads Sewer Project.
- The owner of the property adjacent to Pumping Station No. 1 has signed off on right of entry so that survey work can be done by the Authority.
- The contractor for Doe Run Elementary School will be in contact with the township concerning their water needs during construction.

On motion by D. Stewart, with a second by P. Steinweg, it was unanimous to approve the Engineer's Report as presented.

### **Other Business**

- M. Hiester noted that USDA Rural Housing Service will be paying for the sewer connection tapping fee and any remaining funds from USDA will be used for the contractor's fee for the sewer connection at the residence of 911 Holly Tree Road.

### **Adjournment**

On motion by H. Mattern, with a second by D. Stewart, it was unanimous to adjourn the meeting at 7:40 p.m.

Respectfully Submitted,  
Connie Weidle  
Recording Secretary

9:01 AM

07/14/16

Accrual Basis

**NORTHWESTERN LANCASTER COUNTY AUTHORITY NEW**

**Balance Sheet**

As of July 13, 2016

	<u>Jul 13, 16</u>
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
1000.02 · INTEGRITY BANK	1,827.65
<b>Total Checking/Savings</b>	<u>1,827.65</u>
<b>Total Current Assets</b>	<u>1,827.65</u>
<b>TOTAL ASSETS</b>	<u><u>1,827.65</u></u>
<b>LIABILITIES &amp; EQUITY</b>	0.00

9:02 AM

07/14/16

Accrual Basis

# NORTHWESTERN LANCASTER COUNTY AUTHORITY NEW CHECKBOOK LEDGER

As of July 13, 2016

Type	Date	Num	Name	Memo	Debit	Credit	Balance
1000.02 · INTEGRITY BANK							1,827.47
Deposit	06/30/2016			Interest	0.18		1,827.65
Total 1000.02 · INTEGRITY BANK					0.18	0.00	1,827.65
<b>TOTAL</b>					<b>0.18</b>	<b>0.00</b>	<b>1,827.65</b>

07/14/16

## 2009 PENN TOWNSHIP WATER & SEWER Profit & Loss Budget vs. Actual

Cash Basis

January 1 through December 30, 2016

	Jan 1 - Dec 30, 16	Budget	% of Budget
<b>Ordinary Income/Expense</b>			
<b>Income</b>			
332 · LIEN PROCEEDS	2,135.92	0.00	100.0%
341 · INTEREST EARNINGS			
341.01 · INTEREST ON CHECKING	977.88	0.00	100.0%
341.02 · INTEREST ON SAVINGS	167.80	0.00	100.0%
341 · INTEREST EARNINGS - Other	0.00	750.00	0.0%
<b>Total 341 · INTEREST EARNINGS</b>	<b>1,145.68</b>	<b>750.00</b>	<b>152.8%</b>
364 · WASTEWATER SYSTEM			
364.11 · SEWER CONNECTION/TAP IN FEES	477,750.00	236,250.00	202.2%
364.12 · SEWER USE CHARGES	610,618.54	1,045,000.00	58.4%
364.14 · NUTRIENT CREDIT SALE	237.76	500.00	47.6%
364.15 · NONREFUNDABLE MAINTANCE FEE	7,500.00	0.00	100.0%
364.90 · MISCELLANEOUS	7,678.75	6,500.00	118.1%
<b>Total 364 · WASTEWATER SYSTEM</b>	<b>1,103,785.05</b>	<b>1,288,250.00</b>	<b>85.7%</b>
372 · ELECTRIC REVENUES			
372.44 · STREETLIGHT USER FEES	16,827.48	25,250.00	66.6%
372.56 · PPL CASH OUT	3,346.48	1,500.00	223.1%
<b>Total 372 · ELECTRIC REVENUES</b>	<b>20,173.96</b>	<b>26,750.00</b>	<b>75.4%</b>
378 · WATER SYSTEM			
378.10 · WATER USE CHARGES	144,921.06	290,000.00	50.0%
378.11 · METERED SALE-BULK WATER TO CUST	7,041.23	15,000.00	46.9%
378.90 · WATER CONNECTION/TAP IN FEES	4,074.08	22,200.00	18.4%
378.92 · MISCELLANEOUS	1,669.18	1,250.00	133.5%
<b>Total 378 · WATER SYSTEM</b>	<b>157,705.55</b>	<b>328,450.00</b>	<b>48.0%</b>
<b>Total Income</b>	<b>1,284,946.16</b>	<b>1,644,200.00</b>	<b>78.2%</b>
<b>Gross Profit</b>	<b>1,284,946.16</b>	<b>1,644,200.00</b>	<b>78.2%</b>
<b>Expense</b>			
400 · GOVERNING BODY			
400.110 · AUTHORITY BOARD SALARIES	450.00	1,500.00	30.0%
400.42 · DUES, SUBSCRIPTIONS, MEMBERSHIP	995.00	1,450.00	68.6%
400.46 · EDUCATION AND TRAINING	0.00	250.00	0.0%
<b>Total 400 · GOVERNING BODY</b>	<b>1,445.00</b>	<b>3,200.00</b>	<b>45.2%</b>
406 · OTHER GEN GOVERNMENT ADMIN			
406.39 · BANK SERVICE CHARGES/FEES	22.50	100.00	22.5%
<b>Total 406 · OTHER GEN GOVERNMENT ADMIN</b>	<b>22.50</b>	<b>100.00</b>	<b>22.5%</b>
429 · WASTEWATER SYSTEM EXPENSES			
429.365 · SLUDGE DISPOSAL	6,565.50	45,000.00	14.6%
429.370 · SEWER FACILITIES PROPERTY MAINT	620.00	2,500.00	24.8%
429.60 · CAPITAL CONSTRUCTION			
429.601 · WWTF DO SYSTEM	0.00	101,775.00	0.0%
429.606 · WWTF EFFLUENT FLOW METERING	0.00	86,250.00	0.0%
429.607 · PUMPING STATION #1	2,140.00	30,000.00	7.1%
429.608 · HOLLY TREE/TEMPERANCE HILL SEWR	11,638.75	97,500.00	11.9%
<b>Total 429.60 · CAPITAL CONSTRUCTION</b>	<b>13,778.75</b>	<b>315,525.00</b>	<b>4.4%</b>
429.664 · I & I INSPECTION & REPAIR	0.00	30,000.00	0.0%
429.74 · CAPITAL PURCHASE			
429.741 · SCADA	0.00	50,000.00	0.0%
<b>Total 429.74 · CAPITAL PURCHASE</b>	<b>0.00</b>	<b>50,000.00</b>	<b>0.0%</b>
<b>Total 429 · WASTEWATER SYSTEM EXPENSES</b>	<b>20,964.25</b>	<b>443,025.00</b>	<b>4.7%</b>
448 · WATER SYSTEM EXPENSES			
448.225 · LABORATORY/TESTING SUPPLIES	5,046.00	10,000.00	50.5%
448.366 · BULK PURCHASE WTR-CITY OF LANC	6,944.68	10,000.00	69.4%
448.371 · WATER FACILITIES PROPERTY MAINT	845.00	14,000.00	6.0%
448.60 · CAPITAL CONSTRUCTION			
448.605 · DOE RUN RD WTR-WEST END TO BORO	0.00	224,000.00	0.0%
448.606 · DOE RUN ROAD/S. PENRYN ROAD WTR	243,800.00	268,000.00	91.0%
<b>Total 448.60 · CAPITAL CONSTRUCTION</b>	<b>243,800.00</b>	<b>492,000.00</b>	<b>49.6%</b>
<b>Total 448 · WATER SYSTEM EXPENSES</b>	<b>256,635.68</b>	<b>526,000.00</b>	<b>48.8%</b>
486 · INSURANCE, CASUALTY, SURETY			
486.60 · FIDELITY AND SURETY BONDS	0.00	100.00	0.0%
<b>Total 486 · INSURANCE, CASUALTY, SURETY</b>	<b>0.00</b>	<b>100.00</b>	<b>0.0%</b>
493 · JOINT OPERATING EXPENSES			
493.150 · PART-TIME STAFF SALARY & WAGES	19,442.31	48,990.29	39.7%
493.215 · POSTAGE / POSTCARDS	3,271.99	5,750.00	56.9%
493.222 · CHEMICALS	19,697.53	48,000.00	41.0%
493.239 · PA ONE CALL	327.27	500.00	65.5%
493.240 · METERS	1,495.00	85,000.00	1.8%
493.250 · REPAIR AND MAINTENANCE	26,013.50	50,000.00	52.0%
493.280 · SOFTWARE / HARDWARE	990.00	1,500.00	66.0%
493.310 · OPERATION & MAINTENANCE SERVICE	217,647.85	397,726.00	54.7%
493.311 · ACCOUNTING & AUDITING SERVICES	2,075.00	2,075.00	100.0%
493.313 · ENGINEERING SERVICES	19,567.15	40,000.00	48.9%
493.314 · SOLICITOR / LEGAL SERVICES	472.50	2,500.00	18.9%

07/14/16

**2009 PENN TOWNSHIP WATER & SEWER  
Profit & Loss Budget vs. Actual**

Cash Basis

January 1 through December 30, 2016

	Jan 1 - Dec 30, 16	Budget	% of Budget
493.360 · PUBLIC UTILITIES	82,147.83	160,000.00	51.3%
493.375 · REPAIRS & MAINTENANCE-VEHICLES			
375.01 · 2000 GMC 1/2 TON PICK-UP	400.69	0.00	100.0%
375.02 · 2000 GMC 3/4 TON PICK-UP	59.98	0.00	100.0%
493.375 · REPAIRS & MAINTENANCE-VEHICLES - Other	0.00	2,000.00	0.0%
<b>Total 493.375 · REPAIRS &amp; MAINTENANCE-VEHICLES</b>	<b>460.67</b>	<b>2,000.00</b>	<b>23.0%</b>
493.490 · MISCELLANEOUS	200.00	3,000.00	6.7%
<b>Total 493 · JOINT OPERATING EXPENSES</b>	<b>393,808.60</b>	<b>847,041.29</b>	<b>46.5%</b>
<b>Total Expense</b>	<b>672,876.03</b>	<b>1,819,466.29</b>	<b>37.0%</b>
<b>Net Ordinary Income</b>	<b>612,070.13</b>	<b>-175,266.29</b>	<b>-349.2%</b>
<b>Other Income/Expense</b>			
<b>Other Income</b>			
393 · PROCEEDS GENERAL LONG-TERM DEBT			
393.10 · G.O. BOND AND NOTE PROCEEDS	0.00	330,000.00	0.0%
<b>Total 393 · PROCEEDS GENERAL LONG-TERM DEBT</b>	<b>0.00</b>	<b>330,000.00</b>	<b>0.0%</b>
<b>Total Other Income</b>	<b>0.00</b>	<b>330,000.00</b>	<b>0.0%</b>
<b>Other Expense</b>			
471 · DEBT PRINCIPAL			
471.20 · DEBT PRINCIPAL WATER SYST	100,000.00	100,000.00	100.0%
471.21 · SERIES 2012-WTR SYS IMPROVEMENT	5,000.00	5,000.00	100.0%
471.35 · DEBT PRINCIPAL WASTEWATER SYST	345,000.00	345,000.00	100.0%
<b>Total 471 · DEBT PRINCIPAL</b>	<b>450,000.00</b>	<b>450,000.00</b>	<b>100.0%</b>
472 · DEBT INTEREST			
472.20 · WATER TREATMENT FACILITY	49,373.75	97,747.50	50.5%
472.21 · SERIES 2012	60,368.74	120,706.25	50.0%
472.35 · DEBT INTEREST WASTEWATER SYST	36,126.25	68,802.50	52.5%
<b>Total 472 · DEBT INTEREST</b>	<b>145,868.74</b>	<b>287,256.25</b>	<b>50.8%</b>
492 · INTERFUND TRANSFERS			
492.01 · TRANSFER TO GENERAL FUND	14,946.19	25,250.00	59.2%
<b>Total 492 · INTERFUND TRANSFERS</b>	<b>14,946.19</b>	<b>25,250.00</b>	<b>59.2%</b>
<b>Total Other Expense</b>	<b>610,814.93</b>	<b>762,506.25</b>	<b>80.1%</b>
<b>Net Other Income</b>	<b>-610,814.93</b>	<b>-432,506.25</b>	<b>141.2%</b>
<b>Net Income</b>	<b>1,255.20</b>	<b>-607,772.54</b>	<b>-0.2%</b>

8:50 AM  
07/14/16  
Cash Basis

**2009 PENN TOWNSHIP WATER & SEWER**  
**Balance Sheet**  
As of July 13, 2016

	<u>Jul 13, 16</u>
<b>ASSETS</b>	
Current Assets	
Checking/Savings	
100 · BANK ACCOUNTS	
100.02 · PNC CHECKING	13,825.94
100.03 · INTEGRITY BANK	1,569,267.67
107.04 · INTEGRITY-CASH MANAGEMENT	95,925.79
Total 100 · BANK ACCOUNTS	<u>1,679,019.40</u>
Total Checking/Savings	<u>1,679,019.40</u>
Total Current Assets	<u>1,679,019.40</u>
<b>TOTAL ASSETS</b>	<b><u><u>1,679,019.40</u></u></b>
<b>LIABILITIES &amp; EQUITY</b>	
Equity	
30000 · Opening Bal Equity	1,404,145.23
32000 · Retained Earnings	273,646.70
Net Income	1,227.47
Total Equity	<u>1,679,019.40</u>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b><u><u>1,679,019.40</u></u></b>

8:51 AM  
 07/14/16  
 Accrual Basis

2009 PENN TOWNSHIP WATER & SEWER  
 CHECKBOOK LEDGER  
 As of July 13, 2016

Date	Num	Name	Memo	Debit	Credit	Balance
100 · BANK ACCOUNTS						1,652,182.43
100.02 · PNC CHECKING						13,525.45
06/20/2016			Deposit	267.29		13,792.74
06/30/2016			Service Charge		2.00	13,790.74
07/05/2016			Deposit	35.20		13,825.94
Total 100.02 · PNC CHECKING				302.49	2.00	13,825.94
100.03 · INTEGRITY BANK						1,542,731.19
06/20/2016			Deposit	4,841.30		1,547,572.49
06/20/2016			Deposit	11,460.97		1,559,033.46
06/20/2016			Deposit	120.68		1,559,154.14
06/20/2016			Deposit	5,250.00		1,564,404.14
06/27/2016	1422	COMMUNICATION CENTER	INV #160610166		84.00	1,564,320.14
06/27/2016	1423	SEVERN TRENT ENVIRONME...	INVOICE #45157		45,187.16	1,519,132.98
06/27/2016	1424	SHELLY ALIGNMENT SERVICE	INVOICE #33731		51.47	1,519,081.51
06/27/2016	1425	SOLAR PROPERTIES - PENN ...	JULY 2016		4,416.67	1,514,664.84
06/27/2016	1426	DAVID STEWART	NWLCA MEETINGS APRIL, JUNE 2016		50.00	1,514,614.84
06/27/2016	1427	HERBERT MATTERN, JR.	NWLCA MEETINGS MAY, JUNE 2016		50.00	1,514,564.84
06/27/2016	1428	PAUL STEINWEG	NWLCA MEETINGS APRIL, MAY, JUN...		75.00	1,514,489.84
06/27/2016	1429	JEFFREY SWEATER	NWLCA MEETINGS APRIL, MAY 2016		50.00	1,514,439.84
06/27/2016	1430	ROBERT KURTZ	NWLCA MEETINGS APRIL, MAY 2016		50.00	1,514,389.84
06/30/2016			Interest	143.65		1,514,533.49
07/05/2016			Deposit	65.00		1,514,598.49
07/05/2016			Deposit	1,743.67		1,516,342.16
07/05/2016			Deposit	13,224.71		1,529,566.87
07/05/2016			Deposit	19,331.67		1,548,898.54
07/11/2016	1431	BECKER ENGINEERING	MONTHLY INVOICES		7,837.50	1,541,061.04
07/11/2016	1432	CITY OF LANCASTER, PA	ACCT. NO. 602110		1,751.32	1,539,309.72
07/11/2016	1433	MAWSA	ACCOUNT NUMBER 30518000		97.21	1,539,212.51
07/11/2016	1434	MUNIBILLING	INVOICE #4628 AND #4660		727.80	1,538,484.71
07/11/2016	1435	PPL UTILITIES CORPORATION	ACCT #75733-08001		153.31	1,538,331.40
07/11/2016	1436	SHELLY ALIGNMENT SERVICE	2000 GMC TRUCK		157.47	1,538,173.93
07/11/2016	DD	PENN TOWNSHIP	2ND QUARTER TRANSFER		17,644.33	1,520,529.60
07/11/2016	1437	MORGAN, HALLGREN, CROSS...	INV #48090		297.50	1,520,232.10
07/11/2016	1438	BENCHMARK - ELECTRIC ACC...	PT-1 WS DO JUNE 2016		27.90	1,520,204.20
07/11/2016	1439	PPL UTILITIES CORPORATION	PT-1 WS DO JUNE 2016		1,159.27	1,519,044.93
07/11/2016	1440	PAULB LLC-LITITZ	INVOICE #232944/1		159.95	1,518,884.98
07/11/2016	1441	VERIZON	IPAD AND METER READINGS		36.29	1,518,848.69
07/12/2016			Deposit	61.48		1,518,910.17
07/12/2016			Deposit	1,251.43		1,520,161.60
07/12/2016			Deposit	395.98		1,520,557.58
07/12/2016			Deposit	1,596.54		1,522,154.12
07/12/2016			Deposit	802.18		1,522,956.30
07/12/2016			Deposit	38.33		1,522,994.63
07/12/2016			Deposit	356.48		1,523,351.11
07/12/2016			Deposit	148.81		1,523,499.92
07/12/2016			Deposit	812.34		1,524,312.26
07/12/2016			Deposit	437.39		1,524,749.65
07/12/2016			Deposit	183.69		1,524,933.34
07/12/2016			Deposit	500.62		1,525,433.96
07/12/2016			Deposit	593.42		1,526,027.38
07/12/2016			Deposit	50.00		1,526,077.38
07/12/2016			Deposit	347.82		1,526,425.20
07/12/2016			Deposit	132.41		1,526,557.61
07/12/2016			Deposit	292.12		1,526,849.73
07/12/2016			Deposit	24.48		1,526,874.21
07/12/2016			Deposit	55.64		1,526,929.85
07/12/2016			Deposit	7,865.95		1,534,795.80
07/12/2016			Deposit	4,406.04		1,539,201.84
07/12/2016		JOCELYN SHERMAN	REFUND FOR SEWER OVERPAYME...		14.12	1,539,187.72
07/13/2016			Deposit	30,079.95		1,569,267.67
Total 100.03 · INTEGRITY BANK				106,614.75	80,078.27	1,569,267.67
107.04 · INTEGRITY-CASH MANAGEMENT						95,925.79
Total 107.04 · INTEGRITY-CASH MANAGEMENT						95,925.79
Total 100 · BANK ACCOUNTS				106,917.24	80,080.27	1,679,019.40

8:51 AM  
07/14/16  
Accrual Basis

2009 PENN TOWNSHIP WATER & SEWER  
CHECKBOOK LEDGER  
As of July 13, 2016

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Memo</u>	<u>Debit</u>	<u>Credit</u>	<u>Balance</u>
TOTAL				<u>106,917.24</u>	<u>80,080.27</u>	<u>1,679,019.40</u>

8:52 AM  
07/14/16

## 2009 PENN TOWNSHIP WATER & SEWER Deposit Detail June 16 through July 13, 2016

Type	Date	Name	Memo	Account	Amount
<b>Deposit</b>	<b>06/20/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>4,841.30</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/20/16	364.12 · SEWER US...	-3,107.20
		CUSTOMERS	WATER PAYMENTS REC'D. 6/20/16	378.10 · WATER US...	-1,623.99
		CUSTOMERS	S L PAYMENTS REC'D. 6/20/16	372.44 · STREETLIG...	-110.11
TOTAL					-4,841.30
<b>Deposit</b>	<b>06/20/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>11,460.97</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/20/16	364.12 · SEWER US...	-7,370.11
		CUSTOMERS	WATER PAYMENTS REC'D. 6/20/16	378.10 · WATER US...	-3,736.03
		CUSTOMERS	S L PAYMENTS REC'D. 6/20/16	372.44 · STREETLIG...	-354.83
TOTAL					-11,460.97
<b>Deposit</b>	<b>06/20/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>120.68</b>
		CUSTOMERS	WATER TAPPING FEE - NYE 258 GRANDVI...	378.90 · WATER CO...	-60.34
		CUSTOMERS	WATER TAPPING FEE - RUTT 227 GRAND...	378.90 · WATER CO...	-60.34
TOTAL					-120.68
<b>Deposit</b>	<b>06/20/2016</b>		<b>Deposit</b>	<b>100.02 · PNC CHECK...</b>	<b>267.29</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/20/16	364.12 · SEWER US...	-169.81
		CUSTOMERS	WATER PAYMENTS REC'D. 6/20/16	378.10 · WATER US...	-89.48
		CUSTOMERS	S L PAYMENTS REC'D. 6/20/16	372.44 · STREETLIG...	-8.00
TOTAL					-267.29
<b>Deposit</b>	<b>06/20/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>5,250.00</b>
		KENNETH HOMES	SEWER PERMIT - 370 CEDAR HOLLOW	364.11 · SEWER CO...	-5,250.00
TOTAL					-5,250.00
<b>Deposit</b>	<b>06/30/2016</b>		<b>Interest</b>	<b>100.03 · INTEGRITY ...</b>	<b>143.65</b>
			Interest	341.01 · INTEREST ...	-143.65
TOTAL					-143.65
<b>Deposit</b>	<b>07/05/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>65.00</b>
		CUSTOMERS	WATER TAPPING FEE - HAWKINS 273 GR...	378.90 · WATER CO...	-65.00
TOTAL					-65.00
<b>Deposit</b>	<b>07/05/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>1,743.67</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/5/16	364.12 · SEWER US...	-1,471.92
		CUSTOMERS	WATER PAYMENTS REC'D. 7/5/16	378.10 · WATER US...	-201.52
		CUSTOMERS	S L PAYMENTS REC'D. 7/5/16	372.44 · STREETLIG...	-70.23
TOTAL					-1,743.67
<b>Deposit</b>	<b>07/05/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>13,224.71</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/5/16	364.12 · SEWER US...	-11,690.91
		CUSTOMERS	WATER PAYMENTS REC'D. 7/5/16	378.10 · WATER US...	-915.08
		CUSTOMERS	S L PAYMENTS REC'D. 7/5/16	372.44 · STREETLIG...	-618.72
TOTAL					-13,224.71
<b>Deposit</b>	<b>07/05/2016</b>		<b>Deposit</b>	<b>100.02 · PNC CHECK...</b>	<b>35.20</b>
		CUSTOMERS	S L PAYMENTS REC'D. 7/5/16	372.44 · STREETLIG...	-35.20
TOTAL					-35.20
<b>Deposit</b>	<b>07/05/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>19,331.67</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/5/16	364.12 · SEWER US...	-18,589.78
		CUSTOMERS	WATER PAYMENTS REC'D. 7/5/16	378.10 · WATER US...	-172.62
		CUSTOMERS	BULK WATER PAYMENTS REC'D. 7/5/16	378.11 · METERED S...	-472.02

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07/14/16

## 2009 PENN TOWNSHIP WATER &amp; SEWER

## Deposit Detail

June 16 through July 13, 2016

Type	Date	Name	Memo	Account	Amount
		CUSTOMERS	S L PAYMENTS REC'D. 7/5/16	372.44 · STREETLIG...	-97.25
TOTAL					-19,331.67
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>61.48</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/7/16	364.12 · SEWER US...	-22.22
		CUSTOMERS	WATER PAYMENTS REC'D. 7/7/16	378.10 · WATER US...	-39.26
TOTAL					-61.48
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>1,251.43</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/16/16	364.12 · SEWER US...	-811.47
		CUSTOMERS	WATER PAYMENTS REC'D. 6/16/16	378.10 · WATER US...	-423.96
		CUSTOMERS	S L PAYMENTS REC'D. 6/16/16	372.44 · STREETLIG...	-16.00
TOTAL					-1,251.43
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>395.98</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/16/16	364.12 · SEWER US...	-249.42
		CUSTOMERS	WATER PAYMENTS REC'D. 6/16/16	378.10 · WATER US...	-130.56
		CUSTOMERS	S L PAYMENTS REC'D. 6/16/16	372.44 · STREETLIG...	-16.00
TOTAL					-395.98
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>1,596.54</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/17/16	364.12 · SEWER US...	-1,051.99
		CUSTOMERS	WATER PAYMENTS REC'D. 6/17/16	378.10 · WATER US...	-480.55
		CUSTOMERS	S L PAYMENTS REC'D. 6/17/16	372.44 · STREETLIG...	-64.00
TOTAL					-1,596.54
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>802.18</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/20/16	364.12 · SEWER US...	-458.73
		CUSTOMERS	WATER PAYMENTS REC'D. 6/20/16	378.10 · WATER US...	-295.45
		CUSTOMERS	S L PAYMENTS REC'D. 6/20/16	372.44 · STREETLIG...	-48.00
TOTAL					-802.18
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>38.33</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/20/16	364.12 · SEWER US...	-38.33
TOTAL					-38.33
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>356.48</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/22/16	364.12 · SEWER US...	-104.21
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/22/16	364.12 · SEWER US...	-158.76
		CUSTOMERS	WATER PAYMENTS REC'D. 6/22/16	378.10 · WATER US...	-83.06
		CUSTOMERS	S L PAYMENTS REC'D. 6/22/16	372.44 · STREETLIG...	-10.45
TOTAL					-356.48
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>148.81</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/22/16	364.12 · SEWER US...	-128.81
		CUSTOMERS	S L PAYMENTS REC'D. 6/22/16	372.44 · STREETLIG...	-20.00
TOTAL					-148.81
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>812.34</b>
		PORTNOFF LAW ASSOCIA...	SEWER PAYMENT REC'D. 6/23/16-LASDIN	364.12 · SEWER US...	-168.45
		PORTNOFF LAW ASSOCIA...	S L PAYMENT REC'D. 6/23/16-LASDIN	372.44 · STREETLIG...	-6.55
		PORTNOFF LAW ASSOCIA...	SEWER PAYMENT REC'D. 6/23/16-KAY	364.12 · SEWER US...	-330.12
		PORTNOFF LAW ASSOCIA...	WATER PAYMENT REC'D. 6/23/16-KAY	378.10 · WATER US...	-236.28
		PORTNOFF LAW ASSOCIA...	S L PAYMENT REC'D. 6/23/16-KAY	372.44 · STREETLIG...	-17.60
		PORTNOFF LAW ASSOCIA...	FEES REC'D. 6/23/16-KAY	332 · LIEN PROCEEDS	-53.34
TOTAL					-812.34
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>437.39</b>

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07/14/16

**2009 PENN TOWNSHIP WATER & SEWER**  
**Deposit Detail**  
June 16 through July 13, 2016

Type	Date	Name	Memo	Account	Amount
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/23/16	364.12 · SEWER US...	-290.03
		CUSTOMERS	WATER PAYMENTS REC'D. 6/23/16	378.10 · WATER US...	-139.36
		CUSTOMERS	S L PAYMENTS REC'D. 6/23/16	372.44 · STREETLIG...	-8.00
TOTAL					-437.39
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>183.69</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/27/16	364.12 · SEWER US...	-120.61
		CUSTOMERS	WATER PAYMENTS REC'D. 6/27/16	378.10 · WATER US...	-63.08
TOTAL					-183.69
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>500.62</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/28/16	364.12 · SEWER US...	-500.62
TOTAL					-500.62
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>593.42</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 6/29/16	364.12 · SEWER US...	-450.79
		CUSTOMERS	WATER PAYMENTS REC'D. 6/29/16	378.10 · WATER US...	-125.97
		CUSTOMERS	S L PAYMENTS REC'D. 6/29/16	372.44 · STREETLIG...	-16.66
TOTAL					-593.42
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>50.00</b>
		PORTNOFF LAW ASSOCIA...	SEWER PAYMENTS REC'D. 6/30/16 - GAR...	364.12 · SEWER US...	-50.00
TOTAL					-50.00
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>347.82</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/1/16	364.12 · SEWER US...	-347.82
TOTAL					-347.82
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>132.41</b>
		CUSTOMERS	SEWER PAYMENT REC'D. 7/5/16	364.12 · SEWER US...	-112.41
		CUSTOMERS	S L PAYMENT REC'D. 7/5/16	372.44 · STREETLIG...	-20.00
TOTAL					-132.41
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>292.12</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/6/16	364.12 · SEWER US...	-159.73
		CUSTOMERS	WATER PAYMENTS REC'D. 7/6/16	378.10 · WATER US...	-83.91
		CUSTOMERS	S L PAYMENTS REC'D. 7/6/16	372.44 · STREETLIG...	-8.80
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/6/16	364.12 · SEWER US...	-32.68
		CUSTOMERS	S L PAYMENTS REC'D. 7/6/16	372.44 · STREETLIG...	-7.00
TOTAL					-292.12
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>24.48</b>
		CUSTOMERS	SEWER PAYMENT REC'D. 7/7/16	364.12 · SEWER US...	-24.48
TOTAL					-24.48
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>55.64</b>
		CUSTOMERS	SEWER PAYMENT REC'D. 7/7/16	364.12 · SEWER US...	-55.64
TOTAL					-55.64
<b>Deposit</b>	<b>07/12/2016</b>		<b>Deposit</b>	<b>100.03 · INTEGRITY ...</b>	<b>7,865.95</b>
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/11/16	364.12 · SEWER US...	-7,379.19
		CUSTOMERS	WATER PAYMENTS REC'D. 7/11/16	378.10 · WATER US...	-121.48
		CUSTOMERS	S L PAYMENTS REC'D. 7/11/16	372.44 · STREETLIG...	-365.28
TOTAL					-7,865.95

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07/14/16

### 2009 PENN TOWNSHIP WATER & SEWER

### Deposit Detail

June 16 through July 13, 2016

Type	Date	Name	Memo	Account	Amount
Deposit	07/12/2016		Deposit	100.03 · INTEGRITY ...	4,406.04
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/11/16	364.12 · SEWER US...	-4,255.41
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/11/16	378.10 · WATER US...	-124.23
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/11/16	372.44 · STREETLIG...	-26.40
TOTAL					-4,406.04
Deposit	07/13/2016		Deposit	100.03 · INTEGRITY ...	30,079.95
		CUSTOMERS	SEWER PAYMENTS REC'D. 7/13/16	364.12 · SEWER US...	-29,466.00
		CUSTOMERS	WATER PAYMENTS REC'D. 7/13/16	378.10 · WATER US...	-204.80
		CUSTOMERS	S L PAYMENTS REC'D. 7/13/16	372.44 · STREETLIG...	-409.15
TOTAL					-30,079.95

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**G.O. BONDS SERIES OF 2009 & 2012 - NWLCA WATER PROJECT**

07/14/16

**Balance Sheet**

Accrual Basis

As of July 13, 2016

	<u>Jul 13, 16</u>
<b>ASSETS</b>	
Current Assets	
Checking/Savings	
100 · BANK ACCOUNTS	
100.02 · PLGIT ARM GO BONDS SERIES 2012	314,792.24
Total 100 · BANK ACCOUNTS	314,792.24
103.00 · SINKING FUND	0.01
Total Checking/Savings	314,792.25
Total Current Assets	314,792.25
<b>TOTAL ASSETS</b>	<b>314,792.25</b>
<b>LIABILITIES &amp; EQUITY</b>	
Equity	
30000 · Opening Bal Equity	6,143,952.12
32000 · Retained Earnings	-5,803,788.02
Net Income	-25,371.85
Total Equity	314,792.25
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>314,792.25</b>

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07/14/16

Accrual Basis

**G.O. BONDS SERIES OF 2009 & 2012 - NWLCA WATER PROJECT  
CHECK BOOK LEDGER**

As of July 13, 2016

<u>Date</u>	<u>Num</u>	<u>Name</u>	<u>Memo</u>	<u>Debit</u>	<u>Credit</u>	<u>Balance</u>
<b>100 · BANK ACCOUNTS</b>						315,134.65
<b>100.02 · PLGIT ARM GO BONDS SERIES 2012</b>						315,134.65
06/30/2016			Interest	92.59		315,227.24
07/11/2016	219	BECKER ENGINEERING	INV #12044		435.00	314,792.24
Total 100.02 · PLGIT ARM GO BONDS SERIES 2012				92.59	435.00	314,792.24
Total 100 · BANK ACCOUNTS				92.59	435.00	314,792.24
<b>103.00 · SINKING FUND</b>						0.01
Total 103.00 · SINKING FUND						0.01
<b>TOTAL</b>				<b>92.59</b>	<b>435.00</b>	<b>314,792.25</b>



**BECKER**  
**ENGINEERING**  
115 MILLERSVILLE ROAD  
LANCASTER, PA 17603  
717-295-4975 P | 717-295-4972 F  
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# Invoice

Bill To

Northwestern Lanc. County Authority  
97 North Penryn Road  
Manheim, PA 17545

Invoice # 12041  
Date 6/27/2016  
Terms Net 30  
Due Date 7/27/2016

**Project** 0405 - Sweetbriar Creek Subdivision-Ph. 1

Date	Professional Services	Hours	Rate	Amount
	May 30, 2016 - June 26, 2016			
6/13/2016	PS Control Building Roof Repair, Bucknoll Road Sanitary Sewer Repair and Off-Site Sanitary Sewer Repair Follow-up	0.75	80.00	60.00
6/14/2016	PS Control Building Roof Repair, Bucknoll Road Sanitary Sewer Repair and Off-Site Sanitary Sewer Repair Follow-up	0.25	80.00	20.00
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.		<b>Total</b>		<b>\$80.00</b>



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# Invoice

Bill To

Northwestern Lanc. County Authority  
97 North Penryn Road  
Manheim, PA 17545

Invoice # 12042  
Date 6/27/2016  
Terms Net 30  
Due Date 7/27/2016

**Project** 0614 - Holly Tree Farms Subdivision

Date	Professional Services	Hours	Rate	Amount
	May 30, 2016 - June 26, 2016			
6/14/2016	Correspondence with Developer's Consultant/Review Planning Module Exemption Letter	0.5	100.00	50.00
6/16/2016	Correspondence with Developer's Consultant/Review Planning Module Exemption Letter	0.5	100.00	50.00
6/24/2016	Phase 2 Sewer Capacity/PADEP Discussions	0.75	115.00	86.25
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.		<b>Total</b>		\$186.25



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# Invoice

Bill To

Northwestern Lanc. County Authority  
97 North Penryn Road  
Manheim, PA 17545

Invoice # 12043  
Date 6/27/2016  
Terms Net 30  
Due Date 7/27/2016

**Project** 0617 - Pumping Station No. 1

Date	Professional Services	Hours	Rate	Amount
	May 30, 2016 - June 26, 2016			
6/16/2016	Correspondence with Authority, Review of Site Plan	0.5	100.00	50.00
6/17/2016	Survey Coordination/Lot Layout and Configuration	2	115.00	230.00
6/21/2016	Project Coordination	0.5	100.00	50.00
6/22/2016	Project Coordination/Discussions	1	100.00	100.00
6/24/2016	Lot Configuration/Survey Coordination & Discussions	2	115.00	230.00
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.		<b>Total</b>		\$660.00



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 LANCASTER, PA 17603  
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# Invoice

Bill To

Northwestern Lanc. County Authority  
 97 North Penryn Road  
 Manheim, PA 17545

Invoice # 12044  
 Date 6/27/2016  
 Terms Net 30  
 Due Date 7/27/2016

**Project** 1102 - Doe Run Rd/Penryn Rd Water Line

Date	Professional Services	Hours	Rate	Amount
	May 30, 2016 - June 26, 2016			
5/31/2016	Construction Administration	0.5	105.00	52.50
5/31/2016	Construction Observation/Reports	1.25	80.00	100.00
6/6/2016	Construction Administration	0.5	105.00	52.50
6/6/2016	Construction Coordination, GeoTech Invoice Review	1	100.00	100.00
6/10/2016	Construction Administration	0.5	105.00	52.50
6/17/2016	Construction Administration	0.5	105.00	52.50
6/17/2016	Sanitary Sewer Manhole Adjustment Coordination	0.25	100.00	25.00
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.		<b>Total</b>		<b>\$435.00</b>



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 717-295-4975 P | 717-295-4972 F  
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# Invoice

Bill To

Northwestern Lanc. County Authority  
 97 North Penryn Road  
 Manheim, PA 17545

Invoice # 12045  
 Date 6/27/2016  
 Terms Net 30  
 Due Date 7/27/2016

**Project** 1402 - Blackford Development

Date	Professional Services	Hours	Rate	Amount
	May 30, 2016 - June 26, 2016			
5/31/2016	Revised Phase 2 Lateral Connection Review	1.75	80.00	140.00
6/1/2016	Sewer Lateral Plan Modifications/Discussions/Review	2	115.00	230.00
6/1/2016	Revised Phase 2 Lateral Connection Review	1.5	80.00	120.00
6/6/2016	Construction Coordination - Sanitary Sewer Lateral Connection	0.5	80.00	40.00
6/6/2016	Construction Observation/Report - Sanitary Sewer Lateral Connection	4.5	80.00	360.00
6/7/2016	Construction Observation/Report - Sanitary Sewer Lateral Connection	5	80.00	400.00
6/10/2016	Construction Coordination/Reports	0.75	80.00	60.00
6/14/2016	Construction Observation/Reports	5	80.00	400.00
6/15/2016	Construction Observation/Reports	4	80.00	320.00
6/16/2016	Construction Observation/Reports	3	80.00	240.00
6/17/2016	Construction Observation/Reports	4	80.00	320.00
	Mileage/Expenses		71.28	71.28
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.			<b>Total</b>	<b>\$2,701.28</b>



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 115 MILLERSVILLE ROAD  
 LANCASTER, PA 17603  
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# Invoice

Bill To

Northwestern Lanc. County Authority  
 97 North Penryn Road  
 Manheim, PA 17545

Invoice # 12046  
 Date 6/27/2016  
 Terms Net 30  
 Due Date 7/27/2016

**Project** 1406-Fruitville Pike/Holly Tree Rd Sewers

Date	Professional Services	Hours	Rate	Amount
	May 30, 2016 - June 26, 2016			
6/1/2016	Design	0.5	105.00	52.50
6/1/2016	Plans/Correspondence	1	70.00	70.00
6/2/2016	Review Sewer Design/Discussions/Bid Document Coordination	3	115.00	345.00
6/3/2016	Review Sewer Design/Discussions/Bid Document Coordination	2	115.00	230.00
6/6/2016	Design	1	105.00	105.00
6/6/2016	Preparation of Bidding Documents	0.5	100.00	50.00
6/8/2016	Review Sanitary Sewer Design Plans	1.5	115.00	172.50
6/8/2016	Preparation of Bidding Documents	1.25	100.00	125.00
6/8/2016	Quantity Take off/Specifications	3.25	100.00	325.00
6/8/2016	Preparation of Construction Project File	0.5	100.00	50.00
6/9/2016	Review Sanitary Sewer Design Plans	1	115.00	115.00
6/9/2016	Preparation of Bidding Documents	1.5	100.00	150.00
6/9/2016	Quantity Take off/Specifications	1.75	100.00	175.00
6/10/2016	Review Sanitary Sewer Design Plans	2	115.00	230.00
6/10/2016	Design	0.5	105.00	52.50
6/10/2016	Preparation of Bidding Documents	4.75	100.00	475.00
6/10/2016	Quantity Take off/Specifications	0.5	100.00	50.00
6/13/2016	Preparation of Bidding Documents, Construction Schedule	3.5	100.00	350.00
6/14/2016	Construction Cost Opinion/Schedule	1.5	115.00	172.50
6/14/2016	Design	0.5	105.00	52.50
6/14/2016	Set up Project on PennBid	2	100.00	200.00
6/14/2016	Plan Revisions	3.5	70.00	245.00
6/15/2016	PennDOT Permitting/Plan Review/Specifications	2	115.00	230.00
6/15/2016	Correspondence with Township, Review HOP Drawings	2.5	100.00	250.00
6/15/2016	Plan Revisions	1	70.00	70.00
6/16/2016	PennDOT Permitting/Plan Review/Specifications	1	115.00	115.00
6/16/2016	Plan Revisions	0.5	70.00	35.00
6/17/2016	PennDOT Permitting/Plan Review/Specifications	1	115.00	115.00
6/17/2016	Design	0.5	105.00	52.50
6/17/2016	Correspondence with Township, Review HOP Drawings	1.5	100.00	150.00
6/21/2016	Review HOP Drawings, Coordination with TPD	1.5	100.00	150.00
6/21/2016	HOP Plan QA/QC Review	0.75	100.00	75.00
6/24/2016	Review Design Plans/Specifications	2	115.00	230.00
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.			<b>Total</b>	\$5,265.00



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# Invoice

Bill To

Northwestern Lanc. County Authority  
97 North Penryn Road  
Manheim, PA 17545

Invoice # 12047  
Date 6/27/2016  
Terms Net 30  
Due Date 7/27/2016

**Project** 1504 - Longenecker's Storage Buidling

Date	Professional Services	Hours	Rate	Amount
6/10/2016	May 30, 2016 - June 26, 2016 Sanitary Sewer/Water Record Drawing Follow-up with Consultant	0.25	80.00	20.00
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.			<b>Total</b>	\$20.00



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# Invoice

Bill To

Northwestern Lanc. County Authority  
 97 North Penryn Road  
 Manheim, PA 17545

Invoice # 12048  
 Date 6/27/2016  
 Terms Net 30  
 Due Date 7/27/2016

**Project** 1505 - Doe Run Elementary School

Date	Professional Services	Hours	Rate	Amount
	May 30, 2016 - June 26, 2016			
6/2/2016	Project Discussions	0.75	80.00	60.00
6/6/2016	Construction Coordination/Water Service Connection	1.25	100.00	125.00
6/8/2016	Shop Drawing Review	1.25	80.00	100.00
6/13/2016	Shop Drawing Review	0.5	80.00	40.00
6/14/2016	Shop Drawing Review/Temp Water Source Correspondence with Contractor	0.75	100.00	75.00
6/14/2016	Shop Drawing Review	1	80.00	80.00
6/15/2016	Shop Drawing Review/Temp Water Source Correspondence with Contractor	0.75	100.00	75.00
6/15/2016	Shop Drawing Review	2.5	80.00	200.00
6/16/2016	Shop Drawing Review/Temp Water Source Correspondence with Contractor	0.75	100.00	75.00
6/16/2016	Shop Drawing Review	2	80.00	160.00
6/17/2016	Shop Drawing Review/Temp Water Source Correspondence with Contractor	1.75	100.00	175.00
6/21/2016	Construction Coordination	0.5	100.00	50.00
6/24/2016	Construction & Shop Drawing Discussions	0.75	115.00	86.25
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.			<b>Total</b>	\$1,301.25



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# Invoice

Bill To

Northwestern Lanc. County Authority  
 97 North Penryn Road  
 Manheim, PA 17545

Invoice # 12049  
 Date 6/27/2016  
 Terms Net 30  
 Due Date 7/27/2016

**Project** 1601 - 2016 General Engineering

Date	Professional Services	Hours	Rate	Amount
	May 30, 2016 - June 26, 2016			
6/6/2016	Coordination with Authority	0.5	100.00	50.00
6/8/2016	Authority Specification Discussions/Review with Potential Developer Contractor	0.75	115.00	86.25
6/13/2016	Correspondence/Severn Trent	0.5	105.00	52.50
6/14/2016	June Engineer's Report/Discussions/Correspondence	2.25	115.00	258.75
6/14/2016	Authority Correspondence Review/Response	1	115.00	115.00
6/14/2016	Copy all Record Drawings and Prepare CD of NWLCA Record Drawings for Authority	2.5	100.00	250.00
6/15/2016	Correspondence/Severn Trent	0.5	105.00	52.50
6/17/2016	Correspondence/Severn Trent	0.5	105.00	52.50
6/20/2016	Authority Meeting Preparation/Attendance/Discussions	4.25	115.00	488.75
6/24/2016	Severn Trent Correspondence/Discussions	0.75	115.00	86.25
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.		<b>Total</b>		<b>\$1,492.50</b>



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# Invoice

Bill To

Northwestern Lanc. County Authority  
97 North Penryn Road  
Manheim, PA 17545

Invoice # 12050  
Date 6/27/2016  
Terms Net 30  
Due Date 7/27/2016

**Project** 1602 - Auto Zone

Date	Professional Services	Hours	Rate	Amount
	May 30, 2016 - June 26, 2016			
6/14/2016	Capacity Request/Project Clarification	0.5	100.00	50.00
6/21/2016	Sanitary Sewer Plan Review, Phone Discussion with Developer's Consultant	0.75	100.00	75.00
6/21/2016	Plan Resubmission Review	1	100.00	100.00
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.			<b>Total</b>	\$225.00



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# Invoice

Bill To

Northwestern Lanc. County Authority  
97 North Penryn Road  
Manheim, PA 17545

Invoice # 12051  
Date 6/27/2016  
Terms Net 30  
Due Date 7/27/2016

**Project** 1603 - Source Water Protection Plan

Date	Professional Services	Hours	Rate	Amount
6/20/2016	May 30, 2016 - June 26, 2016 Advisory Board Meeting Preparation/Attendance	4	105.00	420.00
1.5% per month, 18% annual (\$1.00 minimum) charged on past due invoices.				<b>Total</b> \$420.00

**NORTHWESTERN LANCASTER COUNTY AUTHORITY  
 ANTICIPATED G.O. BOND SERIES PROJECT COSTS  
 BILLING SUMMARY  
 PROJECT NO. 16-103-01**

	Invoiced Through 11/3/2014	Invoice Date 6/1/2015	Invoice Date 7/27/2015	Invoice Date 8/31/2015	Invoice Date 9/28/2015	Invoice Date 10/26/2015	Invoice Date 11/30/2015	Invoice Date 12/28/2015	Invoice Date 1/31/2016	Invoice Date 3/28/2016	Invoice Date 5/2/2016	Invoice Date 5/31/2016	Invoice Date 6/27/2016	Total Costs	Task Budget	Remaining Budget
<b>Grandview Drive Water Line</b>																
Construction Costs	\$173,529.21													\$173,529.21	\$176,188.00	\$2,658.79
Engineering	\$19,442.23													\$19,442.23	\$17,619.00	(\$1,823.23)
Contingency														\$0.00	\$8,809.00	\$8,809.00
<b>Doe Run Road/S. Penryn Road Water Line</b>																
Construction Costs											\$2,089.47	\$173,136.53		\$175,226.00	\$223,900.00	\$48,674.00
Engineering	\$8,268.67		\$2,345.00	\$1,841.25	\$1,245.00	\$86.25	\$1,502.24	\$152.50	\$255.00	\$5,772.02	\$11,873.66	\$3,992.86	\$435.00	\$37,769.45	\$33,585.00	(\$4,184.45)
Legal/Administration														\$0.00	\$6,717.00	\$6,717.00
Ephrata National Bank Construction Contribution											\$65,494.00			\$65,494.00	\$65,494.00	\$0.00
Advantage Engineering Compaction Testing											\$3,080.00	\$3,186.50		\$6,266.50	\$0.00	(\$6,266.50)
<b>Well 3 Development</b>																
Construction Costs	\$199,673.50													\$199,673.50	\$210,000.00	\$10,326.50
Engineering	\$72,272.41	\$140.00												\$72,412.41	\$70,800.00	(\$1,612.41)
PHMC	\$8,407.53													\$8,407.53	\$0.00	(\$8,407.53)
Legal/Administration														\$0.00	\$13,035.00	\$13,035.00
<b>TOTAL:</b>	<b>\$481,593.55</b>	<b>\$140.00</b>	<b>\$2,345.00</b>	<b>\$1,841.25</b>	<b>\$1,245.00</b>	<b>\$86.25</b>	<b>\$1,502.24</b>	<b>\$152.50</b>	<b>\$255.00</b>	<b>\$5,772.02</b>	<b>\$82,537.13</b>	<b>\$180,315.89</b>	<b>\$435.00</b>	<b>\$758,220.83</b>	<b>\$826,147.00</b>	<b>\$67,926.17</b>

## 2015 ANNUAL DRINKING WATER QUALITY REPORT

**PWSID #: 7360078      NAME: MANHEIM AREA WATER & SEWER AUTHORITY "MAWSA"**

*Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.* (This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.)

### **WATER SYSTEM INFORMATION:**

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact the Operations Supervisor, Sam Getz, at 717-665-2737. Our office hours are Monday to Friday from 8AM to 12PM, and 12:30PM to 4PM.

We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. Meetings are held in Borough Hall at 15 East High Street, Manheim at 7PM on the second Thursday of each month.

### **SOURCE(S) OF WATER:**

The source of our drinking water are two wells (#4 and #6) drilled into the Eplea formation aquifer, which lies about 200 feet below the Earth's surface. An aquifer is an underground body of water, which is tapped by drilling wells and pumping the water to the surface of distribution. The 200 feet of earth between surface sources and this aquifer helps to purify the water before it actually reaches the aquifer, making it easier for us to treat before we pump it into your water distribution system.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the *Safe Drinking Water Hotline* (800-426-4791).

### ***SOURCE WATER PROTECTION:***

In 2013 the Manheim Area Water and Sewer Authority (MAWSA) joined with the Northwest Lancaster County Authority (NWLCA) and the Pennsylvania Department of Environmental Protection (DEP) Source Water Protection Technical Assistance Program (SWPTAP) to pursue an increasing desire to protect our overlapping source water protection zones. Both MAWSA and NWLCA wish to preserve and improve the safety of their drinking water supplies for their customers today and into the future. Potential contaminations from various sources including agricultural operations, auto related businesses, industrial sites, and former industrial and brownfield sites are of a concern to all involved. The objective of the joint effort is to develop a source water protection plan that delineates the recharge areas for MAWSA and the NWLCA water sources, determine the transport times and pathways of potential contaminants, identify potential sources of contamination, educate the public on the importance of source water protection, plan for potential pollution events, and comply with DEP regulations cited in Chapter 109, Section 1.3

### ***MONITORING YOUR WATER:***

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2015. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The dates have been noted on the sampling results table.

### ***DEFINITIONS:***

*Action Level (AL)* - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*HAA5 - Haloacetic Acids (Five)*

*IOC - Inorganic Chemical*

*Maximum Contaminant Level (MCL)* - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal (MCLG)* - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

*Maximum Residual Disinfectant Level (MRDL)* - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

*Maximum Residual Disinfectant Level Goal (MRDLG)* - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

*Minimum Residual Disinfectant Level (MinRDL)* - The minimum level of residual disinfectant required at the entry point to the distribution system.

**DEFINITIONS (continued):**

*Mrem/year* = millirems per year (a measure of radiation absorbed by the body)

*ng/L* = nanogram per Liter

*pCi/L* = picocuries per liter (a measure of radioactivity)

*pb* = parts per billion, or micrograms per liter ( $\mu\text{g/L}$ )

*ppm* = parts per million, or milligrams per liter ( $\text{mg/L}$ )

*ppq* = parts per quadrillion, or picograms per liter

*ppt* = parts per trillion, or nanograms per liter

*THM* - Trihalomethane

*Treatment Technique (TT)* - A required process intended to reduce the level of a contaminant in drinking water.

*TTHM* - Total Trihalomethanes

**DETECTED SAMPLE RESULTS:**

Contaminant	MCL in CCR Units	MCLG	Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Barium IOC	2	2	0.043	0.043	MG/L	2015	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine	4	4	0.89	0.61 – 0.89	ppm	2015	N	Water additive used to control microbes
Chromium IOC	0.1	0.1	0.001	N/A	ppb	2015	N	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride IOC	2	2	0.84	0.84	ppm	2015	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
HAA5 (Distribution)	60	N/A	0.7375	0 – 2.37	ppb	2015	N	By-product of drinking water disinfection
Nitrate	10	10	5.9	5.71 – 6.1	ppm	2015	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

<b>Entry Point Disinfectant Residual</b>							
<b>Contaminant</b>	<b>Minimum Disinfectant Residual</b>	<b>Lowest Level Detected</b>	<b>Range of Detections</b>	<b>Units</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Chlorine	0.2	0.25	0.25 – 1.89	MG/L	2015	N	Water additive used to control microbes.

<b>2013 Copper and Lead</b>							
<b>Contaminant</b>	<b>Action Level (AL)</b>	<b>MCLG</b>	<b>90<sup>th</sup> %ile Value</b>	<b>Units</b>	<b># of Sites Above AL of Total Sites</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Copper	1.3	1.3	0.091	ppm	0	N	Corrosion of household plumbing.
Lead	15	0	2.8	ppb	0	N	Corrosion of household plumbing.

Non-detected contaminants (“0” results or less than 0 results); Antimony IOC, Arsenic IOC, Beryllium IOC, Cadmium IOC, Cyanide (free) IOC, Mercury IOC, and Nickel IOC, Nitrite, Selenium IOC, and Thallium IOC.

<b>Turbidity</b>							
<b>Contaminant</b>	<b>MCL</b>		<b>MCLG</b>	<b>Level Detected</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Source of Contamination</b>
Turbidity	TT=2.0 NTU for a single measurement		N/A	0.623	2015	Y	Soil runoff.
	TT= at least 95% of monthly samples < 1.0			0.070	2015	N	

<b>Raw Source Water Microbial</b>					
<b>Contaminants</b>	<b>MCLG</b>	<b>Total # of Positive Samples</b>	<b>Dates</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
<i>E. coli</i>	0	0	2015	N	Human and animal fecal waste.

<b>Microbial</b>					
<b>Contaminants</b>	<b>MCL</b>	<b>MCLG</b>	<b>Highest # or % of Positive Samples</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Total Coliform Bacteria	For systems that collect <40 samples/month: <ul style="list-style-type: none"> <li>• More than 1 positive monthly sample</li> </ul> For systems that collect ≥ 40 samples/month: <ul style="list-style-type: none"> <li>• 5% of monthly samples are positive</li> </ul>	0	0	N	Naturally present in the environment.
Fecal Coliform Bacteria or <i>E. coli</i>	0	0	0	N	Human and animal fecal waste.

**HEALTH EFFECTS**

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

**OTHER VIOLATIONS**

Turbidity Violation: March 20, 2015 and December 22, 2015. MAWSA experienced turbidity violations pertaining to a malfunction of the monitoring equipment.

- Public notifications were issued.
- Compliance was achieved in both instances.
- Turbidity is routinely monitored for filter performance effectiveness. MAWSA has purchased more advanced equipment to assure continued quality.
- Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
- For all violations on any public water system, enter the public water system ID at; <http://www.drinkingwater.state.pa.us/ccr/index.html>.

## ***EDUCATIONAL INFORMATION***

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA and DEP prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's *Safe Drinking Water Hotline* (800-426-4791).

***Information about Lead:*** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. MAWSA is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. MAWSA also enforces the removal of galvanized/lead carrying piping from the home, and checks for such installations at property inspections. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>. Additional resources for lead research may be found on our web site at <http://www.mawsa.org>.

***Other Information:*** The Manheim Area Water & Sewer Authority has a constant goal of providing you with a dependable supply of safe drinking water. We want you to understand some of the efforts made to improve the water treatment process, and to protect our water resources. MAWSA is dedicated to providing top quality water to every tap each day. It has been our privilege to assure that our system's water quality meets, or exceeds, regulatory requirements when it reaches your tap each day. We ask that all of our customers help us to protect our water sources, which are the heart of our community, our way of life, and our children's future.



June 30, 2016

DAVID STEWART AUTH CHRMN  
NORTHWESTERN LANCASTER CO AUTH  
97 N PENRYN RD  
MANHEIM PA 17545-9326

PWSID #7360164

Re: Reminder Notification of Monitoring Requirements for all Entry Points

DEAR DAVID STEWART:

In order to improve public health protection and meet the intent of state and federal regulations, on **January 1, 2017**, the Department of Environmental Protection (Department) will begin requiring and tracking routine compliance monitoring at **all** permitted entry points (EPs) and associated sources, including purchased sources. On-going, routine monitoring will be required for all EPs and associated sources even if they were historically used only in an interim, reserve, or emergency capacity.

Both state and federal regulations require public water systems (PWS) to monitor all of their EPs and associated sources during routine compliance monitoring. Specifically, the Chapter 109 Safe Drinking Water Regulations requires the following:

- **§109.4.** Public water suppliers shall provide and effectively operate and maintain PWS facilities, and shall take whatever investigative or corrective action is necessary to assure that safe and potable water is continuously supplied to the users.
- **§109.301** (which incorporates 40 CFR Part 141). Monitoring must be representative of each source after treatment.
- **§109.504(c).** A permit's continuing validity is conditioned upon satisfaction of the terms of the permit.

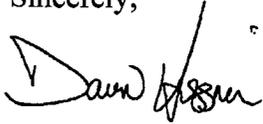
While the Department understands that all facilities are not used on a 24/7 basis, **all** permitted facilities should be operated and evaluated at least annually to ensure routine compliance monitoring is conducted, public health is protected, and the facilities remain in good working order and in compliance with all applicable requirements. After **January 1, 2017**, any source listed in your permit must be appropriately treated and captured in routine EP compliance monitoring. Abandoned sources (i.e., removed from your PWS permit) may not be connected to the system or used as a source of supply for your PWS unless you first obtain an emergency permit from the Department, as provided in 25 Pa. Code §109.506.

To prepare for the **January 1, 2017** deadline, please review the status and use of all your EPs and associated sources to determine what, if any, changes are needed to ensure all EPs and associated

sources are included in routine monitoring. The enclosed Q&A document provides additional information you should consider in your review.

Should you have any questions regarding the above information, *please contact your local DEP district office.*

Sincerely,

A handwritten signature in black ink, appearing to read "Dawn Hissner". The signature is written in a cursive style with a large initial "D".

Dawn Hissner  
Chief  
Operations, Monitoring & Compliance Division

Enclosure

cc: Regional Program Manager

## **Clarification of Monitoring Requirements Initiative Q&A**

### **What is the intent/expectations of this initiative?**

This initiative is intended to improve public health protection by ensuring that all permitted/ approved sources are included in routine compliance monitoring. This clarification was first announced in August of 2013 to explain that changes may be needed beginning January 2017. These changes may include modifications to permits, or changes in operations or monitoring plans. With ~6 months remaining until tracking of routine compliance monitoring is turned on for all sources/entry points (EPs), water suppliers need to consider their system operations so that , any necessary changes are completed by January 2017.

All permitted facilities should be routinely operated and evaluated to ensure compliance monitoring is conducted, public health is protected, and the facilities remain in good working order. Therefore, on January 1, 2017, the Department will begin requiring and tracking routine compliance monitoring at all permitted entry points (EPs) and associated sources. On-going, routine monitoring will be required for all EPs and associated sources even if they were historically used only in an interim, reserve or emergency capacity. Water suppliers should be evaluating the facilities (sources, purchased sources, treatment) currently listed in all their PWS permits for any source that has the potential to supply water to consumers to determine whether these facilities are still necessary to meet demand. The PWS should also evaluate what treatment and/or operational changes will be needed to determine water quality and establish a routine monitoring frequency. The purpose of the (delayed implementation) 3-year timeframe was to give water systems enough time to figure out how to comply.

### **What is the compliance/enforcement strategy beginning January 2017?**

Beginning January 2017, DEP will begin tracing compliance monitoring for all sources/EPs and assess monitoring & reporting (M/R) violations if monitoring is not conducted. Standard protocols will be followed for issuing violation notices or NOVs, and responding to violations.

The source/treatment/EP must be used frequently enough that it is captured in all routine monitoring (EP AND distribution). The frequency of use may be reduced to once/year if **all** EP and distribution sampling is annual or less frequently. This does NOT affect the daily residual monitoring required (or not required, if the EP is off-line for an entire day); the use of the N for reporting to DWELR that an EP was inactive on a particular day still applies. *[Note, this code only applies if the EP was not supplying water from ANY sources connected to it for an entire day.]*

### **What does "routine use" mean?**

Sources and treatment facilities will have to be operated for a sufficient amount of time to ensure that the *finished* water is captured in all routine chemical compliance monitoring – this includes both EP and distribution system sampling (Nitrate/Nitrite (NTRT), IOCs, VOCs, SOCs, Rads, DBPs, Lead/Copper & WQPs- if applicable). Therefore, the source(s) need to be used at least annually (NTRT cannot be less than an annual frequency), unless one/more contaminants are on a quarterly frequency (then the source(s) need to be used at least quarterly).

### **How should previously designated reserve, back-up or emergency sources be operated and monitored if they are retained in the permit?**

If an interim, reserve or emergency source will be retained in the operation permit and used routinely as a permanent source moving forward, an assessment should be conducted to ensure that existing treatment facilities are sufficient to meet all drinking water standards. Multiple wells adjacently located with similar construction *cannot* be assumed to qualify as a well field – the PWS will need to demonstrate to DEP that the wells are hydraulically connected.

If the PWS routinely uses only groundwater (GW) sources but has a permitted surface water or groundwater under direct influence (SW/GUDI) source that they currently consider reserve, interim or

emergency, the PWS will need to install the appropriate level of filtration *and be regulated as a SW system if they choose to retain the SW/GUDI source in the permit*. The PWS will likely need to conduct LT2 source water sampling to determine the source bin classification and the appropriate level of treatment.

1. "Normal operating conditions" prior to the 2013 letter should *not* be used to assess sources now and *are not necessarily what will be "normal operating conditions" moving forward*. ***If a PWS wants to keep a source on the permit that has not been used, the PWS must reconsider how that source will be used in the future to ensure it is captured in all routine compliance monitoring.***
2. If a source is to be added to an existing EP, then the PWS needs to determine whether the sources will be alternated or blended.
  - If sources are alternated, multiple EP samples are necessary to ensure each source is monitored. The 2<sup>nd</sup> (& subsequent) EP sample(s) must represent the water from each individual source, so the 2<sup>nd</sup> (& subsequent) sample(s) cannot be collected until the transmission line, treatment building pipes and contact tanks have been flushed and then filled from the next source (either by manual flushing or via system demand).
  - If the source is, or will be, blended prior to the EP, the PWS needs to decide how the blending occurs. The blending ratio should remain fairly constant to ensure monitoring is representative of all sources. If the blending ratio fluctuates, multiple samples may be necessary to ensure each source is monitored.
  - If blending is necessary to meet an MCL, the blending ratio is a treatment process and needs to be documented in the operation permit.
3. If the source will have its own EP, then all required treatment must be permitted/approved and in place before the source is put on-line.
4. Source (raw) water sampling is not an acceptable alternative in lieu of routine use and ***EP*** compliance monitoring, even for multiple sources blended at an EP. Different sources or different blending ratios will affect water chemistry and treatment processes. The PWS must ensure that the *finished* water meets all water quality standards. This will include an assessment of simultaneous compliance of the distribution system water quality for the RTCR, DBPRs and LCR.
5. The PWS may have to develop a monitoring plan to document how sources and treatment processes will be operated to ensure EP compliance monitoring includes all permitted sources and treatment facilities.
6. Systems may composite up to 5 EP samples to save monitoring costs. Composite samples may be from the same EP or from multiple EPs. There are specific criteria for compositing:
  - Individual samples are collected in duplicate on the *same* day; the composite sample must be created by the accredited lab, in the lab.
  - If possible and the PWS wishes to composite multiple samples from the same EP, it will be very time consuming because each EP sample must capture the water representing each source. For example, there are 2 sources that are alternated at an EP. The 1<sup>st</sup> sample is representative of source A. The PWS cannot simply turn off source A, turn on source B, and immediately collect another sample. The EP sample for source B must represent the water from that 2<sup>nd</sup> source, so the 2<sup>nd</sup> sample cannot be collected until the transmission line, treatment building pipes and contact tanks have been flushed/filled from source B (either by manual flushing or replaced by system demand).
  - For PWSs serving > 3,300, only samples from the same PWS may be composited. For PWSs serving ≤ 3,300, samples from different PWSs may be composited.
  - If the composite result is a detection (for VOCs/SOCs) or is > 1/5 detection limit (for IOCs), the individual duplicate samples must be analyzed ASAP, within 14 days (cannot exceed the contaminant/method holding time) and those individual results are reported to DEP.

## **What sampling may be required before an unused source is put into service?**

If the PWS wants to begin using a source/EP that is not currently listed as permanent in DEPs data system, the water supplier needs to confirm with DEP that all required initial monitoring has been, or will be, completed and then establish the appropriate routine frequency. If these sources have or require treatment to meet MCLs, permit amendments may be necessary.

7. If the source was taken off-line for a known or potential water quality issue:
  - Raw water testing will be necessary before the source is put on-line and if there are still issues, the PWS may need to add treatment before the source is used.
  - Records should be checked to determine when the source water last used. Was the source used within the last 3 years? If yes, what sampling was done in the past and what are the results? Raw water sampling may be needed if historical data indicates a potential issue.
8. If a source was not used within the last 3 years, at a minimum, raw water monitoring for acute contaminants should be conducted including nitrate/nitrite coliform samples (coliform samples are not needed if the PWS has 4-log disinfection). Before any source water samples are collected, the source should be purged at least the equivalent of 2 well volumes (consult with DEP regional hydrogeologist to determine if a larger volume is required).
9. Regardless, a special EP sample will be needed for any EP parameter not sampled within the last 3 years:
  - For CWSs, BVRBs - NTRT/IOC/VOC/SOC/Rads
  - For NTNCs - NTRT/IOC/VOC/SOC
  - For TNCs - NTRT
10. Use these EP results to establish a routine frequency for EP parameters.
  - If a GW source was never evaluated for surface water influence, the source will need to be evaluated prior to use.
  - If a SW/GUDI source is to be used, the PWS will also have to do LT2 sampling.

## **What is required for a simultaneous compliance evaluation? How will this affect distribution system monitoring?**

Simultaneous compliance planning is the holistic assessment and evaluation of regulatory compliance actions prior to their implementation. There are several federal and state regulatory provisions that require an evaluation of system operational changes to ensure that the system will be "capable of providing water that complies with the primary and secondary MCLs, MRDLs and treatment techniques."

The *water supplier* is responsible for completing an assessment of simultaneous compliance with the SWTRs, the DBPRs, the TCR/RTCR and the LCR; DEP technical staff should review the documentation to ensure the assessment is complete and determine if a permit amendment is necessary. The PWS Permit Module 1 – Completeness Report contains a few questions that remind the water supplier of this requirement:

- Has a formal assessment been made of new project-related simultaneous compliance issues, which includes identifying the anticipated impact on specific parameters?
- Have applicable guidance manuals been reviewed as part of this assessment?
- Is an assessment summary document discussing the above-mentioned topics included with the submittal documentation?
- Will assessment-identified problem areas be tracked, and will a sampling plan be implemented, that will provide both baseline (pre-process change) and post-change data?

Evaluating simultaneous compliance may involve a system-wide assessment prior to changing sources or treatment facilities. Changes in treatment facilities include the addition or removal of a treatment process or any change in treatment chemicals. Changes in source water include the addition or removal of sources or interconnections. It may include changes in flow or blending ratios if these changes have the potential to affect water quality parameters or OCCT. Finally, it may also include the use of permitted but unused sources that may not have been included in any previous LCR monitoring or evaluation of OCCT. It is imperative that any changes in sources and/or treatment are fully assessed and approved by DEP prior to making the change. The PWS may need to conduct additional lead & copper tap sampling, DBP sampling or other compliance monitoring to assess baseline and post-change water quality.

*Simultaneous Compliance for the LCR:*

If an unused source (not evaluated for OCCT or has not been used within the last 3 years) is placed back into operation, there are actions that the PWS will need to ensure are completed. These actions are based on whether the PWS is a large system (population > 50,000) or a small/medium system (under the LCR) and whether there is any type of corrosion control treatment in place.

NOTES: Before any source water samples are collected, the source should be purged at least the equivalent of 2 well volumes (consult with DEP regional hydrogeologist to determine if a larger volume is required). WQPs may be measured by a certified operator (or person using an SOP) as long as EPA approved methods are used.

11. Small/Medium PWS (population <= 50,000) with **NO** CCT (neither general pH/Alkalinity nor for LCR)
  - ASAP: PWS needs to measure pH/Alkalinity from raw water at all "unused" sources (or from EP if adding SW/GUDI source) *and* from EPs of all other sources (should be raw water from regularly used sources if only treatment is disinfection using hypochlorite).
  - ASAP (within 6 months), PWS will need to resume 6-month lead/copper tap sampling frequency at the initial number of sample sites.
  - Within 1<sup>st</sup> 6-months: PWS must conduct (and submit to DEP regional engineers) an assessment by PE to determine if "unused" sources will adversely affect distribution water quality and if additional CCT is necessary (will the additional sources change lead solubility in the distribution system? Will CCT be necessary?).
12. Small/Medium PWS (population <= 50,000) **WITH** CCT (general pH/Alkalinity or for LCR)
  - ASAP: PWS needs to measure pH/Alkalinity from raw water at all "unused" sources (or from EP if adding SW/GUDI source) *and* from EPs of all other sources (should be raw water from regularly used sources if only treatment is disinfection using hypochlorite). Before sampling, the source should be purged (equivalent of 2 well volumes).
  - ASAP (within 6 months), PWS will need to resume 6-month lead/copper tap sampling frequency at the initial number of sample sites.
  - Within 1<sup>st</sup> 6-months: PWS must conduct (and submit to DEP regional engineers) an assessment by PE to determine if "unused" sources will adversely affect distribution water quality and if additional CCT is necessary (will the additional sources change lead solubility in the distribution system? Will CCT be necessary?).
  - During 1<sup>st</sup> 6-months: Under 109.302, PWS will need to conduct WQP monitoring at EP (every 2 weeks) & in distribution system (at initial number of sites) during 1<sup>st</sup> 6-month period; monitoring may be extended into 2<sup>nd</sup> 6-month period if needed.

### 13. Large PWS (population > 50,000)

- ASAP:
  - PWS needs to measure pH/Alkalinity from raw water at all "unused" sources (or from EP if adding SW/GUDI source) *and* from EPs of all other sources (should be raw water from regularly used sources if only treatment is disinfection using hypochlorite).
  - Measure WQP from all EPs with CCT
- ASAP, but no later than when source(s) put into use:
  - Resume 6-month lead/copper tap sampling frequency at the initial number of sample sites .
  - Resume 6-month WQP distribution monitoring frequency at initial number of WQP sample sites.
- Within 1<sup>st</sup> 6-months: PWS must conduct (and submit to DEP regional engineers) an assessment by PE to determine if "unused" sources will adversely affect distribution water quality or is PWS able to maintain optimized CCT.

#### *Simultaneous Compliance for the DBPRs:*

If an unused source (not evaluated under IDSE or has not been used within the last 3 years) is placed back into operation, the PWS needs to evaluate whether (& how) these sources will affect DBP formation in the distribution system and whether their existing DBPR compliance monitoring locations are adequate. Additionally, if the "unused" source is SW/GUDI (or purchased SW/GUDI), the DBPR monitoring frequency & number of locations may significantly change (i.e. PWS becomes regulated as a SW system).

#### *Simultaneous Compliance for the RTCR:*

If an unused source (not evaluated under IDSE or has not been used within the last 3 years) is placed back into operation, the PWS needs to evaluate whether their existing RTCR compliance monitoring locations are adequate.

#### **How will this affect monitoring waivers?**

Any waiver issued for an EP needs to include all the sources contributing to that EP.

If an unused source is connected to its own EP, it should be treated as a new EP for the purposes of SOC testing or SOC waivers. If the PWS requests Use waivers, SOC samples are *not* necessary; if Susceptibility waivers are requested, the PWS will need to submit at least 1 sample result for each SOC included in the waiver request (EP samples collected under #10 may be used for waiver requests). The PWS will need to begin initial quarterly monitoring when the EP is activated for any SOCs for which a waiver is NOT approved; if the PWS has sufficient historical data to satisfy initial monitoring requirements, the EP will need to be monitored at the appropriate routine frequency.

If a source is added to an existing EP with a current waiver, the PWS will need to submit a revised/updated waiver application that includes the additional buffer area for the "new" source **prior** to their next 3-year monitoring period (the current waiver may NOT be renewed as is). If the buffer area for the "new" source is part of, or connected to, the buffer area of sources already evaluated under the initial waiver, an additional fee is not necessary for the revised waiver application review. If the buffer area is not connected to areas already evaluated or there is significant differences in land use, a new fee may be required as part of the revised waiver application.

#### **How will purchased interconnections be managed?**

14. ***ALL*** purchased interconnections need to be included in the PWS ***operation permit*** (including the details for both the source and EP) ***of the purchasing system***. *If the interconnection is bi-directional, the details will need to be included in the operation permits of BOTH water systems.* The permit may

include special conditions regarding how the interconnect is used. If the interconnection is a purchased SW interconnect it will also need a subsidiary allocation permit, *unless* the interconnect is intended ONLY for emergencies (no subsidiary allocation permit needed).

15. Purchased sources and purchased EPs will be considered either permanent or seasonal. DEP may allow the use of the "emergency" designation for select interconnects *provided the following criteria are met*:
- Using the last three years of historical water use data, water suppliers will need to demonstrate that their purchased interconnects have been used for emergency purposes only.
  - The use of an emergency interconnection cannot exceed a total of 14 calendar days per year. State or federal emergency declarations are excluded. *However*, if the interconnect is used at the same time every year (i.e. same month), regardless of the number of days/year, the source & EP are at least seasonal (& possibly permanent), so the permits should be updated.
  - An annual compliance check will be conducted by DEP using reported water use data. If DEP believes that the interconnect is used for more than just emergencies (14 days/year), DEP will discuss the use of the interconnect and update permits as appropriate.
  - The PWS operation permit should include special conditions for emergency interconnects, including 1-hr notification to DEP whenever the interconnect is opened.
16. PWSs may need to adjust the use of their interconnections (including those that open automatically based on system demand) to ensure the interconnect is exercised routinely to identify any maintenance or operational issues; to ensure sufficient quantity will be available in an emergency situation; and to ensure the purchased sources are adequately captured in routine chemical compliance sampling in the distribution system (TTHMs/HAA5s, Pb/Cu, WQPs). Purchased EPs are not required to conduct routine monitoring for most chemical contaminants (NTRT/IOC/VOC/SOC/ Rad), unless there are circumstances requiring monitoring (e.g. selling PWS has MCL exceedances/ violations). *It is up to the PWS to determine how long the interconnect is open to ensure any water chemistry issues from blending the sources are identified and addressed and the blended water is monitored.*

### **When/how should permits be modified or revoked?**

On a case-by-case basis, a water supplier may request and DEP may condition a permit to require certain actions before the source can be used, provided the water supplier has a specific plan and course of action. This provision is intended for situations where the water supplier needs a little more time beyond the January 2017 deadline to complete specific tasks, such as completing LT2 or other source water monitoring to fully characterize the water quality and establish an appropriate level of treatment; determining blending ratios, operational changes, or treatment technologies needed to meet an MCL; submitting financial assistance applications and receiving awards, etc.

A PWS with numerous wells, adjacently located with similar construction and assumed to be pumping the same water **cannot** assume these sources count as a well field. Multiple wells may be considered the same source (i.e. a well field), **IF** the PWS has supporting documentation (e.g. hydraulic study). It is the PWS's responsibility to establish that the wells behave as a well field; the DEP regional hydrogeologist will consider that information and make a determination whether to permit the wells as individual sources or a well field and condition operation of the sources based on individual well hydraulics.

If the PWS permit is amended to remove any SW sources or if any SW sources have not been used for any period of seven (7) consecutive years, the Water Allocation permit may have to be amended or rescinded. If the source is included in an Order of Confirmation (OoC), the OoC may need to be rescinded and any active SW sources will need a Water Allocation Permit.

17. If the PWS indicates that they intend to abandon any sources currently listed in their permit (i.e. physically disconnect from the water system and cannot be used in the future w/o prior approval through an emergency permit), they will need to submit a permit amendment to have those sources removed from the operation permit and they may lose their Allocations permit or Order of Confirmation

if any are SW sources. [NOTE: this does not apply to purchased interconnects designated as emergency use.]

- If an Allocation Permit or Order of Confirmation only covers one (1) source and the PWS permit is amended to remove that source, the Allocation Permit or Order of Confirmation may be rescinded.
  - If an Allocation Permit includes multiple sources and only one (or some) of the sources are being removed from the PWS permit, the Allocation Permit may be amended. If the permit specifies an allocation specific to each source, this is a minor amendment; if there is 1 allocation that covers multiple sources, this is a major amendment requiring additional documentation to determine the revised allocation for the sources being retained.
  - An Order of Confirmation often includes multiple sources without source-specific withdrawal or conservation release provisions (the Order of Confirmation has a single total withdrawal limit for all sources listed). If an Order of Confirmation includes multiple sources and only one (or some) of the sources are being removed from the PWS permit, the Order of Confirmation may need to be rescinded, and the PWS may need to apply for an Allocation Permit for the remaining source(s). This action may be necessary to ensure appropriate environmental reviews are conducted and protections under the Clean Streams Law, Water Rights Act and the PA Constitution are addressed, including the need for source-specific withdrawal limits, passby flow requirements, and conservation releases.
18. There may be operational constraints that limit a water supplier's ability to routinely use (and monitor at the EP) a source of supply. On a case-by-case basis, a water supplier can request to keep a source in their permit that cannot be used at least once/year. Provided the water supplier can justify the operational constraints, DEP would consider the use of special conditions (such as source water sampling) and other control measures to ensure public health protection. The cost of operation should not be considered an operational constraint in this situation.
19. NCWS approvals and revocations when a permit is NOT required (i.e. approval is done via Brief Description Form) will be documented in writing.
20. Source Abandonment Clarification: Although "plugging the hole" would be the proper procedure for well abandonment, we don't typically require complete abandonment; instead we require physical separation from the system and removal of the source from the permit. NOTE: The wellhead still needs to be maintained and a sanitary seal provided (otherwise we just created a potential pathway for contamination).

# Penn Township, Pennsylvania

Monthly Report – June 2016



UNDERSTANDING  
A VALUABLE RESOURCE



July 14, 2016

Penn Township  
97 North Penryn Road  
Manheim, PA 17545

Dear Board Members,

Please find our monthly report covering operations and maintenance activities for the Northwestern Lancaster County Authority Water and Wastewater Systems for June 2016.

Please review this report and contact me with any questions or comments.

Sincerely,

Michael Wolgemuth  
Project Manager  
Severn Trent – North America

## Summary

The water treatment plant was fully operational and all water quality parameters were within limits for the month of June. Staff continued to utilize Well #3 as the primary source for the drinking water system. The wastewater treatment plant was also fully operational and all permit quality parameters were within limits.

## Critical Issues

The flowmeter at Pump Station 3 failed during a storm event on May 30, 2016. A representative from WG Malden determined that the flow meter's amplifier was damaged due to an electrical surge. A quote to replace the amplifier was accepted and the work will be scheduled as soon as the replacement is received.

## Noteworthy Events

- 1) STS received three quotes to replace the lower bearing to the Lakeside Influent Screener. Gouldey Welding came in low with a proposal of \$5,585. Staff will schedule the work to be done as soon as possible.
- 2) STS completed annual valve exercising in the distribution system.
- 3) STS Maintenance Department installed a pressure relief valve to the discharge pipe at the Fruitville Pike Booster System.
- 4) The Utility Well pump failed at the WWTP. STS Maintenance personnel have been working to put the Gorman Rupp Utility Water Skid online. When the well pump failed, maintenance staff had Utility Pump 2 online as a backup. Staff utilized Utility Pump 2 until the well pump could be replaced. Staff are receiving pricing to repair Utility Pump 1.
- 5) Replaced MSA multi-gas meter for confined space entry with a new GasAlert Max XT II Multi-gas Detector. Replacement sensors were no longer available for the MSA unit which was purchased in 2008.

## Ongoing/ Upcoming Projects

- 1) Fruitville Pike Transfer Switch Replacement (Completed July 11, 2016)
- 2) PS3 Flow Meter Repair (Completed July 6, 2016)
- 3) Submersible pump inspections. (scheduled for June/July)
- 4) Lakeside Influent Bar-screen Bearing Replacement
- 5) Water meter replacement.
- 6) Develop a prioritization strategy to televise the collection system for I and I investigation
- 7) Pursue installation of an effluent flow meter at the WWTP

## Environmental Compliance

### ➤ NPDES Permit Compliance

- 1) The total influent flow to the treatment plant for June 2016 was 10.028 million gallons. STS staff measured 6.4 inches of precipitation at the WWTP in the month of June.
- 2) Please review the following tables that summarize process control monitoring and NPDES reporting criteria for June 2016.

Parameter	Units	Allowable Level	Average Monthly	Minimum	Maximum
Flow Reported	MGD	Report	0.334	0.274	0.409
MLSS	mg/l	Process	1760	1557	1885
Influent Total Suspended Solids	mg/l	Report	228	150	326
Influent Total Suspended Solids	Average Lbs/day	Report	578	381	744
Influent BOD	mg/l	Report	267	197	333
Influent BOD	Average Lbs/day	Report	680	501	828

Parameter	Units	Allowable Level	Monthly Monitoring Results
Influent Total Phosphorus	mg/l	Process	7
Influent Total Phosphorus	Lbs/day	Process	22
Influent NH3	mg/l	Process	32
Influent NH3	Lbs/day	Process	95
Influent TKN	mg/l	Process	51
Influent TKN	Lbs/day	Process	150
Influent NO2-NO3	mg/l	Process	1
Influent NO2-NO3	Lbs/day	Process	3
Influent TN	mg/l	Process	28
Influent TN	Lbs/day	Process	82

Discharge Parameter	Units	Allowable Level	Average Monthly	Minimum	Maximum	Exceptions
pH	S.U.	6.0 - 9.0	7.9	7.6	8.0	0
D.O.	mg/l	Minimum of 5.0	8.0	6.7	9.1	0
Total Suspended Solids	mg/l	Ave/ Mon less than 30	4.8	4.3	5.5	0
Total Suspended Solids	Average Lbs/day	Ave/ Mon less than 163	12.4	10.0	14.8	0
CBOD	mg/l	Ave/ Mon less than 25	3.3	2.3	4.8	0
CBOD	Average Lbs/day	Ave/ Mon less than 136	8.5	5.7	11.9	0
NH3	mg/l	Ave/ Mon less than 4.5	0.45	0.1	1.66	0
NH3	Average Lbs/day	Ave/ Mon less than 24	1.15	0.23	4.27	0
Total Phosphorus	mg/l	Ave/ Mon less than 2.0	0.59	0.31	0.88	0
Total Phosphorus	Average Lbs/day	Ave/ Mon less than 10.8	1.50	0.77	2.24	0
Nitrate-Nitrite	mg/l	Report	2.34	1.77	3.29	0
Nitrate-Nitrite	Average Lbs/day	Report	6.03	4.56	8.37	0
TKN	mg/l	Report	1.96	1.42	3.25	0
TKN	Average Lbs/day	Report	5.02	3.64	8.37	0
Total Nitrogen	mg/l	Report	4.31	3.80	5.02	0
Total Nitrogen	Average Lbs/day	Report	11.05	8.81	12.92	0
Fecal Coliform	Colonies /100ml	Geometric Mean less than 200	12	3	220	0

- 3) The NWLCA WWTP is reporting 10,658 pounds of Total Nitrogen and 1,106 pounds of Total Phosphorus under the total annual mass effluent limits for the 2016 reporting year ending September 30, 2016.

Discharge Parameter	Units	June	Units	Allowable Level	Annual
Net Total Nitrogen	Monthly Net Total Lbs	331.4	Total Pounds October 2015 – September 2016	less than 14,987	4,329
Net Total Phosphorus	Monthly Net Total Lbs	45.1	Total Pounds October 2015 – September 2016	less than 1,826.5	721

➤ Biosolids Removal

Disposal Site	Gallons	Dry Tons
Manheim STP	18,000	1.5
Kline's	54,000	5.1

➤ Water Production and Quality

- 1) The total volume of drinking water distributed in June 2016 was 4.173 million gallons.
- 2) Monitoring results were within limits for all drinking water quality parameters. Please review the tables below that summarize monitoring results for June 2016.

Description	Month/Year	Volume	Units
Total volume distributed WTF	June 2016	4,163,000	Gallons
Daily average distributed WTF	June 2016	138,767	Gallons per day
Total volume distributed Fruitville Extension	June 2016	301,644	Gallons
Daily average distributed Fruitville Extension	June 2016	10,055	Gallons per day

Contaminant	Sample Location	Goal	Result	Frequency
Total Coliforms	Doe Run Distribution System	Absent	Absent	2 Samples per month
Total Coliforms	Fruitville Extension System	Absent	Absent	1 Sample per month
Average Chlorine Residual	Entry Point (Doe Run)	(>)0.4 mg/l	1.6 mg/l	Daily
Low Chlorine Residual	Entry Point (Doe Run)	(>)0.4 mg/l	1.0 mg/l	Daily
Turbidity	Combined Filter (Doe Run)	95% under 0.3 NTU	100% under 0.3 NTU	Monthly
Cryptosporidium	Well 3	0 oocyst/L	0 Oocyst/L	Monthly (21 of 26)
Giardia	Well 3	0 cyst/L	0.2 cyst/L	Monthly (21 of 26)

### Chemical Usage

Chemical	Location	Use	Monthly Volume/ Weight Used
Aluminum Sulfate	WWTP	Used to enhance phosphorus removal from wastewater	586 gallons
Polymer	WWTP	Used for sludge thickening	41 gallons
BIOXIDE	PS1	Used for odor and corrosion control within collection system	240 gallons
Sodium Hypochlorite (6.25%)	WTF	Used for drinking water disinfection	124 gallons
Sodium Hydroxide (25%)	WTF	Used for drinking water pH adjustment	20 gallons
Solar Salt	WTF	Used to cleanse ion exchange resin for softeners and nitrate treatment units	14,030 lbs

**Power Consumption**

Facility	Water or Waste Water	Monthly Usage (KWh)	Monthly Peak (KW)
Wastewater Treatment Plant	WW	61,700	146
Pump Station 1	WW	3,000	29
Pump Station 2	WW	711	2
Pump Station 3	WW	1,754	7
Cedar Hollow Pump Station	WW	643	2
Sweetbriar Creek Pump Station	WW	2,000	8
Brookshire Pump Station	WW	758	3
Water Treatment Facility	W	19,189	No Data
Mallard Ponds Water Tower	W	1,254	2
Fruitville Pike Booster Station	W	1,056	4

**Financial**

➤ Waste Water System Summary of Fee Expenditures (1/01-/2016– 12/31/2016)

Fee Expenditures	Monthly Fee	June Expenses	2016 Total Expenses	Annual Fee	Over/(under) 2016
Maintenance	\$3,000	\$3,943	\$26,010	\$36,000	\$(9,990)
Sludge	\$3,750	\$4,623	\$25,366	\$45,000	\$(19,634)
Chemical	\$3,000	\$3,792	\$16,250	\$36,000	\$(19,750)

1) Waste Water System Maintenance Expenditures for June

Vendor	Description	Amount
Susquehanna Fire Equip	Gas Alert Meter, Concussion Proof Case, Calibration Gas and Regulator	\$ 1,148.50
Longeneckers	miscellaneous hardware and maintenance supplies	\$ 45.74
LB Water	Schedule 80 PVC pipe and fitting to reconfigure Blower Building plumbing.	\$ 434.38
Home Depot	miscellaneous hardware and maintenance supplies	\$ 120.72
RCP Recorders & Charts	WWTP influent flow recorder charts	\$ 130.45
USABlueBook	Chemical spill kit/ recorder charts for pumps stations	\$ 330.83
CalgonCarbon	3 UV ballast cards, lamp supply cable assembly, O-ring seals	\$ 1,407.25
GSM	PM on HVAC system 2016	\$ 201.00
GSE	Troubleshoot UV Issue	\$ 140.00

2) Waste Water System Chemical Expenditures Invoiced in June

Vendor	Description	Amount
Univar	Aluminum Sulfate	\$3,792.24

➤ Water System Summary of Fee Expenditures (1/01-/2016– 12/31/2016)

Fee Expenditures	Monthly Fee	June Expenses	2016 Total Expenses	Annual Fee	Over/(under) 2016
Maintenance	\$1,000	\$3,429	\$9,028	\$12,000	\$(2,972)
Chemical	\$1,000	\$3,699	\$6,395	\$12,000	\$(5,605)

1) Water System Maintenance Expenditures for June

Vendor	Description	Amount
USABlueBook	Membrane retainer for CIP probe	\$ 91.49
Longenecker's	Miscellaneous hardware	\$ 13.88
GSM	PM Service on HVAC system May	\$ 227.00
Exeter Supply	gaskets, pipe plugs and hydrant oil for hydrant maintenance	\$ 216.23
Hach	pH Probe	\$ 161.94
Evoqua	Annual Membrane Filter Service Agreement	\$ 2,086.00
Fisher Scientific	Orion benchtop pH meter	\$ 632.39

2) Water System Chemical Expenditures for June

Vendor	Description	Amount
North Industrial Chemical	Sodium Hydroxide	\$ 930.32
North Industrial Chemical	Sodium Hypochlorite	\$ 410.00
Oceanport	Untreated Solar Salt	\$ 2,358.63

**Customer Service**

- Answering Service Calls  
None
- Meter Reading  
STES recorded customer water meter volumes in Service Area Three.
- Meter Repairs, Replacements and Checks
  - 1) (6/13) Bungalows on South Oak St. -Meter was clogged. Replaced meter with new iPearl
  - 2) (6/14) 780 Power Rd. -Read meter by request of Twp.
  - 3) (6/14) 497 Charles Dr. -Read meter by request of Twp.
  - 4) (6/16) 456 Meadowlark Ln. -Read meter by request of Twp.
  - 5) (6/21) 374 Lititz Rd. -Read meter by request of Twp.
  - 6) (6/21) 460 663 Mallard Dr. -Read meter by request of Twp.
  - 7) (6/22) 528 Wood Duck Dr. -Read meter by request of Twp.
  - 8) (6/27) 562 Wood Duck Dr. -Read meter by request of Twp.
  - 9) (6/27) 697 Hamaker Rd. -Delivered meter for new construction
  - 10) (6/29) 86 East End Dr. -Replaced meter with new iPearl
- Customer Complaints
  - 1) (6/7) A Brookshire resident called with concerns about the drinking water. A member of his household was diagnosed with a condition that may or may not be the result of a waterborne bacteria. Staff advised the customer of the Authorities Treatment Facilities and monitoring requirements procedures.
  - 2) (6/28) 86 East End Dr. -Customer complained about low water pressure. Staff advised the customer of some troubleshooting procedures. After no resolution, staff replaced the customer’s water meter. It was later determined that a bad valve in the building was most likely the problem.

➤ Commercial Discharge Monitoring

- 1) STS reviewed second quarter monitoring results for the Joseph C. Graybill, facility at 164 East Sun Hill Road. Staff generated and distributed a review and comment letter.
- 2) STS reviewed second quarter monitoring results for the Gibble Enterprises Facilities at 138 Bucknoll Road. Staff generated and distributed a review and comment letter.
- 3) STS reviewed first and second quarter monitoring results for the Pleasant View Retirement Community at 544 North Penryn Rd. Staff generated and distributed a review and comment letter.
- 4) STS reviewed second quarter monitoring results for the Adcock Bros facility at 14 Anthony Drive.
- 5) Staff generated and distributed a review and comment letter.

## Maintenance

➤ Wastewater System

- 1) (6/1) Cleaned and verified all dissolved oxygen probes and downloaded data
- 2) (6/1) Replaced wire harness to UV bank A rack 1
- 3) (6/2) W.G. Malden determined that the flow meter controller at Pump Station 3 was damaged by a lightning strike and removed the damaged components for repair/replacement. A quote for replacement was accepted and the work will be scheduled when the parts are received. Staff will provide Township Personnel with a copy of the invoice to be submitted to the insurance provider.
- 4) (6/3) Cleaned and flushed SOMAT polymer system
- 5) (6/6) Replaced Pump Station 4 Chart Recorder due to possible lightning strike damage. The recorder was replaced with a previously used spare recorder from stock.
- 6) (6/6) Performed scheduled maintenance on SBR Blower #2
- 7) (6/6) Performed scheduled maintenance on Sludge Blower #1
- 8) (6/8) Cleaned and verified all dissolved oxygen probes and downloaded data
- 9) (6/15) Cleaned and verified all dissolved oxygen probes and downloaded data
- 10) (6/16) STS Maintenance Department reconfigured the Blower Building water piping to separate the chemical shower from the utility water. The chemical shower was connected to the Domestic Well Pump in preparation for startup of the Utility Water Pumps.
- 11) (6/17) The utility well pump failed. Staff put Utility Water Pump 2 online.
- 12) (6/19) Replaced a malfunctioning level pressure transducer at the Sweet Briar Creek Pump Station with a spare from stock. The damaged transducer will be sent back to the manufacturer for repair.
- 13) (6/21) Kline's Services pumped and cleaned all collection system pump stations and the WWTP influent channel.
- 14) (6/22) Cleaned and verified all dissolved oxygen probes and downloaded data
- 15) (6/22) Kohl Bros replaced the utility well pump
- 16) (6/28) Received 22900 lb. of Aluminum Sulfate
- 17) (6/28) Pulled and inspected sewage pumps at Pump Station 4
- 18) (6/29) Pulled and inspected both pumps at the Sweet Briar Creek Pump Station
- 19) (6/29) Pulled and inspected both pumps at the Cedar Hollow Pump Station
- 20) (6/29) Grating inspection completed and clips painted
- 21) (6/29) Cleaned and verified all dissolved oxygen probes and downloaded data
- 22) (6/30) Pulled and inspected sewage pumps at Brookshire Pump Station, Pump Station 2, and the WTP Pump Station

➤ Water System

- 1) (6/1) STS Maintenance Department installed a pressure relief valve to the discharge at the Fruitville Pike Booster System.
- 2) (6/1) Verified finished and intermediate CL17 analyzers and changed buffer solution in both / cleaned NO3-N probe
- 3) (6/2) Verified finished and intermediate CL17 analyzers
- 4) (6/2) Flushed last hydrant on Fruitville Pike
- 5) (6/4) Replaced pump tubing on Cl2 pump #1
- 6) (6/7) Received 25 tons of salt
- 7) (6/7) Repaired and serviced 11 system fire hydrants
- 8) (6/8) Verified finished and intermediate CL17 analyzers and cleaned NO3-N probe
- 9) (6/8) Exercised 39 System valves
- 10) (6/9) Exercised 55 System valves
- 11) (6/13) Repaired and serviced 2 system fire hydrants
- 12) (6/14) Exercised 32 System valves
- 13) (6/15) Verified finished and intermediate CL17 analyzers and cleaned NO3-N probe
- 14) (6/16) Performed Acid & Cl2 Clean In Place (CIP) on Filter 1
- 15) (6/21) Performed Acid Clean In Place (CIP) on Filter 2
- 16) (6/22) Performed Cl2 Clean In Place (CIP) on Filter 2
- 17) (6/22) Verified finished and intermediate CL17 analyzers and cleaned NO3-N probe
- 18) (6/24) Garden Spot Mechanical repaired the Process Room AC unit at WTP
- 19) (6/27) Calibrated Cl2 Probe at Fruitville Pike Booster Station
- 20) (6/29) Verified finished and intermediate CL17 analyzers and cleaned NO3-N probe
- 21) (6/29) Cleaned, calibrated and verified Cl2 probe at Fruitville Pike Booster Station
- 22) (6/30) Moved automatic flusher to last fire hydrant on Fruitville Pike, lower flush time to 45 minutes and increase frequency to daily.

➤ After Hours Callouts

- 1) (6/5) WWTP Screener Alarm (momentary power outage)
- 2) (6/18) Sweet Briar backup floats (level pressure transducer failed, staff replaced with a spare)
- 3) (6/24) Fruitville Pike Booster Station low Cl2 (momentary reading drop)
- 4) (6/25) Fruitville Pike Booster Station low Cl2 (momentary reading drop)
- 5) (6/26) Fruitville Pike Booster Station low Cl2 (momentary reading drop, adjusted delay, calibrated probe)
- 6) (6/29) Fruitville Pike Booster Station low Cl2 (momentary reading drop, adjusted delay, cleaned, calibrated and verified probe, repositioned and adjusted flusher)

**Security**

➤ Incidents

None

## Safety

### ➤ Incidents

- 1) (6/28) Brandon Spangler received a minor puncture wound from a wire rope while pulling pumps at Pump Station 4.
- 2) STS have worked at the Penn Township project for 2,921 days without a lost time incident.

### ➤ STES Training Presentations

- 1) Global Harmonized System of Classification and Labeling Chemicals (GHS)
- 2) SOP Review- Guidelines for Submersible Sewage Pump Maintenance (No Entry)
- 3) SOP Review- GasAlert Max XT II Multigas Detector
- 4) Review- Handling Regulatory Inspections Standard

## Personnel

### ➤ Training

- 1) Michael Wolgemuth completed EarthWise Academy “Leadership and Decision Making for Sustainable Water and Wastewater Infrastructure”
- 2) Douglas Zook received a Class E Water Distributions System Operator Certification and Class E Wastewater Collection System Operator Certification

➤ Staffing

\* Other personnel available for assistance as needed

Name	Title	PA Water Operator Certifications	PA Wastewater Operator Certifications
Michael Wolgemuth	Project Manager	A,E – 1,2,3,4,5,6,7,8,9,11,12	A,E – 1,4
Douglas Zook	Plant Supervisor Penn Township	A,E-6,8,9,12	A,E – 1,4
Larry Kirchgessner	Operator-In-Training Penn Township	NA	NA
Don Martzall	Operator-in-Training Penn Township	NA	NA
Branden Spangler	Operator-in-Training Penn Township	NA	NA
Connie Trynovich	Administrative Assistant Lititz/Penn	NA	NA
Ray Bowman	Lead Maintenance Tech Lititz/Penn	B, E - 12	NA
Cory Imler	Maintenance Tech Lititz	B - 11	
Jared Gible*	Operator-in-Training Lititz	NA	NA
Kyle Noll*	Lead Water Operator Lititz	A,E- 1-14	NA
Dominic Volpe*	Operator-in-Training Lititz	NA	D - 1
Zachary Pennepacker*	Operator-in-Training Lititz	NA	NA
Wade Keener*	Lead Maintenance Tech Lititz	NA	A - 1
Gordon Woodson*	Maintenance Tech Lititz	NA	NA
Charles Fiero*	Regional Manager		
Jeff Doutrich*	Regional Advisor	A,E- 1-14	A,E -1,2,3,4
Thomas Callahan*	Health and Safety Advisor	NA	NA

## NORTHWESTERN LANCASTER COUNTY AUTHORITY July 2016 Engineer's Report

1. **Manheim Borough Water System Interconnection (No Change from June Report):** PADEP issued the Public Water Supply Construction permit to the Authority on February 10, 2009. BEL met with MBA and the MBA Engineer on November 25, 2008 to discuss the status of the Borough's acquisition of the booster pumping station site as well as the status of the Borough's project budgeting. BEL provided an updated construction cost opinion to the Authority and MBA along with an alternate water booster pumping station location plan. BEL met with MBA on October 28, 2009 to review a potential new location for the booster pumping station building (located on the current NWLCA WWTF site), and provided an updated construction cost opinion.

Authority staff and BEL had also approached the impacted property owners regarding the water line easements along Doe Run Road.

2. **Manheim Auto Auction:** BEL reviewed the quarterly flow and sampling data and issued a review letter to the Authority dated April 28, 2016. As part of the quarterly sampling data submittal, the Auction indicated that the watertight manhole bolts were not installed in their watertight manholes. Each manhole watertight manhole lid contains 4 stainless steel bolts and if those bolts are not installed, there are 4 open holes in the lid which would allow inflow into the sanitary sewer system. In our April 28, 2016 correspondence, we requested that stainless steel bolts with rubber washers be installed within all watertight manhole lids and the gaskets beneath the lid be inspected/replaced as necessary. BEL received the 2<sup>nd</sup> quarter sampling results on July 12, 2016 and will be reviewing those results in the near future.

3. **Sweetbriar Creek Subdivision (No Change from June Report):** The Authority accepted dedication of the Phase 1 sanitary sewer facilities at the April 15, 2013 Authority meeting. The Authority will continue to hold the 18-month Maintenance Guaranty in the amount of \$139,167.30 through October 14, 2014. BEL and Severn Trent performed a site review of all of the Phase 1 sanitary sewer facilities (this includes the pumping station and control building) on August 18, 2014 and issued a letter dated August 22, 2014 outlining several issues that need to be addressed by the developer prior to expiration of the Maintenance Guaranty. The developer provided a written response indicating that the identified issues will be addressed, but a schedule has not been provided. BEL also reviewed the on-site gravity sewer video inspection and issued correspondence dated November 5, 2014 which identified 2 sections of line that need to be repaired. BEL also reviewed the off-site gravity sewer video inspection and issued a review letter dated February 11, 2015.

Construction and testing of all Phase 2 sanitary sewer facilities has been completed. The Authority authorized a reduction to the Phase 2 sanitary sewer financial security from \$91,527.48 to \$37,244.33 at the October 2015 Authority meeting. The construction contractor completing the Bucknoll Road culvert replacement project was informed on numerous occasions to complete the sanitary sewer repair work while Bucknoll Road was closed for construction.

4. **Holly Tree Subdivision:** The Authority accepted dedication of the Holly Tree Road sanitary sewer facilities at the November 2015 Authority meeting. The 18-month Maintenance Guaranty will expire on May 15, 2017 and is in the amount of \$73,908.91.

The developer recently submitted a revised subdivision and land development plan to the Authority for an additional apartment unit building as well as storage units. The developer also requested sewer capacity and submitted the necessary PADEP planning documents to the

Authority for approval and signature. BEL is in process of reviewing the sanitary sewer design for this project. **BEL recommends that the Authority grant 12 EDU's (2,798 gpd) of sanitary sewer capacity and execute the PADEP Planning Module documents.**

5. Sunhill Commons **(No Change from June Report)**: The Authority previously authorized a reduction to the sanitary sewer financial security from \$398,101.11 to \$108,900.00 at the June 2013 Authority meeting. The developer will need to provide Easement Agreements, the Bill of Sale and the 18-month Maintenance Guaranty for dedication of the sanitary sewer facilities to the Authority.
6. Gibble Enterprises (formerly Detailing Technologies) **(No Change from June Report)**: The developer will need to provide Record Drawings for review. The developer did provide quarterly sampling data for review and BEL issued a review letter dated May 3, 2012. BEL has been working with Township staff to address the remaining outstanding issues.
7. Investment Real Estate Self Storage **(No Change from June Report)**: BEL did receive sanitary sewer Record Drawings and issued a review letter dated October 11, 2010. As discussed with the developer, the developer will need to address the encroachment issues into the Authority's sanitary sewer easement. BEL has contacted the developer and has been notified that the remaining issues will be addressed after the property refinancing has been completed.
8. Total Nitrogen (TN) and Total Phosphorus (TP) Off-Sets **(No Change from June Report)**: An updated "Request for Verification of Nutrient Reduction Credits" was issued to PADEP by BEL on October 15, 2015. On October 16, 2015 PADEP verified the following credits: Nitrogen: 9,586 credits; Phosphorous: 363 credits. At the November meeting the Authority authorized the sale of 9,586 Nitrogen credits to Capital Region Water and 363 Phosphorous credits to Roaring Spring Municipal Authority.
9. Additional Water Source/Water Treatment System/Well #3 Project **(No Change from June Report)**: Siemens Industry, Inc. issued the three-year Membrane Warranty to the Authority. The Membrane Warranty expires on April 10, 2017. This warranty covers the expansion membrane modules and equipment only.
10. Water Storage Tank Reconditioning Project **(No Change from June Report)**: The 2-year warranty period for Worldwide Industries Corp. tank reconditioning project will expire on May 17, 2017.
11. Penryn Road/Doe Run Road Intersection Project: Construction and testing of the water main and service laterals have been completed. There are a few sanitary sewer cleanouts and one fire hydrant that need to be relocated as part of the Township portion of the project.
12. West End Drive/East End Drive/Ditz Drive Pipe Rehabilitation **(No Change from June Report)**: BEL reviewed the video inspection of the sanitary sewer pipe runs and issued a letter to the Authority dated October 19, 2011. Based on BEL's review, it appears that several pipe segments were rehabilitated in the past and the lines appear to be in good condition. BEL recommends that the Authority flush and televise these lines in a few years to confirm that the integrity of the clay pipe remains in acceptable condition.
13. Tapping Fees **(No Change from June Report)**: The Authority updated the sanitary sewer and water facility tapping fees at the May 2014 Authority meeting. The updated tapping fees became effective July 1, 2014.

14. West Sunhill Road Sanitary Sewer Planning **(No Change from June Report)**: BEL met with Township and Authority representatives on December 18, 2012 to review sanitary sewer extension alternatives for existing properties that may need public sanitary sewer service.
15. Manheim Plaza **(No Change from June Report)**: BEL received shop drawings for installation of grease interceptor(s) and a sampling manhole for this existing customer located along Route 72, just south of Manheim Borough. BEL also attended the preconstruction meeting along with a site visit during initial exploratory construction. The actual locations of the sanitary sewer facilities are not located where shown on the plans and the design will need to be modified.
16. Source Water Protection Program: BEL attended the advisory Board meeting on June 20, 2016. The next meeting is scheduled for September 19, 2016 at 1:00 pm.
17. Blackford Development: The Authority granted sanitary sewer capacity for 41,200 gpd at the October 2014 Authority meeting. At the January 2016 Authority meeting, the Authority approved the Preliminary Plan sanitary sewer design as well as the Phase 1 Final Plan sanitary sewer design conditioned upon the remaining outstanding issues being adequately addressed.

Construction of the off-site improvements has been completed. A preconstruction meeting for Phase 1 (Scheetz) is scheduled for July 19, 2016. BEL will be providing periodic construction observation.

BEL attended a meeting with the developer on May 18, 2016. The developer indicated that they may be interested in constructing a bank adjacent to the Scheetz facility. Since this building is part of Phase 2 of the development, BEL recommended that the developer submit information to the Authority for consideration of temporary sanitary sewer service for the bank building until such time as the remainder of the Phase 2 buildings would be constructed. To date, BEL has not received any additional information from the developer.

18. Oceanside Auto **(No Change from June Report)**: BEL attended a site review with Severn Trent and the Township on May 5, 2014 to review the existing and proposed water system.
19. Township Southern Service Area Water Facility Planning **(No Change from June Report)**: As part of the Blackford Development meeting with the Township and MBA on June 11, 2014, the Township and MBA discussed methods to coordinate long term utility planning efforts as development projects are brought before the Township. As part of this, MBA indicated that they may potentially be undertaking a water line project along Fruitville Pike, from the Borough line to Oak Street. BEL provided sanitary sewer Record Drawing information to MBA and their consultant on June 20, 2014 to assist MBA with their planning efforts.
20. MAEDC White Farm Master Planning **(No Change from June Report)**: Dave Christian has prepared a master plan for MAEDC for the White Farm, which is located adjacent to the Authority's WWTF. BEL provided a rough sketch of potential additional land that the Authority may need if the existing WWTF ever needs to be expanded. BEL also provided existing Authority sanitary sewer Record Drawing information to Dave for his use in master planning the site.
21. Penryn Area Utilities Meeting **(No Change from June Report)**: BEL will need to modify the utility service alternatives and associated costs based on input from the Township and Authority.

22. Holly Tree Road/Temperance Hill Road Intersection Project: At the March 2016 Authority meeting, the Authority decided to only install the sanitary sewer facilities in the area of the Township's intersection improvement project. BEL provided preliminary design drawings to the Authority at the May 16, 2016 Authority meeting. BEL also submitted the PennDOT Highway Occupancy Permit (HOP) application for review and approval.

BEL has prepared a construction cost opinion for the project and estimates sanitary sewer facility construction at approximately \$258,000.

It is BEL's understanding that the developer is anticipating initiating construction of the intersection improvements this fall. Since the sanitary sewer construction needs to be completed in advance of the intersection improvement project, the Authority will need to coordinate bidding/construction of the sanitary sewer facilities with the developer's construction contract in order to minimize final PennDOT paving requirements for the Authority. **BEL will provide the Authority with a bidding/construction schedule and BEL recommends that the Authority authorize bidding of the sanitary sewer improvements.**

23. Metzler School Bus Depot **(No Change from June Report)**: The Authority accepted dedication of the sanitary sewer facilities at the April 18, 2016 Authority meeting. The 18-month Maintenance Guaranty will expire on October 17, 2017 and is in the amount of \$20,751.75.
24. WWTF NPDES Permit Renewal **(No Change from June Report)**: The current WWTF NPDES Permit will expire on November 30, 2015 and the renewal application is due to PADEP by May 30, 2015. BEL forwarded the renewal application to PADEP on April 23, 2015.
25. Doe Run Road Pedestrian Enhancement Project **(No Change from June Report)**: The Township has coordinated initial meetings for this project which will include pedestrian corridor enhancements along Doe Run Road from Memorial Drive in Manheim Borough to West End Drive in Penn Township. There is an executed agreement in place to allow the Authority to "inherit" the Township customers from West End Drive to the railroad tracks which are currently provided public water service by Manheim Borough through a 6-inch water line. The existing Borough water line was televised in 2012 and based on the condition of the pipe, BEL recommended that a new 8-inch water main be extended from the Authority's existing water system which terminates at West End Drive to serve these customers. BEL recommends that the Authority consider installation of new 8-inch water line as part of the Township's project.
26. Pumping Station No. 1: At the March 2016 Authority meeting, the Authority authorized staff to initiate discussions with the adjoining property owner to discuss potential land purchase to facilitate a future pumping station expansion and/or upgrade to the existing pumping station. BEL provided land acquisition alternatives to Township staff on May 4, 2016. Township staff has been in communication with the property owner and field survey work of the area is scheduled to be completed in early August 2016.
27. PA Classics Sanitary Sewer Connection **(No Change from June Report)**: BEL received correspondence from the developer's consultant regarding sanitary sewer connection approval requirements. BEL informed the developer's consultant that detailed design plans along with a sanitary sewer capacity request needs to be provided to the Authority for review.
28. Longenecker's Storage Building **(No Change from June Report)**: Sanitary sewer and water facility construction and testing have been completed. The developer's consultant needs to provide Record Drawings for review and approval.

29. Doe Run Elementary School: The Authority approved the sanitary sewer and water facility design at the May 16, 2016 Authority meeting. BEL attended the preconstruction meeting on May 4, 2016. BEL has been reviewing sanitary sewer and water facility shop drawings for the project.
30. Pleasant View Retirement Community Water System **(No Change from June Report)**: At the request of Pleasant View, BEL attended a meeting on October 7, 2015 to discuss the possibility of Pleasant View discontinuing use of their privately owned water storage tank and booster pumping system. BEL reviewed engineering options with Pleasant View and recommended that Pleasant View submit a letter to the Authority outlining their specific request.
31. Auto Zone: BEL received revised sanitary sewer and water facility design drawings and issued a letter to the Authority dated July 1, 2016 recommending approval of the sanitary sewer and water facility design. **BEL recommends that the Authority approve the sanitary sewer and water facility design as outlined in our July 1, 2016 review letter and also authorize execution of the Memorandum of Understanding upon receipt from the developer.**
32. Holly Tree Road Sewer Connection Notices **(No Change from June Report)**: The Township drafted sanitary sewer connection notices to be sent to the property owners along Holly Tree Road. Several properties will also receive water connection notices to connect to MAWSA's water system.
33. Catalyst Commercial Development **(No Change from June Report)**: BEL attended a meeting with a developer regarding the Elvin Metzler property along Route 72 and Bucknoll Road on April 5, 2016. This is the site that Dollar General had previously expressed interest in developing. This new developer is looking to master plan and develop the entire property (approximately 21 acres) and was looking for initial design guidance from the Township and Authority.
34. Obetz Doe Run Road Corridor Project(s): The Township recently shared a revised concept plan for the former Herneisen Property along Doe Run Road controlled by Seth Obetz that may be developed. The concept now proposes approximately 50 senior housing units, 45 townhomes and 152 apartment units. No commercial uses are proposed. BEL will share that information with the Authority at the July 2016 Authority meeting.

1. Development Information

Name of Development Holly Tree Farms Apartments  
Developer Name Landmark Homes  
Address 1737 West Main Street  
  
Telephone # 717-733-1536  
Email Tarah@ownalandmark.com

2. Location of Development

a. County Lancaster  
b. Municipality Penn Township  
c. Address or Coordinates 738 Holly Tree Road  
Manheim, PA 17545  
d. Tax Parcel # 5008957300000  
e. USGS Quad Name Lititz  
inches up 4.5" over 17"  
from bottom right corner of map.  
f. Located in a High Quality/Exceptional Value watershed?  
 Yes  No

3. Type of Development Proposed (check appropriate box)

Residential  Multi-Residential  
Describe Three Strage buildings and one apartment building  
(12 unites)  
 Commercial  Institutional  
Describe \_\_\_\_\_  
 Brownfield Site Redevelopment  
 Other (specify) \_\_\_\_\_

4. Size

a. # of lots 1 # of EDUs 12  
b. # of lots since 5/15/72 NA  
c. Development Acreage 1.65 AC.  
d. Remaining Acreage 0

5. Sewage Flows 2798 gpd

6. Proposed Sewage Disposal Method (check applicable boxes)

a.  Sewerage System  
 Existing (connection only)  New (extension)  
 Public  Private  
 Pump Station(s)/Force Main  Gravity  
Name of existing system being extended  
Northwestern Lancaster County Authority  
Interceptor Name Sweetbriar Creek Interceptor  
Treatment Facility Name Northwestern Lancaster  
County Authority Treatment Plant  
NPDES Permit # PA0084026  
b.  Construction of Treatment Facility  
 With Stream Discharge  
 With Land Application (not including IRSIS)  
 Other  
 Repair?  
Name of waterbody where point of discharge is proposed  
(if stream discharge)  
\_\_\_\_\_

c.  Onlot Sewage Disposal Systems  
(check appropriate box)  
 Individual onlot system(s) (including IRSIS)  
 Community onlot system  
 Large-Volume onlot system  
d.  Retaining tanks  
Number of Holding Tanks \_\_\_\_\_  
Number of Privies \_\_\_\_\_

7.  Request Sewage Facilities Planning Module forms in electronic format

8. Request for Planning Exemption

a. Protection of rare, endangered or threatened species  
Check one:  
 The "PNDI Project Environmental Review Receipt" is attached.  
or  
 A completed "PNDI Project Planning & Environmental Review Form," (PNDI Form) is attached. I request DEP staff to complete the required PNDI search for my project. I realize that my planning exemption will be considered incomplete and that the DEP processing of my planning exemption request will be delayed, until a "PNDI Project Environmental Review Receipt" and all supporting documentation from jurisdictional agencies (when necessary) is/are received by DEP.

Applicant or Consultant Initials \_\_\_\_\_

b.  Plot Plan Attached  Site Reports Attached

c. Onlot Disposal Systems

(1) I certify that the Official Plan shows this area as an onlot service area.

\_\_\_\_\_  
(Signature of Municipal Official) / Date

\_\_\_\_\_  
Name (Print) / Title

Municipality (must be same as in 2.b.)

Telephone # \_\_\_\_\_

(2) I certify that each lot in this subdivision has been tested and is suitable for both a primary and replacement sewage disposal system.

\_\_\_\_\_  
Signature of SEO / Date

\_\_\_\_\_  
Name (Print) / Certification #

Telephone # \_\_\_\_\_

(3) I certify that each lot in this subdivision is at least 1 acre in size

\_\_\_\_\_  
(Signature of Project Applicant/Agent) / Date

d. Public Sewerage Service (i.e., ownership by municipality or authority)

Based upon written documentation, I certify that the facilities proposed for use have capacity and that no overload exists or is projected within 5 years. (Attach documents.)

\_\_\_\_\_  
(Signature of Municipal Official) / Date

\_\_\_\_\_  
Name (Print) / Title

Municipality (must be same as in 2.b.)

Telephone # \_\_\_\_\_