Exhibit "H-3"

SPRINGFIELD TOWNSHIP, YORK COUNTY, SEWER AUTHORITY
WASTEWATER TREATMENT PLAN

2017 ANNUAL MUNICIPAL WASTELOAD MANAGEMENT (CHAPTER 94) REPORT TO THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

For:
Springfield Township, York County, Sewer Authority
P.O. Box 75
Seven Valleys, PA 17360

March 2018

Engineer's File No. 3252.6.00.24

PREPARED BY:

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pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT

For Calendar Year: 2017

☒ Permittee is owner and/or operator of a POTW or other sewage treatment facility
☐ Permittee is owner and/or operator of a collection system tributary to a POTW not owned/operated by permittee

GENERAL INFORMATION			
Permittee Name:	**Springfield Township York County Sewer Authority**	Permit No.:	**PA0086860**
Mailing Address:	**9211 Susquehanna Trail South**	Effective Date:	**January 1, 2014**
City, State, Zip:	**Seven Valleys, PA 17360**	Expiration Date:	**December 31,2018**
Contact Person:	**Stanley Escher**	Renewal Due Date:	**July 4, 2018**
Title:	**Chairman**	Municipality:	**Springfield Township**
Phone:	**(717) 428-1413**	County:	**York**
Email:	**stescher@comcast.net**	Consultant Name:	**C.S. Davidson, Inc.**

CHAPTER 94 REPORT COMPONENTS

1. Attach to this report a line graph depicting the monthly average flows (expressed in MGD) for each month for the past 5 years and projecting the flows for the next 5 years. The graph must also include a line depicting the hydraulic design capacity per the WQM permit. (25 Pa. Code § 94.12(a)(1))

   Check the appropriate boxes:
   ☒ Line graph for flows attached (**Attachment 1.A**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment 1.B**)
   ☐ Section 1 is not applicable (report is for a collection system).

2. Attach to this report a line graph depicting the monthly average organic loads (express as lbs BOD5/day) for each month for the past 5 years and projecting the organic loads for the next 5 years. The graph must also include a line depicting the organic design capacity of the treatment plant per the WQM permit. (25 Pa. Code § 94.12(a)(2))

   Check the appropriate boxes:
   ☒ Line graph for organic loads attached (**Attachment 2.A**)
   ☒ DEP Chapter 94 Spreadsheet used (**Attachment 1.B**)
   ☐ Section 2 is not applicable (report is for a collection system).

3. If the DEP Chapter 94 Spreadsheet was not used to determine projections, discuss the basis for the hydraulic and organic projections. In all cases, include a description of the time needed to expand the plant to meet the load projections, if necessary, and data used to support the projections should be included in an appendix to this report. (25 Pa. Code § 94.12(a)(3))

4. Attach a map showing all sewer extensions constructed within the past calendar year, sewer extensions approved or exempted in the past year in accordance with Act 537 and Chapter 71, but not yet constructed, and all known proposed projects which require public sewers but are in the preliminary planning stages. The map must be accompanied by a list summarizing each extension or project and the population to be served by the extension or project. If a sewer extension approval or proposed project includes schedules describing how the project will be completed over time, the listing should include that information and the effect this build-out-rate will have on populations served. (25 Pa. Code § 94.12(a)(4))

Check the appropriate boxes:

☒ Map showing sewer extensions constructed, approved/exempted but not yet constructed, and proposed projects attached (**Attachment**)

☒ List summarizing each extension or project attached (**Attachment**)

☐ Schedules describing how each project will be completed over time and effects attached (**Attachment**)

Comments:

5. Discuss the permittee's program for sewer system monitoring, maintenance, repair and rehabilitation, including routine and special activities, personnel and equipment used, sampling frequency, quality assurance, data analyses, infiltration/inflow monitoring, and, where applicable, maintenance and control of combined sewer regulators during the past year. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(5))

See Attachment 5

Springfield Township Sewer Authority utilizes contract operators to operate their Wastewater Treatment Plant, as well as, the associated collection systems and pumping stations. During the year, The Authority monitors flows at different sites by way of computerized flow meters. These flow meters are set up and maintained by a contractor who specializes in collection system inflow/infiltration projects. In addition, The Authority has begun a manhole inspection program to determine if these manholes are structurally sound. Pump stations are checked weekly to ensure all pumps are operating properly. These same stations are monitored with dialers, which will notify someone of a problem if it occurs.

A systematic approach has been set in place to visually check the internal structure of the sanitary sewer collection system and check for any inflow and infiltration. This is accomplished with the help of a private contractor who uses cameras and video equipment.

6. Discuss the condition of the sewer system including portions of the system where conveyance capacity is being exceeded or will be exceeded in the next 5 years and portions where rehabilitation or cleaning is needed or is underway to maintain the integrity of the system and prevent or eliminate bypassing, CSOs, SSOs, excessive infiltration and other system problems. Attach a separate sheet if necessary. (25 Pa. Code § 94.12(a)(6))

Check the appropriate boxes:

☐ System experienced capacity-related bypassing, SSOs or surcharging during the report year. On a separate sheet, list the date, location, and reason for each bypass, SSO or surcharge event.

☒ System did not experience capacity-related bypassing, SSOs or surcharging during the report year.

Comments:

7. Attach a discussion on the condition of sewage pumping (pump) stations. Include a comparison of the maximum pumping rate with present maximum flows and the projected 2-year maximum flows for each station. (25 Pa. Code § 94.12(a)(7))

Check the appropriate boxes:

☐ The collection system does not contain pump stations

☒ The collection system does contain pump stations (Number – **16**)

☒ Discussion of condition of each pump station attached (**Attachment 7**)

8. If the sewage collection system receives industrial wastes (i.e., non-sanitary wastes), attach a report with the information listed below. (25 Pa. Code § 94.12(a)(8))

a. A copy of any ordinance or regulation governing industrial waste discharges to the sewer system or a copy of amendments adopted since the initial submission of the ordinance or regulation under Chapter 94, if it has not previously been submitted.

b. A discussion of the permittee's or municipality's program for surveillance and monitoring of industrial waste discharges into the sewer system during the past year.

c. A discussion of specific problems in the sewer system or at the plant, known or suspected to be caused by industrial waste discharges and a summary of the steps being taken to alleviate or eliminate the problems. The discussion shall include a list of industries known to be discharging wastes which create problems in the plant or in the sewer system and action taken to eliminate the problem or prevent its recurrence. The report may describe pollution prevention techniques in the summary of steps taken to alleviate current problems caused by industrial waste dischargers and in actions taken to eliminate or prevent potential or recurring problems caused by industrial waste dischargers.

Check the appropriate boxes:

☐ Industrial waste report as described in 8 a., b. and c. attached (**Attachment**)

☐ Industrial pretreatment report as required in an NPDES permit attached (**Attachment**)

9. Existing or Projected Overload.

Check the appropriate boxes:

☐ This report demonstrates an existing hydraulic overload condition.
☐ This report demonstrates a projected hydraulic overload condition.
☐ This report demonstrates an existing organic overload condition.
☐ This report demonstrates a projected organic overload condition.

If one or more boxes above have been checked, attach a Corrective Action Plan (CAP) to reduce or eliminate present or projected overloaded conditions under §§ 94.21 and/or 94.22 (relating to existing overload and projected overload). (25 Pa. Code § 94.12(a)(9))

☐ Corrective Action Plan attached (**Attachment**)

10. Where required by the NPDES permit, attach a Sewage Sludge Management inventory that demonstrates a mass balance of solids coming in and leaving the facility over the previous calendar year.

☒ Sewage Sludge Management Inventory attached (**Attachment 10**)

11. For facilities with CSOs and where required by the NPDES permit, attach an Annual CSO Report (including satellite combined sewer systems).

☐ Annual CSO Report attached (**Attachment**)

12. For POTWs, attach a calibration report documenting that flow measuring, indicating and recording equipment has been calibrated annually. (25 Pa. Code § 94.13(b))

☒ Flow calibration report attached (**Attachment 12**)

RESPONSIBLE OFFICIAL CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

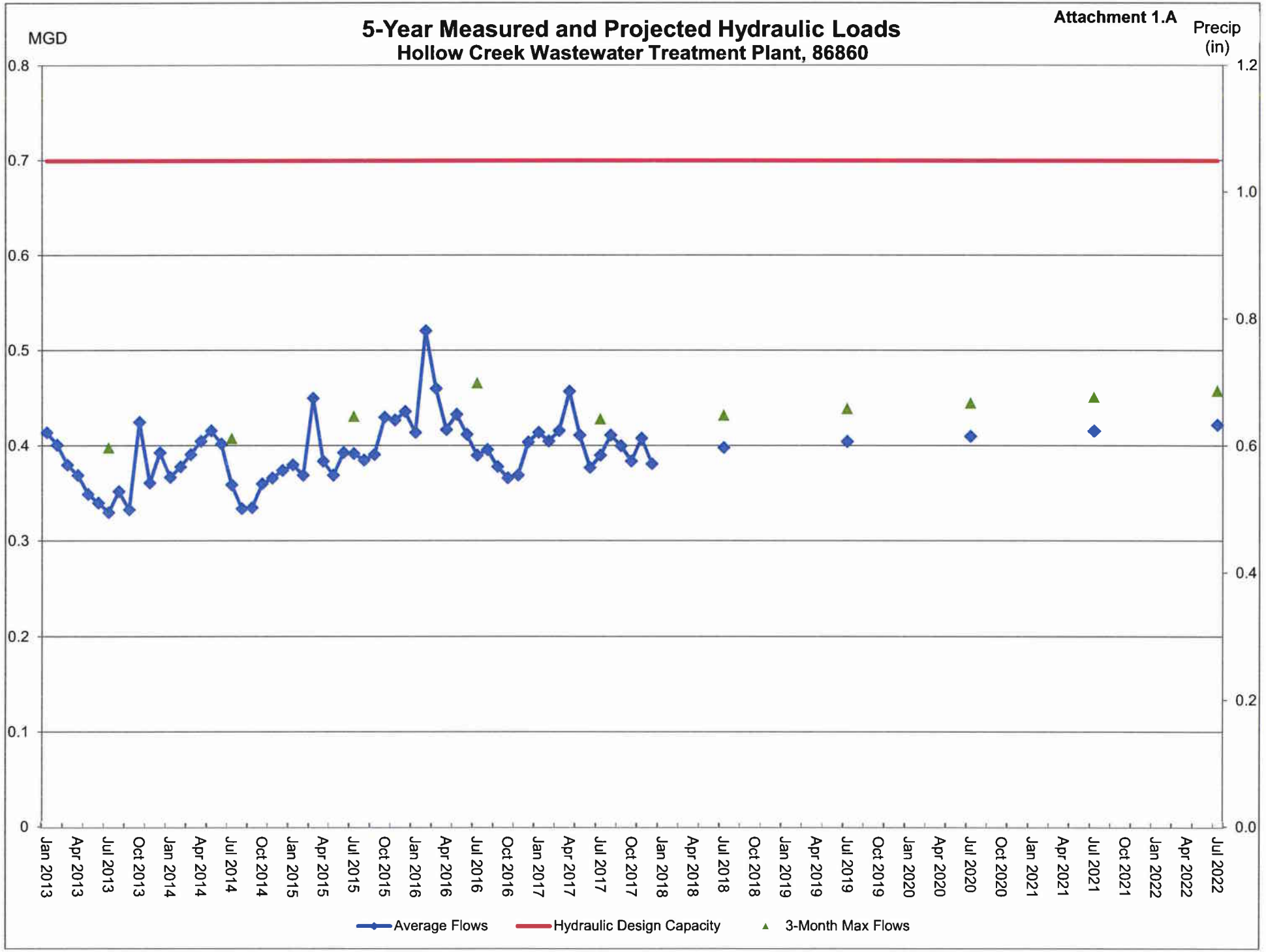
Stan Escher	
Name of Responsible Official	Signature
717-428-1413	
Telephone No.	Date

PREPARER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared by me or otherwise under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Ryan G. Martin	
Name of Preparer	Signature
717-846-4805	
Telephone No.	Date

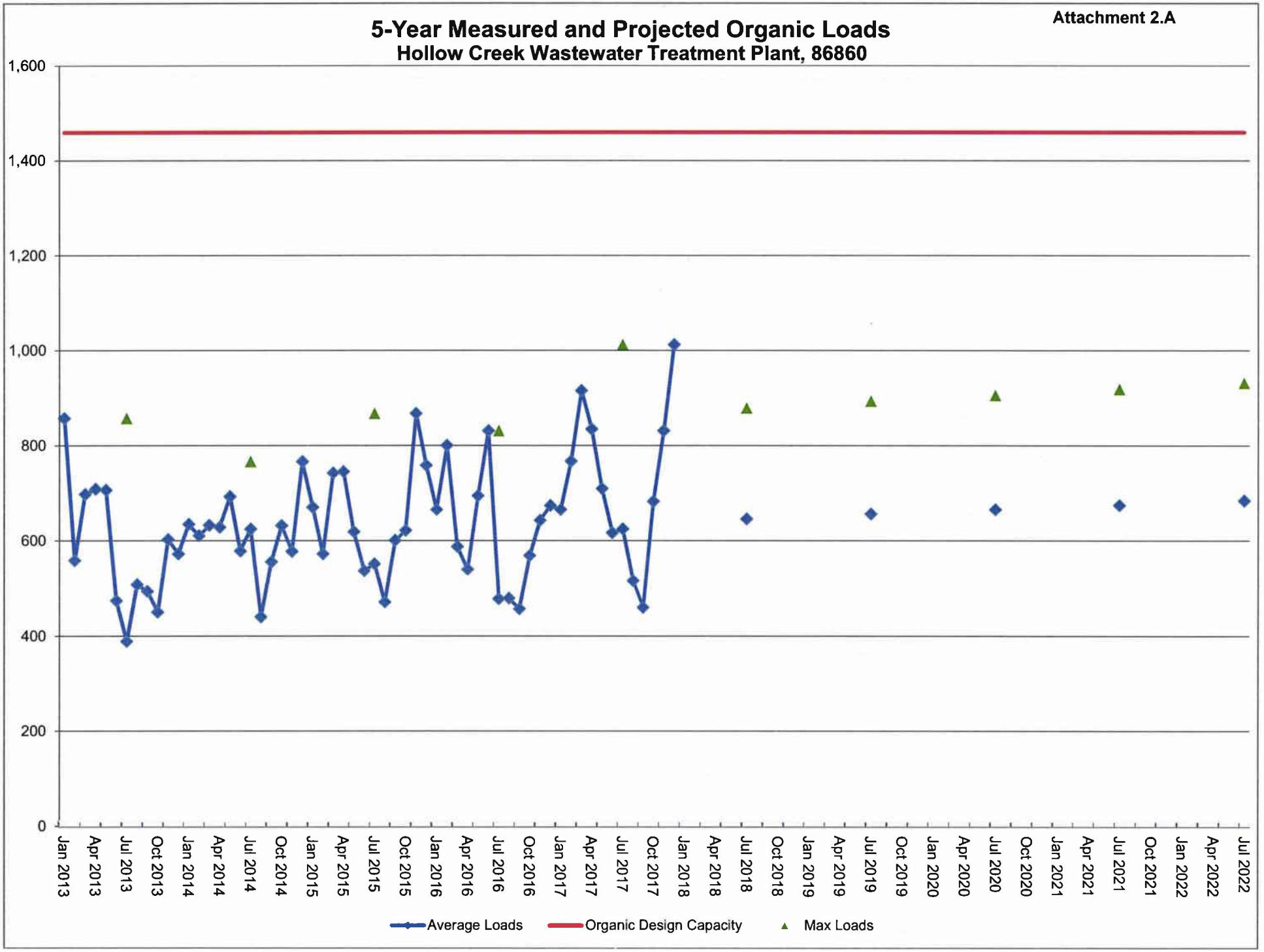
Attachment 1.A



Attachment 2.A

5-Year Measured and Projected Organic Loads

Hollow Creek Wastewater Treatment Plant, 86860



Attachment 1.B

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PADEP Chapter 94 Spreadsheet
Sewage Treatment Plants

Reporting Year: 2017

Facility Name: Hollow Creek Wastewater Treatment Plant

Permit No.: 86860

Persons/EDU: 3.5

Existing Hydraulic Design Capacity:	0.7	MGD		**Existing Organic Design Capacity:**	1,460	lbs BOD5/day
Upgrade Planned in Next 5 Years?	NO	**Year:**		**Upgrade Planned in Next 5 Years?**	NO	**Year:**
Future Hydraulic Design Capacity:		MGD		**Future Organic Design Capacity:**		lbs BOD5/day

Monthly Average Flows for Past Five Years (MGD)

Month	2013	2014	2015	2016	2017
January	0.414	0.367	0.38	0.414	0.414
February	0.401	0.378	0.369	0.521	0.405
March	0.38	0.391	0.45	0.46	0.416
April	0.369	0.405	0.384	0.417	0.457
May	0.349	0.416	0.369	0.433	0.411
June	0.34	0.402	0.393	0.412	0.377
July	0.33	0.359	0.392	0.39	0.39
August	0.352	0.334	0.385	0.396	0.411
September	0.333	0.335	0.391	0.378	0.4
October	0.425	0.36	0.43	0.366	0.384
November	0.361	0.366	0.427	0.369	0.408
December	0.393	0.374	0.436	0.404	0.381
Annual Avg	0.371	0.374	0.401	0.413	0.405
Max 3-Mo Avg	0.398	0.408	0.431	0.466	0.428
Max : Avg Ratio	1.07	1.09	1.07	1.13	1.06
Existing EDUs	2,249.0	2,271.0	2,311.0	2,311.0	2,331.0
Flow/EDU (GPD)	165.0	164.7	173.5	178.7	173.7
Flow/Capita (GPD)	47.1	47.1	49.6	51.1	49.6
Exist. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Monthly Average BOD5 Loads for Past Five Years (lbs/day)

Month	2013	2014	2015	2016	2017
January	858	635	671	666	666
February	559	611	573	801	768
March	698	633	743	588	916
April	709	629	746	540	835
May	707	693	619	695	710
June	474	579	537	832	617
July	389	625	552	478	625
August	508	440	471	479	516
September	494	556	601	457	460
October	450	632	622	569	683
November	603	578	868	643	832
December	573	767	759	674	1,013
Annual Avg	585	615	647	619	720
Max Mo Avg	858	767	868	832	1,013
Max : Avg Ratio	1.47	1.25	1.34	1.35	1.41
Existing EDUs	2,249	2,271	2,311	2,311	2,331
Load/EDU	0.260	0.271	0.280	0.268	0.309
Load/Capita	0.074	0.077	0.080	0.076	0.088
Exist. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Projected Flows for Next Five Years (MGD)

	2018	2019	2020	2021	2022
New EDUs	25.0	31.0	27.0	14.0	12.0
New EDU Flow	0.0043	0.0053	0.0046	0.0024	0.0021
Proj. Annual Avg	0.397	0.4023	0.4069	0.4093	0.4114
Proj. Max 3-Mo Avg	0.431	0.436	0.441	0.444	0.446
Proj. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Projected BOD5 Loads for Next Five Years (lbs/day)

	2018	2019	2020	2021	2022
New EDUs	25	31	27	14	12
New EDU Load	6.937	8.602	7.492	3.885	3.330
Proj. Annual Avg	644	653	660	664	667
Proj. Max Avg	877	889	899	904	909
Proj. Overload?	**NO**	**NO**	**NO**	**NO**	**NO**

Show Precipitation Data on Hydraulic Graph?

Total Monthly Precipitation for Past Five Years (Inches)

Month	2013	2014	2015	2016	2017
January	4.03	1.78	1.83	1.44	2.58
February	1.45	2.04	0.39	4.28	1.83
March	3.09	4.56	3.28	1.52	2.97
April	2.28	4.36	1.78	2.21	1.35
May	3.13	3.13	3.68	4.98	3.55
June	6.46	5.1	8.48	3.08	2.08
July	4.14	1.52	5.6	2.87	5.21
August	5.34	2.12	4.58	3.25	3.83
September	2.6	1.86	4.36	4.22	2.29
October	11.2	3.23	4.88	0.81	3.74
November	2.29	2.13	1.05	2.2	2.25
December	5.27	3.24	4.25	1.96	0.81

SPRINGFIELD TOWNSHIP, YORK COUNTY, SEWER AUTHORITY
2017 Annual Wasteload Management Report

PROJECTED CONNECTIONS AND WASTEWATER FLOWS (MGD)

Project #	Name	Requested # EDU	Reserved EDUs	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	Jacobus Borough:												
	Jacobus initial customers		540	540	540	540	540	540	540	540	540	540	540
	Jacobus misc development		227	149	151	146	146	146	151	180	206	220	227
	Jacobus Borough total		767	689	691	686	686	686	691	720	746	760	767
	Springfield Township:												
	Springfield Township initial customers		164	164	164	164	164	164	164	164	164	164	164
1	Glenn E. & Kathleen I. Collier	4	0	0	0	0	0	0	0	0	0	0	0
2	Keystone Custom Homes	20	0	0	0	0	0	0	0	0	0	0	0
3	Keystone Custom Homes	1	1	1	1	1	1	1	1	1	1	1	1
4	Vern E. Raffensberger	65	13	0	0	0	0	0	0	0	0	0	0
5	Dallastown Area School District	38	38	26	26	26	26	26	26	26	26	26	26
6	Paul L. Smith, Inc.	211	211	206	206	206	206	206	206	206	206	206	206
7	Charles D Gerlach	1	1	1	1	1	1	1	1	1	1	1	1
8	Dustheimer, David (6250 Mockingbird La)	1	1	1	1	1	1	1	1	1	1	1	1
9	Kauri Corp.	462	462	288	356	398	444	484	490	490	490	490	490
10	East Springfield Road area	72	72	72	72	72	72	72	72	72	72	72	72
11	Keystone Custom Homes	2	2	2	2	2	2	2	2	2	2	2	2
12	Shawn Strausbaugh (residue Hillside Hts)	2	2	1	1	1	1	1	1	1	1	1	1
13	Brown's Orchard	6	6	6	6	6	6	6	6	6	6	6	6
14	Vacant lot - Salem Court	1	1	1	1	1	1	1	1	1	1	1	1
15	Vacant lot - Sweitzer Court	2	2	2	2	2	2	2	2	2	2	2	2
16	Gary A. Noffke	1	1	1	1	1	1	1	1	1	1	1	1
17	Godfrey Bros Meats	1	1	1	1	1	1	1	1	1	1	1	1
18	Mahlon Godfrey	1	0	0	0	0	0	0	0	0	0	0	0
19	G &C - Springfield Bowling Alley	2	1	1	1	1	1	1	1	1	1	1	1
20	Montessori School (add'l EDU)	2	1	0	0	0	0	0	0	0	0	0	0
21	Kauri Corp.	50	0	0	0	0	0	0	0	0	0	0	0
22	Sipe, Harry H. & Gloria M.	1	1	1	1	1	1	1	1	1	1	1	1
23	Keystone Custom Homes - Logans Greens	50	50	50	50	50	50	50	50	50	50	50	50
24	A. Douglas Hunger III	6	6	6	6	6	6	6	6	6	6	6	6
25	Charles D Gerlach	2	2	2	2	2	2	2	2	2	2	2	2
26	Springfield Township	1	1	1	1	1	1	1	1	1	1	1	1
27	Robert Kinsley	31	4	0	0	0	0	0	0	0	0	0	0
28	Koch, Drew and Sandra	1	1	1	1	1	1	1	1	1	1	1	1
29	McDonald	1	1	0	0	0	0	0	0	0	0	0	0
30	York County Parks (Nixon)	1	1	0	0	0	0	0	1	1	1	1	1
	Springfield Twp. Total	1039	1047	835	903	945	991	1031	1038	1038	1038	1038	1038

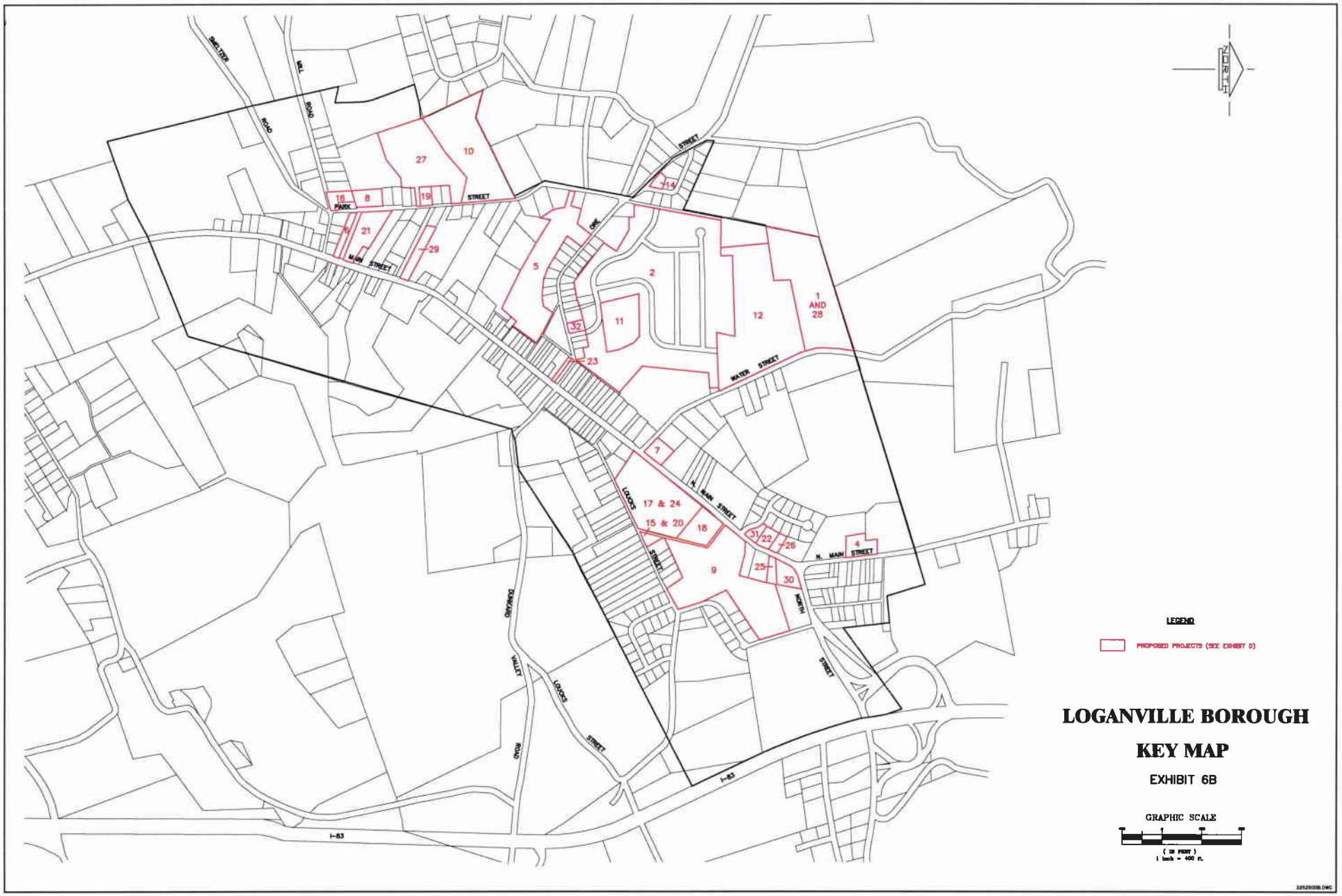
SPRINGFIELD TOWNSHIP, YORK COUNTY, SEWER AUTHORITY
2017 Annual Wasteload Management Report

PROJECTED CONNECTIONS AND WASTEWATER FLOWS (MGD)

Project #	Name	Requested # EDU	Reserved EDUs	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	Seven Valleys Borough:												
	Seven Valleys initial customers	202	202	195	195	195	195	195	195	195	195	195	195
1	Tittle, Paul G.	1	1	1	1	1	1	1	1	1	1	1	1
2	Oliver, Jr., Donald E.	1	0	0	0	0	0	0	0	0	0	0	0
3	Growmark FS Inc	1	1	0	0	0	0	0	0	0	0	0	0
6	Landis, Gary L.	1	1	0	0	0	0	0	0	0	0	0	0
7	Hanover Junction train station	1	1	1	1	1	1	1	1	1	1	1	1
7	Hanover Junction train station (2nd floor)	1	1	1	1	1	1	1	1	1	1	1	1
8	Stiles, William H.	1	1	1	1	1	1	1	1	1	1	1	1
9	Eyster, Glenn	3	3	3	3	3	3	3	3	3	3	3	3
10	Inners, Mareta L.	1	1	1	1	1	1	1	1	1	1	1	1
11	Cousins, William K.	1	1	1	1	1	1	1	1	1	1	1	1
12	Matthews, Betty J.	1	1	0	0	0	0	0	0	0	0	0	0
13	Russell Holmes Estate	1	1	1	1	1	1	1	1	1	1	1	1
14	Baskett, Jason	0	0	0	0	0	0	0	0	0	0	0	0
15	McDonald, John & Jolene	1	0	0	0	0	0	0	0	0	0	0	0
16	Eyster, Glenn	1	0	0	1	1	1	1	1	1	1	1	1
	Seven Valleys Borough total:	218	215	205	206	206	206	206	206	206	206	206	206
	Loganville Borough:												
	Loganville Initial customers	389	389	390	390	389	389	389	389	389	389	389	389
1	Kauri Corp	17	17	0	0	0	0	0	9	9	9	9	9
2	Brenneman Builders, Inc.	100	100	100	100	100	100	100	100	100	100	100	100
4	Stoltzfus, Kenneth R. & Gladys M.	0	0	0	0	0	0	0	0	0	1	1	1
4a	M&G Realty/Stoltzfus	3	3	0	2	2	2	2	2	2	2	2	2
5	Snyder, Wilmer L. & Carolyn P.	1	1	0	0	0	0	0	0	0	0	0	0
6	Buser, David	1	1	1	1	1	1	1	1	1	1	1	1
7	Bixby, Chris	1	1	0	0	0	0	0	0	0	0	0	0
8	Delp, Scott (Knaub, William)	1	1	1	1	1	1	1	1	1	1	1	1
8	Delp, Scott (Knaub, William)	2	2	2	2	2	2	2	2	2	2	2	2
9	Dallastown Area School District (add'l)	2	2	0	0	0	0	0	0	0	0	0	0
10	Taylor, Scott (Ness property - Park St)	16	16	16	16	16	16	16	16	16	16	16	16
11	Brenneman Builders, Inc.	12	12	12	12	12	12	12	12	12	12	12	12
12	Samelson, Leo & June F.	50	40	0	0	0	0	1	5	7	7	7	12
14	Godfrey, Kenneth C.	1	1	1	1	1	1	1	1	1	1	1	1
15	Rill, Tammy M.	1	1	1	1	1	1	1	1	1	1	1	1
16	Moore	1	1	1	1	1	1	1	1	1	1	1	1
17	Stavropulos/Aristidis	1	1	0	0	0	1	1	1	1	1	1	1
18	Jacobs, Carl	1	1	1	1	1	1	1	1	1	1	1	1
19	Ness, Roger	1	1	1	1	1	1	1	1	1	1	1	1
20	McClintock, Tammy (Loucks St)	1	0	0	0	0	0	0	0	0	0	0	0
21	Eckard, Norma (rear 160 S Main)	1	0	0	0	0	0	0	0	0	0	0	0
22	Paterakis (Lee's Drive-In)	4	1	0	0	0	0	0	0	0	0	0	0
23	McLaughlin, Marvin E. & Julia A.	1	1	0	0	0	0	0	0	0	0	0	0
24	Stavropulos, George (NAGG P'ship - Kopp farm)	25	0	0	0	0	0	0	0	0	0	0	0
25	Derksen, Raynette	1	1	1	1	1	1	1	1	1	1	1	1
26	Paterakis (Rug Runners)	1	1	1	1	1	1	1	1	1	1	1	1
27	Knaub, William & Marie	3	0	0	0	0	0	0	0	0	0	0	0
28	Logan's (Milford)	1	1	0	0	0	0	0	0	0	0	0	0
29	Makandvan, Shahab	1	0	0	0	0	0	0	0	0	0	0	0
30	Cracchole (Mamma's Pizza)	1	0	0	0	0	0	0	0	0	0	0	0
31	Kleen-Rite Investments	4	0	0	0	0	0	0	0	0	0	0	0
32	Hershner-Decker, Krista	1	0	0	0	0	0	0	0	0	0	0	0
	Loganville Borough developer reservations total:	646	596	529	531	530	531	532	545	547	548	548	553
	Sytem total		2625	2258	2331	2367	2414	2455	2480	2511	2538	2552	2564

ATTACHMENT 4.

SPRINGFIELD TOWNSHIP, YORK COUNTY SEWER AUTHORITY
SEWER MAPS


NORTH
SHELTZER
MILL ROAD
STREET
27
10
16
PARK
8
19
STREET
14
21
29
MAIN STREET
5
2
11
12
1 AND 28
32
23
WATER STREET
7
17 & 24
15 & 20
18
LUCAS STREET
N. MAIN STREET
31
22
26
4
N. MAIN STREET
9
25
30
NORTH STREET
DURHAM VALLEY ROAD
LUCAS STREET
I-83
I-83
LEGEND
PROPOSED PROJECTS (SEE EXHIBIT D)
LOGANVILLE BOROUGH
KEY MAP
EXHIBIT 6B
GRAPHIC SCALE
(IN FEET)
1 inch = 400 ft.

LEGEND

PROPOSED PROJECTS
(SEE EXHIBIT E)

SEVEN VALLEYS BOROUGH

YORK COUNTY, PENNSYLVANIA

SCALE: 1"=800'

EXHIBIT 6C

C.S. Davidson, Inc.

Excellence in Civil Engineering

38 SOUTH DUKE STREET, YORK, PA • PHONE (717) 848-4888 • FAX (717) 848-4891
50 WEST MIDDLE STREET, GETTYSBURG, PA • PHONE (717) 334-3636 • FAX (717) 337-4015
www.csdavidson.com

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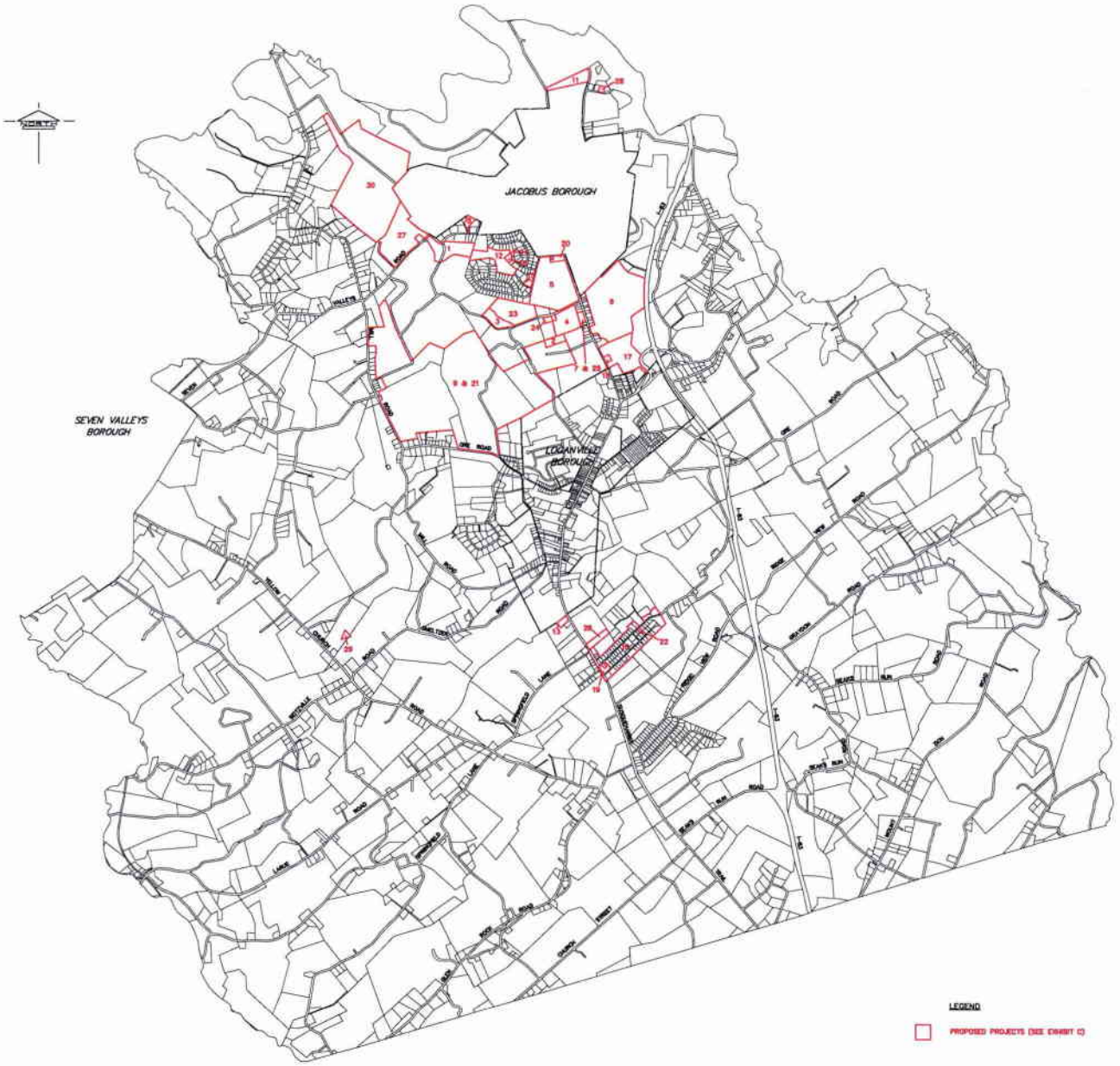
1004-CH94.DWG



GRAPHIC SCALE

SPRINGFIELD TOWNSHIP

KEY MAP

EXHIBIT 6A

3252.6.00.17

Attachment 5

ENVIRONMENTAL SERVICES, LLC

P.O. Box 3685
York, PA 17402
717-699-4797

Inflow/Infiltration • Pipe Line Inspection • Water • Wastewater

Hollow Creek WWTP Monthly Operations Report

January 2017/February 2017

Treatment Plant:

- *January 19*: Notified Verizon that we didn't have a dial tone for the plant phone number 428-0165, which is used for emergency dialers. The problem was repaired on January 20th. Verizon found a problem in the telephone pedestal at the corner of Beck Rd and Water St.
- *January 25:* Received (4) 55 gallon drums of Polymer for sludge dewatering.
- *January 31*: The U.V. system was cleaned thoroughly as part of our preventative maintenance program.
- *February 1*: Received 1,100 gallons of liquid alum, which is used for phosphorous removal.
- *February 2*: Placed new cap on D.O. probe and a new PH Probe on PH meter as part of QA/QC program for lab equipment.
- DMR has not been submitted for January 2017 because we are still waiting for some lab results to be completed, however DMR will be submitted before due date of February 28th.
- Phosphorous for January 2017 was 1.0 mg/L, which is below the permit level of 2.0 mg/L.
- Cummings Generator Services performed preventative maintenance, which is part of their contract. The maintenance was performed on both generators at the plant.

Pumping Stations:

- *January 19 @ 9pm*: Received emergency call out for Church Street pump station, high wet well level. #2 side lost prime due to a leaking seal, #1 side was out of service for repairs. I got #2 side working, however #1 side would need to be placed back into service. I called Daryl of B&R Electric to have the #1 side placed back into service asap.
- *January 20*: B&R Electric replaced the repaired motor back into operation at Church Street pump station on the #1 side. I shut down the #2 side due to a leaking seal on high head pump.
- *January 23*: Cummings Generator Service performed preventative maintenance at Church Street and Valley Road pump stations.
- *January 25*: B&R Electric made repairs to seal on the #4 high head pump and replaced check valve on same side at the Church Street pump station. B&R then tested and placed the #3 and #4 side back into operation.
- *February 13*: During pump station check it was noticed that a water seal pipe had broken at the Church Street pump station. That issue caused the pump to not prime or run on the #1 side. I shut down the #1 side until repairs could be made.
- *February 14*: Daryl of B&R Electric made repairs to the #1 side at Church Street pump station. Both sides are now fully operational.
- All stations were checked on a weekly basis.
- All pump stations have had their electric meters switched to smart meters.
- New check valves for Valley Road pump station which were ordered in October 2016, have been received on February 9th. We will have the old valves removed and replaced.

Respectfully Submitted,

Ronald P. Perks

CBS Environmental Services, LLC

3252.6.00.17

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Hollow Creek WWTP Monthly Operations Report

February 2017/March 2017

Treatment Plant:

- *February 28 & March 10*: Received 1,100 gallons of liquid alum, which is used for phosphorous removal.
- *March 10*: Darryl and Ben of B&R Electric/Johnston Construction started making repairs to muffin monster at head of plant. Parts had to be ordered to repair the muffin monster. Ben and Darryl will return on March 15 to finish the repairs.
- *March 13*: Excelsior Blower Inc. made repairs to #2 blower for sludge silo and #2 blower in centrifuge building.
- *March 15*: Darryl and Ben of B&R Electric/Johnston Construction made the necessary repairs to the muffin monster at the head of the plant. The muffin monster has been put back into operation.
- *March 15*: Easy Dig Excavation plowed the snow around the WWTP due to the Bobcat being out of service.

  Note: The Bobcat has a mechanical problem. Finch Services Inc. was called to have the Bobcat serviced.

Dewatering:

- (2) dumpsters totaling 5.71 dry tons were removed from the plant in February by Red Rose Sanitation.
- In February we had an average feed of 1.01% and an average cake of 24.18%.

Centrifuge:

Nothing to report at this time.

Collection System:

- *March 12*: AR1 (Air Relief Valve 1) for force main for Valley Road pump station failed. Shut down air relief until repairs can be made in the near future.

Pumping Stations:

- *February 22*: Kline's Services cleaned the surfaces of the following pump station wet wells: Treatment Plant, Seneca Ridge, E. Springfield Road, Church Street and Main Street (Seven Valleys).
- *February 25 (3:00pm – 5:30pm & 9:00pm – 10:00pm):* Received emergency call out to Main Street (Seven Valleys) pump station and Church Street pump station due to power failure from high winds.
- *February 27, March 3 & March 8*: Kline's Services cleaned rags from bar screens and wet well at the head of the plant due to muffin monster being out of service.
- *March 8 (2:00am – 3:30am):* Received emergency call out to South Main Street pump station for high wet well level. Solenoid Valve failed, I made the necessary repairs and placed the station back into operation.
- *March 10 (4:00am – 5:30am*): Received emergency call out for Valley Road pump station. Arrived at station at 4:15am and found pump #1 had a seal failure. I shut down the pump and locked it out. Both pumps had lost prime, so I re-primed pump #2 and also cleaned transducer in wet well. I observed station operation through three cycles.
- *March 12 (12:00pm – 3:30pm*): At 11:00am I received a call from Tom Wolf of Springfield Township stating sewage was coming from a manhole adjacent to Weaver property along walking trail. I found this manhole was an air relief valve manhole on force main for Valley Road pump station. Kline's was called in to pump down manhole. Repairs will be made in the near future.

Respectfully Submitted,

Ronald P. Perks

CBS Environmental Services, LLC

3252.C.00-17 J

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Hollow Creek WWTP Monthly Operations Report

March 2017/April 2017

Treatment Plant:

- *March 20:* Finch Inc. checked the problem with the Bob Cat. It was found that mice had nested under the head liner and chewed the wiring in the harness. A new wire harness was ordered and installed on 3/29/17.
- *March 21*: Started having problems with #1 decanter floating and missing decant cycle.
- *March 21*: BFPE performed annual fire extinguisher services throughout plant.
- *March 15*: Darryl and Ben of B&R Electric/Johnston Construction made the necessary repairs to the muffin monster at the head of the plant. The muffin monster has been put back into operation.
- *March 31*: Plant water well failed and was replaced by Sanders plumbing on 4/3/17. The single lever flush valve was replaced on bathroom urinal as well.
- *April 5:* DEP performed the annual inspection of plant operations and paper work. A new DEP inspector Sheena Ripple conducted the inspection. No violations were found.
- *April 12:* Received 1,100 gallons of liquid alum from Univar for phosphorous removal.

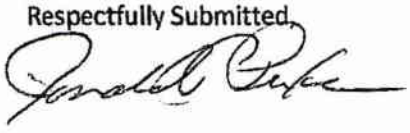
Dewatering:

- (2) dumpsters totaling 5.49 dry tons were removed from the plant in March by Red Rose Sanitation.
- In March we had an average feed of 1.07% and an average cake of 24.36%.

Pumping Stations:

- *March 21 (6:15pm – 7:45pm):* Church Street pumping station, high wet well level. Wet well was high due to snow melting. I stayed with the station until wet well pumped down.
- *March 31 (6:55pm – 8:30pm):* Church Street pump station, high wet well level. Wet well was high due to rainfall. I stayed with station until wet well pumped down.
- *March 31: (9:10pm – 11:30pm):* Hollow Creek SBR common alarm fault. #1 SBR decanter floated. After I reseated the decanter, I had to run the plant by hand until the SBR basins returned to normal.
- *April 1 (12:00am):* South Main Street pump station Loganville, high wet well level. Checked station wet well and it was back to normal.
- *April 1 (1:30am – 3:00am*): Church Street pump station, high wet well level. #1 side lost prime due to leak in water seal tubing. Locked out #1 side and ran station on the #2 side until repairs were made. I watched the wet well pump down to its normal level.
- *April 8 (2:30am – 5:45am*): Hollow Creek WWTP, SBR common alarm, #1 decanter floated. I found rags hanging on the float switches which control SBR basin functions. I removed the rags from the float switches and reseated decanter. I then ran basins by hand until basins were back in normal operations.
- *April 15 (2:15pm – 3:30pm):* Received a call from Mr. Flanigan of 821 Cougar Point Circle. Mr Flanigan said he had a problem with sewer back up. I went out to site to check the main line and found that there wasn't any backup in the main line.
- **Notes:**
    1. Valley Road pump station #1 pump remains out of service. We are still waiting for the impeller replacement part.
    2. Ordered parts for various pump stations to perform preventative maintenance.

Respectfully Submitted,



Ronald P. Perks

CBS Environmental Services, LLC

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Hollow Creek WWTP Monthly Operations Report

April 2017/May 2017

Treatment Plant:

- *April 20*: We are having problems with both decanters floating from time to time. Control Systems 21 replaced the low level float switch in SBR #1. We were thinking that was the problem, however #1 decanter floated again. It was also thought the sequence controller in the control building was malfunctioning, but no problem existed with this unit. Upon further investigation it was determined that the decanter valves are leaking. New valves have been ordered.

- *April 24*: Received (3) 55 gallon drums of defoamer.

- *May 9*: B&R Electric made repairs to lighting fixtures that were bad and also changed sodium bulbs at the plant entrance.

- *May 15*: Received 950 gallons of liquid Alum for phosphorous removal.

- *May 15*: Received (6) new float switches for SBR basins from Control Systems 21.

Note: Received from Angie Fowler the PA DEP 26R form for renewal to dispose solids at Modern Landfill.

Dewatering:

- (2) dumpsters totaling 5.8 dry tons were removed from the plant in April by Red Rose Sanitation.
- In May we had an average feed of 1.07% and an average cake of 24.98 %.

Centrifuge:

Nothing to report at this time.

Collection System:

- *May 4*: Re-televised flat area of Logan's Reserve.
- *May 12*: Received portable flow meters & rain gauge from Teledyne Isco. We had to order 2 additional 8" spring bands.
- **Note:** Mr. Flanigan at 821 Cougar Point Circle had a problem with the lateral.
- **Note:** Ordered door hangers for Smoke testing of East Springfield Road basin.
- **Note:** Logan's Reserve is now built out. We anticipate finishing televising and cleaning of this area.
- **Note:** Seneca Ridge Development is scheduled to be televised this year as part of the yearly televising program. It was asked of Dave Davidson for as-built drawings, because we do not have any at the plant or at the Sewer Authority office.

Pumping Stations:

April 29 & 30 (4:00pm – 5:00pm): Seneca Ridge pump station emergency call out due to high wet well level. Found #2 pump kept tripping out main breaker. Shut pump off until repairs can be made.

April 26: Rich from Control Systems 21 replaced wires at the top of circuit breakers at Valley Road pump station, due to wires getting hot and melting. Also, Kline's was keeping the wet well pumped down while these wires were being replaced.

April 28: Rich of Control Systems 21 had to reprogram the Soft starts at Valley Road pump station. This was due to false codes which would not allow pumps to start. I was also having emergency call outs because of this issue. No problems have been occurring since the repairs were made.

May 8: Daryl of Johnston Construction pulled the #1 motor at Church Street pump station due to bottom bearing failure. The motor was brought to Motor Tech for repairs.

May 11: Daryl of Johnston Construction placed new impeller on the #1 pump at Valley Road pump station.

May 17: Johnston Construction is placing new check valve assembly on the #1 side at Valley Road pump station. This was being done, because the old check valves had bad seats which allowed back flow from the force main.

- **Note:** Control Systems 21 sent a proposal for automatic transfer switch for Church Street pump station. Currently the generator needs to be switched by hand if a power failure occurs.

- **Note:** All pump stations were checked regularly.

Respectfully Submitted,

Ronald P. Perks

CBS Environmental Services, LLC

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Inflow/Infiltration • Pipe Line Inspection • Water • Wastewater

Hollow Creek WWTP Monthly Operations Report

May 2017/June 2017

Treatment Plant:

- *May 20*: Noticed effluent flow meter stopped working. Made some adjustments to housing for flow meter then observed proper operation.

- *May 30*: Darryl of Johnston Construction made repairs to the muffin monster bilco door. A bracket had to be cut back so the door would not bang against the muffin monster motor.

- *May 31*: Kline's cleaned plant wet well surface.

- *June 6*: Control Systems 21 checked and made adjustments to #2 SBR basin actuator decanter valve.

- *June 11*: At 7:40pm, I received a call out for common alarm at Hollow Creek WWTP. I arrived at the plant and found alarm for SBR#2 basin float switch fault. Checked switches and found rags on switches. I then re-set alarm and the plant was back in normal operation. At 11:00pm I received another call out at Hollow Creek WWTP. The alarm was for SBR#2 basin float switch. I checked the float switches and noticed the high level float switch was missing. I called Control Systems 21 to have a new float replaced.

- *June 12*: Rich of Control Systems 21 placed a new high float switch on SBR#2. Rich checked the noise in the motor for Aquajet #3 in SBR#1 basin.

  Note: On May 19, 21, 25, 28 and June 2 & 6, the SBR #2 decanter floated due to leaking valve. Valves are scheduled to be replaced on June 29, 2017.

Dewatering:

- (2) dumpsters totaling 6.02 dry tons were removed from the plant in May by Red Rose Sanitation.
- In May we had an average feed of 1.02% and an average cake of 24.58 %.

Centrifuge:

Nothing to report at this time.

Collection System:

- Smoke testing for East Springfield Road sewer basin still remains to be completed due to a delay in getting the door hangers needed for notification.
- Isco portable flow meters have been placed into service. Data will be uploaded within the next week.
- Seven Valleys residents who had letters sent to them about the smoke testing results have been contacting me with questions or to let me know that repairs have been made. The following residents are up to date:
  1. 91 Church Street
  2. 98 Church Street
  3. 108 Church Street
  4. 23 Maple Street
  5. 22 Cherry Alley

Pumping Stations:

- *May 17 & 18*: Darryl of Johnston Construction/B&R Electric, replaced both pump check valves at Valley Road. Also, he needed to replace sump pump and piping.
- *May 25:* B&R Electric placed repaired #2 pump back into service at Church Street pumpstation. The lower bearings were replaced by Motor Tech.
- *May 31*: Kline's cleaned Mill Street pump station wet well.
- *June 1 (5:00am – 6:00am):* Received emergency call out for Church Street pumpstation. #3 water seal piping broke and sprayed water over the motor which kept tripping the breaker.
- *June 1*: Darryl of Johnston Construction/B&R Electric pulled the #3 motor and pump from Church Street pumpstation. He then brought the pump to Motor Tech for service due to moisture.

- *June 1:* Ben of B&R Electric had to make emergency repair to the #1 side pump starter at Church Street pumpstation. Ben had to swap parts from #2 starter to get the station to operate properly.
- *June 2:* Ben of B&R Electric replaced 2 new motor starters for Church Street pumpstation.
- *June 7:* Darryl of B&R Electric picked up the #3 pump from Motor Tech and placed it back into service along with new high head seal at Church Street pumpstation.
- *June 13:* Darryl of B&R Electric picked up #1 motor from Motor Tech for Valley Road pumpstation. The motor shaft had some grooves on the shaft which needed to be smoothed out before a new seal could be replaced.

Respectfully Submitted,

Ronald P. Perks

CBS Environmental Services, LLC

3252.6.00.17

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York, PA 17402
717-699-4797

Inflow/Infiltration • Pipe Line Inspection • Water • Wastewater

Hollow Creek WWTP Monthly Operations Report

June 2017/July 2017

Treatment Plant:

- *July 12*: From 8:00am to 6:30pm, Daryl and Ben of Johnston Construction replaced both decant valves for SBR basins. Valve bolts had to be cut off and replaced with stainless steel bolts. Both valve actuators which open and close the valves will need to be adjusted.
- *July 19*: Ryan of Control Systems 21 made adjustments to both actuators for decant valve.
- June DMR has not been submitted due to final week testing results were received last week. DMR will be submitted before the end of this week.
- Plant phosphorous for June was 1.9 mg/L.
- 2017 available operator report was signed and given to Angie Fowler for submittal.

Notes: A. Control Systems 21 was asked to provide a price quote for a new effluent flow meter and price quote for influent flow meter.

B. I would like to purchase a Muffle Furnace for the lab from Hach, for a cost of $1,406.00. The furnace is to do volatile suspended solids testing.

Dewatering:

- (2) dumpsters totaling 6.2 dry tons were removed from the plant in June by Red Rose Sanitation.
- In June we had an average feed of 1.11% and an average cake of 24.32%.
- Purchased (4) 55 gallon drums of Polymer.

Centrifuge:

Nothing to report at this time.

Collection System:

- Smoke testing has been delayed until early August. This is being done until we see how the Seven Valleys project turns out, so we can make adjustments before East Springfield Road gets started.
- The flow meters are in operation and tracking flows. We are getting normal flows according to the graphs and charts.
- Logan's Reserve Manhole #33 and Manhole #34 had the curtain benches cut back. Manhole #33 bench was cut back to accommodate the tv camera. Manhole #34 had the bench cut back to reduce flow restriction within the flow channel. These improvements did not help the problem.
- The following are the residences that have contacted us in regards to the letter for the clean out caps. Some of these residences have made repairs or are in the process of repairs.
    1. Church Street Addresses: 91, 108, 98, 46 and 61.
    2. Maple Street Address: 23
    3. Main Street Addresses: 118, 101
    4. Cherry Alley Address: 22

Pumping Stations:

- Church Street Pump Station – The brass water seal tubing has been replaced by stainless steel tubing due to the brass tubing breaking easily.
- No emergency call-outs for this report.

Respectfully Submitted,

Ronald P. Perks

CBS Environmental Services, LLC

3252.6.00.17

Attachment 5

Hollow Creek WWTP Monthly Operations Report

July 2017/August 2017

Treatment Plant:

- *July 24*: #1 SBR Decanter floated due to valve not closing properly.
- *July 25*: Ryan of Control Systems 21 made adjustments to #1 SBR decant valve actuator.
- *July 26*: Ben of B&R Electric checked problems with exhaust fans in centrifuge. Ben found a bad motor for one fan and bad electric coils in two other fans. A new motor was ordered along with new coils.
- *July 31*: At 3:00am I received an emergency call out for Hollow Creek common alarm. Checked plant and found a problem with SBR #1 mixer which had 2 blown fuses. I replaced the fuses and tried to start the mixer, but the fuses blew for a second time. Mixer was inoperable and was out of service until the problem could be identified and fixed.
- *July 31*: Darryl of Johnston Construction and Ben from B&R Electric pulled SBR #1 mixer and brought it to Motor Tech for repairs. I told Motor Tech to place a rush order on repairs.
- *August 1*: Cummings Generator Service performed preventative maintenance per contract on the plant generator and portable generator.
- *August 3*: Received SBR #1 DDM mixer back from Motor Tech after repairs were made.
- *August 4*: Darryl of Johnston Construction and Ben from B&R Electric placed DDM Mixer back into operation for SBR #1 Basin.

- Plant phosphorous for July was 1.4 mg/L, below our permit level of 2.0 mg/L.

Dewatering:

- (2) dumpsters totaling 6.15 dry tons were removed from the plant in July by Red Rose Sanitation.
- In July we had an average feed of 1.15% and an average cake of 24.68%.

Centrifuge:

Nothing to report at this time.

Collection System:

- Seven Valleys Smoke Testing follow up: We have not heard from any other residents outside of the ones listed in last meetings report.
- *August 14-16*: Utilities Service Group have been lining manholes which have H2S deterioration in MH25, MH26, MH27 on East Springfield Right-of-way across from Brown's Orchard. They have also lined Manholes ST1 and ST2 adjacent to Valley Road pump station.
- We are scheduling the smoke testing project for the week of September 18 2017. We will place the door hanger notices during the last week of August.
- The portable flow meters were removed on August 15, 2017. Data is being reviewed at this time. We are also looking to see where the meters will be placed next.
- Pennsylvania State Police Barracks needs to determine where to hook into the sewer line.
- Logan's Reserve Sanitary Sewer Revision between Manhole 35 & 34 drawing.

Pumping Stations:

- *July 31*: Cummings Generator Services performed preventative maintenance on generators at Valley Road and Church Street pump stations.
- *August 14 & 15*: Valley Road pump station had a problem with the soft start. I called Rich from Control Systems 21 to see if he could determine what the problem could be.
- Normal weekly pump station checks were completed with no problems to report.

Respectfully Submitted,

Ronald P. Perks

CBS Environmental Services, LLC

3252.6.00.17

Attachment 5

ENVIRONMENTAL SERVICES, LLC

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York, PA 17402
717-699-4797

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Hollow Creek WWTP Monthly Operations Report

August 2017/September 2017

Treatment Plant:

- *August 19*: Verizon made repairs for the plant phone number 428-0609. This number is specifically for the intrusion alarm which is operated by Coulson Security.
- *August 28*: Received a copy of the permit from DEP regarding the upgrade for rag removal system.
- *August 29*: Aero Oil Service filled plant generator and plant portable generator.
- *September 6*: #1 decanter floated due to actuator not closing the decant valve properly.
- *September 8*: Ryan of Control Systems 21 made additional adjustments to the actuator for SBR #1 decanter.

Notes:

A. The DMR for August is complete and is being reviewed for submittal. We will have them submitted before the September 28 deadline.

B. We are having fluctuations with phosphorous for the month of August 2017. For the month of August the average mg/L of phosphorous was 1.82, which is below our permit limit of 2.0mg/L. However, we did have two weekly tests which were higher than normal, the first was on 8-24-17, which had an average of 2.7mg/L and the second was on 8-31-17, which had an average of 2.1mg/L. We do know that on the date of 8-24-17 the increase in phosphorous was due to a broken Alum feed line.

C. I would like to purchase a DRB200 Digital Block Reactor from HACH, which sells for $1,009.00. We would like to use this equipment to perform Total Phosphorous tests on the effluent. Also, the Total Phosphorous Reagent set would need to be purchased for $70.55. This set can perform 50 tests.

D. See quotes from Control Systems 21.
   1. ABZ Actuators = $5,512.63 or $2,756.32
   2. Square D Soft Start Motor Control = $1,578.94 each.

Dewatering:

- (2) dumpsters totaling 6.9 dry tons were removed from the plant in August by Red Rose Sanitation.
- In August we had an average feed of 1.09% and an average cake of 26.22%.

Centrifuge:

- *August 18*: Ben from B&R Electric placed new coils in exhaust fan switches.

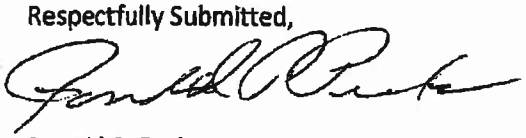
Collection System:

- Logan's Reserve Phase #4 collection system has been cleaned and televised. This area is now complete.
- *September 27*: East Springfield Road basin will be smoke tested. Door hangers are being hung on 9/21/17.

Pumping Stations:

- *August 18*: Ben of B&R Electric made repairs to Church Street pump station motor starters.
- *August 29*: Aero Oil filled emergency generators with diesel fuel at Valley Road, Church Street and East Springfield Road pump stations.
- *September 19*: Rich from Control Systems 21 placed new soft starts (Square D type motor starters) in Valley Road pump station for the #2 pump.
- *September 20*: 10:00am meeting at Logan's reserve pump station in order to observe proper station operation. The station was checked by Brian Corronetta and Bob Corronetta of Hydra Numatic Sales. They will be sending a report of their findings.
- All stations were checked weekly for the month of August 2017.

Respectfully Submitted,



Ronald P. Perks

CBS Environmental Services, LLC

CBS ENVIRONMENTAL SERVICES, LLC

3252.600.17
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York, PA 17402
717-699-4797

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Hollow Creek WWTP Monthly Operations Report

September 2017/October 2017

Treatment Plant:

- *October 1*: At 5:30pm, I received an alarm for SBR problem. Arrived at the plant and found #2 SBR mixer starter had tripped. Re-set starter and mixer, is operating properly.

- *October 1*: At 9:30pm, I received an alarm for SBR problem. I arrived at the plant around 10pm and found the #2 SBR mixer had tripped again. I had to reverse the rotation of the mixer for about five minutes to dislodge rags on the impeller. The mixer was placed back into normal operation with no problems to date.

- *October 6*: Control Systems 21 performed yearly calibrations to effluent flow meter and centrifuge feed pump along with polymer pump. Calibration certificates will be given to C.S. Davidson for the Chapter 94 report.

- *October 13*: We had Klines clean the rags and grease in wet well at the head of the plant. Also, #1 influent pump will need to be pulled up to remove rags from the impeller. Pipe Services, Inc. will be contacted to have this done.

- *October 13*: Cleanup around the plant has been started. We are removing skids and other debris from the plant grounds.

Notes:

A. There has been an ongoing problem with the plant emergency generator not transferring power correctly from exercising mode to normal mode. Cummings generator services have been contacted to have this problem corrected.

B. Phosphorous average for September was 1.23 mg/L which is below the permit level of 2.0 mg/L. We have made adjustments to the process system that has produced some positive results. The last two tests for September were 1.1 and .23 mg/L. The first two tests for October were .36 and .10 mg/L.

Dewatering:

- (2) dumpsters totaling 6.7 dry tons were removed from the plant in September by Red Rose Sanitation.
- In September we had an average feed of 1.08% and an average cake of 27.07%.

Centrifuge:

October 3: We started dismantling the Centrifuge due to a bad interior bearing. We had some difficulty lifting the rotating drum assembly out because of the overhead clearance between centrifuge and lifting beam. We were able to get the drum out and dismantled. All components are being cleaned and new parts will be placed on the centrifuge.

Note: The oil was changed in the gear box of the centrifuge as part of the preventative maintenance.

Collection System:

- *September 27*: Smoke testing was completed in the east Springfield Road sewer area. The following list shows what we found.
  A. **80 Lindy Road** – Cracked cleanout cap
  B. **9136 E. Springfield Road** – Missing cleanout cap
  C. **9217 E. Springfield Road** – Missing cleanout cap
  D. **9212 E. Springfield Road** – Missing cleanout cap
  E. **9446 E. Springfield Road** – Stand pipe for cleanout is not properly installed below ground. Smoke is coming from around the base of the pipe.
  F. **9241 Susquehanna Trail** – (1) improper cap, (1) missing cap
  G. **9211 Susquehanna Trail** – (1) Metal cap is cracked
  Springfield Township Building – (1) PVC cap is missing

Notes:

A. Springfield Township has made repairs to their caps.
B. Seven Valleys Smoke Testing follow up:
    a. All but 15 residences have responded to me about repairs being made to their cleanouts. I have placed a red check mark next to those respondents listed on the Seven Valleys Smoke testing 2016 sheets.

Pumping Stations:

- *September 26*: Rich of Control Systems 21 replaced the #1 soft start at Valley Road Pump station. Both pumps now have new soft starts. This needed to be done because of the old soft starts were malfunctioning. There have been no call outs since the new soft starts were put in place.
- *October 13*: Klines cleaned the Seneca Ridge pump station wet well.

Notes:

A. All stations were checked weekly
B. Loucks Road pump station will have new electric wires replaced where Met-Ed ties into the station feed. The wires protective coverings are exposing bare wire on each feed leg. This repair is being made on Friday October 20, 2017 by Johnston Construction (B&R Electric).

Respectfully Submitted,

Ronald P. Perks

CBS Environmental Services, LLC

3252.6.00.17

Attachment 5

ENVIRONMENTAL SERVICES, LLC

P.O. Box 3685
York, PA 17402
717-699-4797

Inflow/Infiltration • Pipe Line Inspection • Water • Wastewater

Hollow Creek WWTP Monthly Operations Report

October 2017/November 2017

Treatment Plant:

- *October 19*: #2 SBR decant valve failed to close properly which made the decanter float. The decanter was re-seated and Control Systems 21 was contracted to have actuator adjusted.
- *October 19*: A meeting was held at the head of the plant to discuss rag removal system.
- *October 23*: Cummings Generator Service was called to the plant to trouble shoot the transfer switch for the back-up generator. The control would not switch from exercising mode to the main power. A broken metal bar which controls the transfer was broken and a new part was ordered.
- *October 26*: Pump Services Inc. pulled all three influent pumps to clear rags from the impellers. The #3 pump also had its electric cord pulled up into the impeller. This was probably due to rags wrapping around the cord.
- *November 3*: Ryan of Control Systems 21 made adjustments to #2 SBR actuator valve control.
- *November 4*: Ryan of Control Systems 21 had to make additional adjustments to the #2 actuator valve control. This seemed to have helped the leaking valve.
- *November 14*: Control Systems 21 placed a new actuator on the #2 SBR decant valve. This needed to be done in order to eliminate the leaking valve.
- *November 14*: Univar delivered 1,100 gallons of Liquid Alum for phosphorous removal.

Notes:

A. October DMR was submitted via eDMR system and the yearly Chesapeake Bay Supplemental Report Annual Nutrient Monitoring along with the Annual Nutrient Budget. Hollow Creek was over the permitted cap load of 1,704 lbs. by 60 lbs.

B. Three drain valves will need to be replaced at the plant. These valves aide in the transfer of sludge and centrate from the sludge silo to the Centrifuge building. See quote from Easy Dig Inc. ($10,500.00)

C. Phosphorous testing equipment has been ordered from Hach. We will be able to do phosphorous testing between normal weekly Lab testing.

D. Last 4 weeks of Phosphorous tests were as follows: 0.36, 0.10, 0.27 Mg/L. October Average = 0.25 Mg/L.

Dewatering:

- We will be placing the centrifuge back into service the week of 11-20-2017. There was a delay with repairs because some of the parts needed have to be made by us, and getting the proper tools for the removal of some parts. A splash guard was ordered from Alfa Laval, but it will not be shipped until 12-27-2017. The cost for the splash guard is $1,365.84.
- No dewatering was done for the month of October and most of November.

Collection System:

- I have been in contacted by all of the residence and the pastor for the Living Church in Seven Valleys. All of the residences had issues that were found during the smoke testing project. Repairs have been made or are in the process of being made. I will be doing a follow up next week (11-20-2017) to see if repairs have been completed.

- No letters have been sent out in regards to our findings during the East Springfield Road smoke testing project. We hope to have them out by the end of the week (11-17-2017) or during the week of 11-20-2017. We were delayed by repairs being made at the treatment plant.

- 3 Church Street has manhole SV5 situated on the property. The ground around this manhole is sinking around it. The manhole has an ongoing problem and can become a liability. We lifted the manhole cover and no problems appear inside. We are going to televise the sewer line from manhole SV#6 through SV#5 into SV#4 which is situated on the opposite side of the railroad tracks. This work will be completed on 11-16-2017.

Pumping Stations:

- All stations were checked weekly.
- Seneca Ridge pump station will need to have #2 check valve replaced.
- *October 20*: Ben of B&R Electric replaced wiring coming from Met-Ed pole to the pole supplying electric to the pump station. The wires outer jackets were dry rotted and peeling which exposed the bare wire.

Respectfully Submitted,

Ronald P. Perks

CBS Environmental Services, LLC

COPY

Hollow Creek WWTP Monthly Operations Report

November 2017/December 2017

Treatment Plant:

- ***November 23***: Received alarm for high wet well level at 2:45 pm. Arrived at plant at 3:15 pm and found level in wet well higher than normal but pumps were keeping up with flows. It appeared that rags were creating problems with pumps.

- ***November 23***: Received a second alarm for high wet well level at 10:50 pm. Arrived at plant at 11:15pm and checked wet well level which was still higher than normal. Pumps were keeping up with the flow to some degree, but a call would need to be made to Pump Services, Inc. to have pumps pulled and rags removed from impellers. It also appeared that the Muffin Monster was not working properly.

- ***November 24***: Arrived at plant at 7:00 am and checked the wet well and found it to be higher than normal. The wet well appeared to be ¾ full.
    1. 7:42 am – Called Pump Services, Inc. to have influent pumps pulled to clear rags from impellers. This problem is occurring due to the Muffin Monster not cutting the rags. It was determined the pumps were not keeping up with flows and the pumps could not be pulled unless wet well pumps were bypassed.
    2. 8:28 am – Called PSI to have them bring a bypass pump with them. PSI had to contact Keystone Pump Co.
    3. 8:46 am – I notified Stan Escher of the situation.
    4. 9:48 am – Called PSI to get an idea as to how long it would be until they would arrive. They said about thirty to forty minutes. At about 9:50 am, the manhole in the driveway of the plant starting losing water .
    5. 9:54 am – Contacted Stan Escher to update him with the status of the situation. PSI and Keystone Pump arrived at the plant at approximately 11:00 am and had the bypass set up around 30 minutes later (11:30 am) and began pumping the wet well down.

6. 12:00 pm – One pump was pulled and rags were removed. Pump began pumping down the wet well, so the bypass was stopped. Following the pump down, the remaining pumps were cleared of rags. By 1:30 pm, the wet well was back to normal. PSI will return the week of 12-11-2017 in order to pull the Muffin Monster.

- ***December 5***: Pump Services Inc. placed new stainless steel cable on influent pump #1 and pulled all three pumps to clear any rags from impellers.

- ***December 8 & 11***: Easy Dig Inc. dug up and replaced the broken valve (8-C fill valve), which is used for supernate transfer from sludge silo to centrifuge building.

- ***December 11***: Kline's Services cleaned and washed down bar screen area at the head of the plant. We noticed the cutter blades were not turning on Muffin Monster.

- ***December 12***: PSI pulled the Muffin Monster due to cutter blades not turning. They brought the Muffin Monster back to their shop to see what the cost would be to have it repaired. The bar screen will be cleaned manually.

Notes:

A. Average phosphorous for November was 0.80 mg/L.

B. 26 nutrient credits have been purchased for phosphorous for 2017 and approved by DEP on 11-28-17.

C. Lab testing prices have been received on December 12, 2017 with no changes in pricing for 2018. Please see attached copy.

Dewatering:

- ***November 30***: Placed centrifuge back into service after new bearings were placed into the drum section and splash guard was temporarily made. A new splash guard is set to arrive on 12/21/17.

- No dumpsters were removed from the plant in November.

Collection System:

- ***November 16***: Televised from MH SV6 to MH SV5 to MH SV4 in Seven Valleys to determine if a problem exists due to ground sinking around MH SV5. No problems were found, but the line needs to be cleaned.

- ***December 7***: Easy Dig Inc., excavated around MH SV5 in Seven Valleys. They dug approximately five feet down and found a drain line, which appeared to divert rain water around the manhole.

The construction of the pipe was not done correctly and we are assuming it was done when manhole #SV5 was built. Pictures were taken after a new pipe diversion was made by Easy Dig on 12-11-17. These pictures will be placed on C.S. Datum.

- ***December 19***: East Springfield Road smoke testing letters will be sent out. The following list provides the properties and addresses of homeowners with clean out cap issues.
    1. 80 Lindy Road – clean out cap is cracked (Mary Thompson)
    2. 9138 E. Springfield Road – clean out cap is missing (Vickie Saylor)
    3. 9217 E. Springfield Road – clean out cap is missing (Dan Cogut–Federman & Mallory Cogut)
    4. 9446 E. Springfield Road – clean out stand pipe needs repaired at base (Ronald Lentz)
    5. 9212 E. Springfield Road – clean out cap is missing (Bret & Karen henry)
    6. 9241 Susquehanna Trail – Improper cap and missing cap (Laura Anderson)

Pumping Stations:

- All stations were checked weekly.
- ***December 5***: Emergency Call Out (8:30 pm) – High wet well level at Mill Street pump station. Found #1 pump not primed, and I could not determine the cause. I did get the station back into operation after re-priming the #1 pump. #2 pump check valve will need to be replaced.
- ***December 7:*** Emergency Call Out (8:45 pm) – High wet well level at Mill Street pump station. Found #1 pump not primed again, it appears the pump seal is bad. The seal will need to be replaced. I shut down the pump and placed the #2 pump as the lead pump.

Respectfully Submitted,

Ronald P. Perks

CBS Environmental Services, LLC

SPRINGFIELD TOWNSHIP, YORK COUNTY, SEWER AUTHORITY
2017 Annual Wasteload Management Report

PUMPING STATION DATA

5200

Pump Station	Location	Design capacity gpm	Rated capacity gpm	Hrs of operation per day	Gallons pumped per day	Design capacity gpd	% loading of design capacity	% loading of rated capacity	Existing & Projected flows 2017 gpd	2018 gpd	2019 gpd	Existing & Projected % of capacity 2017 gpd	2018 gpd	2019 gpd
Hollow Creek WWTP*	Springfield Township	456	456	12.04	329,324	656,640	50.2%	50.2%	334,524	340,724	346,124	50.9%	51.9%	52.7%
Valley Road	Springfield Township	600	602	4.70	169,828	864,000	19.7%	19.6%	172,000	173,500	178,500	19.8%	20.0%	20.6%
South Main Street	Loganville Borough	160	153	4.84	44,422	230,400	19.3%	20.2%	45,000	45,250	45,500	20.4%	20.5%	20.7%
Mill Street	Loganville Borough	90	111	1.59	10,618	129,600	8.2%	6.6%	11,000	11,250	11,500	6.9%	7.0%	7.2%
Loucks Street	Loganville Borough	90	121	1.70	12,327	129,600	9.5%	7.1%	12,000	12,250	12,500	6.9%	7.0%	7.2%
Main Street	Seven Valleys Borough	95	123	7.92	58,457	136,800	42.7%	33.0%	59,000	59,250	59,500	33.3%	33.5%	33.6%
Church Street	Seven Valleys Borough	120	104	11.77	73,417	172,800	42.5%	49.0%	74,000	74,250	74,500	49.4%	49.6%	49.7%
Greenbriar Drive	Jacobus Borough	105	118	0.35	2,490	151,200	1.6%	1.5%	3,000	3,250	3,500	1.8%	1.9%	2.1%
York Road	Jacobus Borough	220	166	4.21	41,906	316,800	13.2%	17.5%	42,000	42,250	42,500	17.6%	17.7%	17.8%
Water Street	Jacobus Borough	100	123	0.98	7,244	144,000	5.0%	4.1%	7,000	7,250	7,500	4.0%	4.1%	4.2%
Main Street	Jacobus Borough	135	87	0.63	3,312	194,400	1.7%	2.6%	3,000	3,250	3,500	2.4%	2.6%	2.8%
Creekwood Drive	Jacobus Borough	No data	93											
Seneca Ridge	Springfield Township	80	175	4.61	48,430	115,200	42.0%	19.2%	49,000	49,250	49,500	19.4%	19.5%	19.6%
East Springfield Road	Springfield Township	125	125	5.54	41,557	180,000	23.1%	23.1%	42,000	42,250	42,500	23.3%	23.5%	23.6%
Woods @ Lake Redman	Jacobus Borough	80	80	5.24	25,165	115,200	21.8%	21.8%	25,000	25,250	25,500	21.7%	21.9%	22.1%
Logans Reserve	Springfield Township	80	80	2.40	11,510	115,200	10.0%	10.0%	12,000	12,250	12,500	10.4%	10.6%	10.9%

* gpd includes recirculated flows

Number of pump stations: 16

ATTACHMENT 10.

SLUDGE GENERATION CALCULATION

Facility Name: Springfield Twp. Hollow Creek WWTP
Permit Number: PA 0086860
Date of Calculation: 3/8/2018

Required Information For Calculation

Average Daily Flow (mgd):	0.405	Digester Capacity (gal):	657000
Influent BOD (mg/l):	220	%Solids of Outgoing Sludge:	25.04
Effluent BOD (mg/l):	3.3	Monitoring Period (days):	365

Wastewater Treatment Processes

Place an "X" in the box beside the corresponding treatment process. Select a maximum of Primary Clarification and one other treatment process

Primary Clarification	X	Contact Stabilization		RBC	
Conventional Activated Sludge		SBR	X	ABF	
Extended Aeration		Trickling Filter		Small Plant with low SOR (<500 gpd/sq ft)	

Operational Information

BOD Removed (lbs/day):	732	TSS Removed (lbs/day):	769

Digester Information

Type of Digester

Place an "X" in the box beside the corresponding treatment process.

Aerobic Digestion	X	Anaerobic Digestion		None	

Sludge Feed Rate to Digesters (gpd):	2917.66955
Digester Hydraulic Detention Time (days):	225
Estimated Total Solids Reduction (%):	0.4

Sludge Generation

dry lbs/day	461	wet lbs/day	1842
dry tons/monitoring period	84	wet tons/monitoring period	336
gal/day	221	gal/monitoring period	80596

Amount of Sludge Reported as Being Generated by the Facility

wet tons/monitoring period: 0

OR

dry tons/monitoring period: 62.479

Enter only one of the above values. The remaining value should be "0"

Is the amount reported by the generator within 15% of the calculated value? NO

NO explanation: LESS THAN 15% RANGE

What type of information was used to calculate the above information: DMR's

Dates used: 1/1/2017 TO 12/31/2017

Name of person performing the calculation: Ryan G. Martin, C.S. Davidson, Inc.

Control Systems 21

"Your Process Control Specialists"

CERTIFICATE of CALIBRATION

Cal Certificate # 42821

Company Name Springfield
P.O. Box 75
Seven Valleys, PA 17360

Instrument ID EFF-02

Description	Recorder	**Status**	Active
Manufacturer	Honeywell	**Temp °F**	70
Model Number	DR45A1	**Cal Proc**	4.2
Serial Number	9817Y8360695700001	**Adjusted To Improve**	Yes
Location	N/A	**Calibration Frequency**	Annual
Building	N/A	**Calibrated**	10/06/2017
Department	N/A	**Next Due Date**	09/30/2018

Calibration Specifications

Group Name Digital Display

Test Point	Ref Standard	Expected	Tol	UUT As Found	P/F	UUT As Left	P/F	Dev
1	4.00 mA	0.00 GPM	+/-15.00	0.00 GPM	P	0.00 GPM	P	0.00
2	8.00 mA	375.00 GPM	+/-15.00	375.00 GPM	P	375.00 GPM	P	0.00
3	12.00 mA	750.00 GPM	+/-15.00	750.00 GPM	P	750.00 GPM	P	0.00

Group Name Paper Chart (Chart Range = 0-1000GPM)

Test Point	Ref Standard	Expected	Tol	UUT As Found	P/F	UUT As Left	P/F	Dev
1	4.00 mA	0 GPM	+/-15	-10 GPM	P	0 GPM	P	0
2	9.33 mA	500 GPM	+/-15	490 GPM	P	500 GPM	P	0
3	14.67 mA	1,000 GPM	+/-15	990 GPM	P	1,000 GPM	P	0

Calibration Standards Used

Test Instrument ID	Manufacturer	Model Number	Serial Number	Next Cal Date
736	Fluke	725	74100013	4/30/2018

Equipment listed on this cert is certified in reference to our current work instructions as part of our quality system.

Where applicable and noted calibrations were performed using standards whose calibration is traceable through NIST or another National Metrology Institute to the International System of Units (SI units).

Control Systems 21 utilizes the comparison method of calibration. Results are reviewed, when applicable, and any results exceeding the agreed upon specifications are indicated by red and/or bold print

All results with this certification relate only to the item(s) calibrated. This certificate shall not be reproduced except in full and with written consent of Control Systems 21. Unless otherwise noted all calibrations were performed in the field at the customers location.

Please note: *any number of factors may cause the calibration item to drift out of tolerance before the calibration interval has expired.*

Remarks or Special Requirements:

Control Systems 21
713 Range End Rd. • Dillsburg, PA 17019 • Voice: 717 432-5511 • Fax: 717 432-7550
email@controlsystems21.com

Control Systems 21

"Your Process Control Specialists"

CERTIFICATE of CALIBRATION

Cal Certificate # 42821

Calibration Result: Calibration Successful

Calibrated By: Galen Anderson

Finalized By: Galen Anderson 06 October 2017 8:23:14AM

Control Systems 21
713 Range End Rd. • Dillsburg, PA 17019 • Voice: 717 432-5511 • Fax: 717 432-7550
email@controlsystems21.com

Control Systems 21

"Your Process Control Specialists"

CERTIFICATE of CALIBRATION

Cal Certificate # 42822

Company Name Springfield
P.O. Box 75
Seven Valleys, PA 17360

Instrument ID **EFF-01**

Description	Effluent Flow Meter	**Status**	Active
Manufacturer	Sensus Act-Pak	**Temp °F**	70
Model Number	6" 102	**Cal Proc**	4.2
Serial Number	1104-S-49220D	**Adjusted To Improve**	No
Location	Lab	**Calibration Frequency**	Annual
Building	Office	**Calibrated**	10/06/2017
Department	N/A	**Next Due Date**	09/30/2018

Calibration Specifications

Group Name Flow Meter

Test Point	Ref Standard	Expected	Tol	UUT As Found	P/F	UUT As Left	P/F	Dev
1	530.00 GPM	9.65 mA	+/-0.16	9.63 mA	P	9.63 mA	P	-0.02

Calibration Standards Used

Test Instrument ID	Manufacturer	Model Number	Serial Number	Next Cal Date
4221	Fluke	179	34500194	11/30/2017

Equipment listed on this cert is certified in reference to our current work instructions as part of our quality system.

Where applicable and noted calibrations were performed using standards whose calibration is traceable through NIST or another National Metrology Institute to the International System of Units (SI units).

Control Systems 21 utilizes the comparison method of calibration. Results are reviewed, when applicable, and any results exceeding the agreed upon specifications are indicated by red and/or bold print

All results with this certification relate only to the item(s) calibrated. This certificate shall not be reproduced except in full and with written consent of Control Systems 21. Unless otherwise noted all calibrations were performed in the field at the customers location.

Please note: *any number of factors may cause the calibration item to drift out of tolerance before the calibration interval has expired.*

Remarks or Special Requirements:

Calibration Result: Calibration Successful

Calibrated By: Galen Anderson

Finalized By: Galen Anderson 06 October 2017 8:48:05AM

Control Systems 21
713 Range End Rd. • Dillsburg, PA 17019 • Voice: 717 432-5511 • Fax: 717 432-7550
email@controlsystems21.com