EXHIBIT W3 TESTIMONY OF MICHAEL DISANTIS

BEFORE THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

AQUA PENNSYLVANIA WASTEWATER, INC.

DOCKET NO. A-2019-3015173

AQUA STATEMENT NO. 7

DIRECT TESTIMONY OF MICHAEL J. DISANTIS DIRECTOR OF OPERATIONS AND MAINTENANCE DELCORA

With Regard To
Description of DELCORA's System and Operations
Environmental Compliance

March 3, 2020

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1	I.	INTRODUCTION
2	Q.	Please state your name and business address.
3	A.	My name is Michael J. DiSantis. My business address is 100 East Fifth Street, Chester,
4		PA 19013.
5		
6	Q.	In what capacity are you affiliated with the Delaware County Regional Water
7		Quality Control Authority ("DELCORA")?
8	A.	I am the Director of Operations and Maintenance of DELCORA.
9		
10	Q.	Please provide a brief description of your education and work experience.
11	A.	I graduated from Villanova University with a Bachelor of Science degree. I have served
12		as DELCORA's Director of Operations and Maintenance since 2005. I have over forty
13		years of experience in the water and wastewater field working in industrial and municipal
14		applications for both private and public sector organizations, over thirty of which have
15		been in supervision and management. I am a licensed water and wastewater operator,
16		having held a Pennsylvania Wastewater A,E-1,2,3,4 certification since 1989 and a
17		Pennsylvania Water B,E-11,12,13,14 certification since 1999.
18		
19	Q.	Have you testified before the Pennsylvania Public Utility Commission ("PUC" or
20		the ("Commission") before?
21	A.	No.
22		
23	Q.	On whose behalf are you testifying in this proceeding?

1	A.	My testimony is on behalf of DELCORA and in support of Aqua Pennsylvania
2		Wastewater, Inc. ("Aqua") in this proceeding.
3		
4	Q.	What is the purpose of your direct testimony?
5	A.	The purpose of my testimony is as follows: (1) to provide a description of DELCORA's
6		sanitary wastewater collection and conveyance system (the "System"), (2) to describe
7		DELCORA's environmental compliance, (3) to describe DELCORA's projected future
8		connections, (4) to describe DELCORA's water quality management ("WQM"),
9		including its National Pollutant Discharge Elimination System ("NPDES"), permits, and
10		(5) to describe DELCORA's Official Sewage Facilities Plans under the Pennsylvania
11		Sewage Facilities Act ("Act 537 Plan").
12		
13	Q.	Are you sponsoring any Exhibits with your testimony?
14	A.	No.
15		
16	II.	DESCRIPTION OF DELCORA'S SYSTEM
17	Q.	Please generally describe DELCORA's System.
18	A.	DELCORA is responsible for the safe collection, transmission, treatment, and discharge
19		of approximately 65 million gallons per day of wastewater generated in southeastern
20		Pennsylvania. DELCORA's facilities serve residential, commercial, public, and
21		industrial customers in Delaware and Chester Counties. DELCORA services 49
22		municipalities in whole or in part through collection, conveyance and treatment services.

1		DELCORA owns and operates a system consisting of 24 pump stations and over
2		180 miles of gravity collection system mains, interceptor sewers, and force mains for the
3		conveyance of wastewater to DELCORA's Western Regional Treatment Plant located in
4		Delaware County ("WRTP") and to the Philadelphia Water Department's ("PWD")
5		Southwest Water Pollution Control Plant ("SWPCP"). DELCORA owns all or part of the
6		collection systems in the following areas: City of Chester, Chester Township, Borough of
7		Marcus Hook, Borough of Rose Valley, Upland Borough, Parkside Borough, Trainer
8		Borough, Edgmont Township, and Pocopson Township.
9		DELCORA characterizes its service areas as "Eastern" and "Western." The
10		Western Service Area has eighteen (18) pumping stations that are owned and operated by
11		DELCORA. The average annual flow in 2018 for the WRTP was 39.18 million gallons
12		per day ("MGD").
13		The Eastern Service Area has (6) six pumping stations that are owned and
14		operated by DELCORA. The average annual flow in 2018 for the Eastern Service Area
15		was 36.83 MGD. The flow from the Eastern Service Area is split between WRTP and
16		PWD's SWPCP. During 2018, 25.76 MGD from the Eastern Service Area was pumped
17		to the SWPCP.
18		
19	Q.	Does DELCORA own and operate other plants besides the WRTP?
20	A.	Yes. DELCORA also owns and operates two (2) remote Treatment Plants: Corinne
21		Village (Pocopson Preserve) located in Pocopson Township and Sheeder Tract (Pocopson
22		Riverside) located in Pocopson Township. DELCORA also has an agreement for the
23		purchase of Springhill Farms wastewater system which will conclude in 2020.

1		DELCORA currently operates Springhill Farms which is located in Chadds Ford
2		Township.
3		
4	Q.	Please describe any recent plant upgrades.
5	A.	In recent years, all of the WRTP process units and support systems have undergone
6		upgrades, improvements, and rehabilitation to improve effluent quality, reduce treatment
7		costs, and extend the service life. These upgraded systems include, but are not limited to,
8		modifications to the influent screening, pump stations, aeration basins, secondary
9		clarifiers, solids handling system, incinerator upgrades, and the utility water system.
10		
11	Q.	Please provide the year of construction and the average annual flows for
12		DELCORA's treatment plants.
13	A.	The WRTP was constructed in approximately 1975 and as stated above has been
14		upgraded at various times since then. The WRTP's permitted annual average flow is
15		currently 50 MGD. In 2018 the annual average flow was 39.18 MGD and the 3-month
16		maximum average flow was 40.61 MGD. The WRTP is permitted for a maximum
17		organic loading of 108,000 lbs./day, which applies to loading after primary treatment, and
18		has an influent design loading of 161,000 lbs./day. In 2018, the annual average organic
19		loading was 96,311 lbs./day.
20		The Corinne Village Wastewater Treatment Plant (Pocopson Reserve), built in
21		2010, is permitted at an annual average flow of 0.020 MGD. In 2018, the plant had an
22		annual average flow of 0.013 MGD and a 3-month maximum average flow of 0.014

1		MGD. The Corinne Village Plant is permitted for a maximum organic loading of 50.5
2		lbs./day. In 2018, the annual average organic loading was 34.31 lbs./day.
3		The Sheeder Tract Wastewater Treatment Plant (Pocopson Riverside), built in
4		2008, is permitted at an annual average flow of 0.04515 MGD. In 2018, the plant had an
5		annual average flow of 0.021 MGD and a 3-month maximum average flow of 0.022
6		MGD. The Sheeder Tract Plant is permitted for a maximum organic loading of 96
7		lbs./day. In 2018, the plant had an annual average organic loading of 42.97 lbs./day.
8		The Springhill Farms Wastewater Treatment Plant, built in 1988, is permitted at
9		an annual average flow of 0.1 MGD. In 2018, the plant had an annual average flow of
10		0.047 MGD.
11		The PWD SWPCP, built in 1948, is permitted at an annual average flow of 200
12		MGD. In 2018, the plant had an annual average flow of 183.21 MGD and a 3-month
13		maximum average flow of has an annual average flow of 189.65 MGD. In 2018, the
14		plant had an annual average organic loading of 165,601 lbs./day.
15		
16	Q.	Does the Application include a summary of the DELCORA System assets?
17	A.	Yes. Included in the Application as Exhibit D is the Engineering Assessment which
18		provides an inventory of the DELCORA System assets.
19		
20	Q.	Please give an overview of DELCORA's service agreements.
21	A.	Following the Environmental Protection Agency's mandate that systems in Delaware
22		County consolidate treatment providers, as more fully described in Mr. Willert's direct
23		testimony (Aqua Statement No. 5), participating municipalities and authorities entered

1		into agreements to send flows to DELCORA to be treated at the WRTP or at PWD's
2		SWPCP. These contracts are included in the Exhibit F series to the Application.
3		
4	Q.	Please summarize DECORA's existing sludge hauling and O&M contracts.
5	A.	DELCORA has agreements concerning the disposal of wastewater from the Burlington
6		County Resource Recovery Complex and the Delaware County Solid Waste Authority,
7		which both consist of leachate disposal for these entities. DELCORA also provides
8		sludge disposal services at rates posted on DELCORA's website, which have been
9		included in Aqua's proposed tariff (Application Exhibit G). All of the sludge generators
10		and haulers are approved by DELCORA before acceptance of any hauled sludge.
11		DELCORA has agreements either for the management of facilities or for the
12		Operation and Maintenance of Facilities ("O&M") with the following parties: Thornbury
13		Township, Southern Delaware County Authority, Borough of Folcroft, Borough of
14		Norwood, Tinicum Township, and Chadds Ford Township Sewer Authority. These
15		agreements are included in the Exhibit F series to the Application.
16		
17	III.	ENVIRONMENTAL COMPLIANCE
18	Q.	Please describe any environmental compliance issues of DELCORA over the past
19		five years.
20	A.	DELCORA has recently updated its Long-Term Control Plan ("LTCP") for the City of
21		Chester's combined sewer system, which is currently under review with DEP and EPA
22		and has not been finalized. The City of Chester is served by both separate and combined
23		sewer systems, and DELCORA developed the original LTCP to address the combined

system in April 1999. In 2010, the EPA ordered DELCORA to update this LTCP, claiming that it violated the federal Clean Water Act due to overflows and storm water discharges, which occur during heavy rain and wet weather events.

In 2015, the EPA and Pennsylvania Department of Environmental Protection ("DEP") filed a complaint against DELCORA in the United States District Court for the Eastern District of Pennsylvania. The complaint sought injunctive relief and civil penalties for alleged violations of the Clean Water Act and the Pennsylvania Clean Streams Law relating to the discharge of sewage. As a result of that action, DELCORA, EPA and DEP entered into a Consent Decree, effective November 13, 2015, which outlined the steps DELCORA would take to achieve full compliance with the Clean Water Act and the Pennsylvania Clean Streams Law and eliminate sanitary sewer overflows, which occur during rain and wet weather events. In addition to the submission of an updated LTCP for approval and other injunctive relief, DELCORA agreed to pay a civil penalty of \$1.375 million. More recently, the EPA reviewed DELCORA's required submissions regarding forty overflow discharges and assessed an additional stipulated penalty of \$144,000 under the terms of the Consent Decree.

Other issues have been raised and resolved as well. In October 2011, DEP provided DELCORA with a report of its review of the 2010 Municipal Wasteload Management Report for the Rose Valley Wastewater Treatment Plant. In response, in January 2012, DELCORA submitted a Corrective Action Plan in order to address the hydraulic and organic overload issues at Rose Valley. After implementation of the plan, this plant was closed in May 2018 and replaced with a pump station that connects the Rose Valley system to the regional sewer system that serves DELCORA's WRTP. As a

1		result, DELCORA requested discontinuation of the plan, which DEP agreed to in August
2		2018.
3		On July 27, 2017, the DEP approved an Environmental Covenant regarding the
4		former Abbonizio Recycling and Covanta Delaware Valley, LP, located in the City of
5		Chester. Site soils exhibited concentrations of iron and aluminum above acceptable DEP
6		specifications. Due to this and other issues at the property, it is subject to activity and use
7		limitations, including that the property shall only be used for non-residential purposes
8		and groundwater is not to be used on the property for any purpose.
9		Additionally, the EPA and the Delaware River Basin Commission ("DRBC")
10		have established Stage 1 Total Maximum Daily Loadings ("TMDLs") for the Delaware
11		River Estuary and corresponding Waste Load Allocation ("WLA") assigned to
12		DELCORA for the discharge of polychlorinated biphenyls from its WTRP. While a
13		proposed Stage 2 TMDL or WLA has not yet been issued by EPA and DRBC, it is
14		DELCORA's expectation that this will occur soon.
15		
16	Q.	Are there any Notices of Violation ("NOV") issued to DELCORA over the last five
17		years?
18	A.	Yes. The NOVs, narrative reports, and responses from the last five years are included in
19		the Application as Exhibit O1.
20		
21	Q.	Are there any Consent Assessment of Civil Penalties ("CACP") issued to
22		DELCORA over the last five years?

I	A.	Yes. The CACPs are included in the Application as Exhibit O2. Each CACP has been
2		addressed by DELCORA.
3		
4	Q.	Are there any other environmental compliance items of note for DELCORA's
5		System?
6	A.	All environmental compliance matters, including those described above, are detailed in
7		Schedule 4.13 of the Asset Purchase Agreement ("APA"). It should also be noted that, as
8		detailed in the testimony of Mr. Willert (Aqua Statement No. 5), the environmental
9		compliance issues facing PWD, and the costs involved in its resulting LTCP, are a
10		driving force in DELCORA's decision to end its partnership with PWD and expand its
11		operational capabilities at the WRTP.
12		
13	IV.	PROJECTED FUTURE CONNECTIONS
14	Q.	Please describe the projected future connections for DELCORA's plants.
15	A.	By 2024, it is projected that:
16		• 11 additional EDUs will connect with the Corinne Village Wastewater Treatment
17		Facility; and
18		• 22 additional EDUs will connect to the Sheeder Tract Wastewater Treatment
19		Plant.
20		In addition, the WRTP is projected to add 667 EDUs per year through 2023. We do not
21		yet have available the projected connections through 2024, but I will supplement my
22		testimony with this information when it becomes available.
23		

1	V.	NPDES AND WATER QUALITY MANAGEMENT
2	Q.	Does the Application include NPDES permits for DELCORA's plants?
3	A.	Yes. Copies of NPDES permits for DELCORA's plants are included in the Application
4		as Exhibits N1 (WRTP) and N2 (Springhill Farms). Additionally, although not part of
5		the DELCORA acquisition, the NPDES permit for PWD's SWPCP is included in the
6		Application as Exhibit N3.
7		
8	Q.	Does the Application include WQM permits for DELCORA's plants?
9	A.	Yes. Copies of WQM permits for DELCORA's plants are included in the Application as
10		Exhibits M1 through M4. Additionally, although not part of the DELCORA acquisition,
11		the WQM permit for PWD's SWPCP is included in the Application as Exhibit M5.
12		
13	VI.	ACT 537 PLANS
14	Q.	Are Act 537 Plans included in the Application?
15	A.	Yes. The majority of DELCORA's System falls under the 2002 Delaware County
16		Planning Department Act 537 Sewage Facilities Plan Update – Eastern Plan of Study,
17		which is included in the Application as Exhibit P1, and the 2004 Delaware County
18		Planning Department Act 537 Sewage Facilities Plan Update – Western Plan of Study,
19		which is included in the Application as Exhibit P2. The Western Plan of Study was
20		updated in 2006 related to the re-rating of the WRTP and again in 2012 related to the
21		Chester-Ridley Creek Service Area, which are included in the Application as Exhibits P2

 $^{^{1}}$ Pocopson Preserve and Pocopson Riverside do not have NPDES permits as these plants do not have stream discharge.

1		In 2018, an Act 537 Special Study Plan was prepared for DELCORA to address wet
2		weather issues at DELCORA's Central Delaware Pump Station, which is included with
3		Application Exhibit P1. These plans addressed both of DELCORA's eastern and western
4		service areas.
5		Also included in the Application are Act 537 Plans for Chadds Ford Township,
6		Chester County, Concord Township, Middletown Township, Newtown Township, Rose
7		Valley Borough, Edgmont Borough, and the City of Philadelphia, as Exhibits P3 through
8		P10, respectively.
9		
10	VII.	CONCLUSION
11	Q.	Does this conclude your testimony?
12	A.	Yes, it does. However, I reserve the right to file additional testimony at a later date as
13		may be necessary or appropriate.