

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

In re: Application of Pennsylvania-American Water :
Company under Sections 1102(a) and 1329 of the :
Pennsylvania Public Utility Code, 66 Pa C.S. §§ 1102(a) :
and 1329, for approval of (1) the transfer, by :
sale, to Pennsylvania-American Water Company, of :
substantially all of the assets, properties and rights related : Docket No. A-2025-3053487, *et al.*
to the wastewater system owned and operated by East :
Coventry Township, and (2) the rights of Pennsylvania- :
American Water Company to begin to offer or furnish :
wastewater service to the public in the Township of East :
Coventry, Chester County, Pennsylvania :

**DIRECT TESTIMONY OF
WILLIAM BOHNER, ON BEHALF OF
EAST COVENTRY TOWNSHIP**

Date: October 8, 2025

East Coventry Statement No. 2

1 **DIRECT TESTIMONY OF**
2 **WILLIAM BOHNER**

3 **1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.**

4 My name is William (“Bill”) Bohner, and my business address is 321 North Furnace Street,
5 Suite 200, Birdsboro, PA 19508.

6 **2. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

7 I am employed by ARRO Consulting, Inc. (“ARRO”) as an Assistant Vice President and Senior
8 Project Manager.

9 **3. CAN YOU DESCRIBE WHAT ARRO IS?**

10 ARRO Consulting, Inc. is an engineering and consulting firm with headquarters in Lititz,
11 Pennsylvania. ARRO has offices and performs services throughout the Mid-Atlantic region.
12 ARRO engages in a wide variety of projects, including civil and municipal engineering,
13 environmental compliance, and most relevant here, wastewater management. More
14 specifically, for decades ARRO has assisted municipalities throughout the Commonwealth
15 with Act 537 planning. Act 537 Planning is a process carried out pursuant to the Pennsylvania
16 Sewage Facilities Act, which requires, among other things, municipalities to develop and
17 implement comprehensive official sewage management plans that address present and future
18 sewage disposal needs.

19 **4. PLEASE DESCRIBE YOUR PROFESSIONAL EDUCATION AND EXPERIENCE.**

20 I received my Bachelor of Science from the University in Pittsburgh. I am a licensed
21 Professional Engineer in Pennsylvania and Maryland. Throughout my thirty-eight-year career,

1 I have performed professional services involving mechanical engineering, civil engineering,
2 and environmental engineering. Through my work as a Project Engineer for various townships
3 throughout Pennsylvania, I have gained extensive experience in reviewing construction plans
4 for wastewater collection/conveyance systems and water distribution systems, preparing Act
5 537 Plans, hydraulic models, water and sewer studies, and infiltration/inflow studies. I am well
6 versed in wastewater conveyance system design, selecting equipment, developing
7 specifications, and overseeing construction management.

8 **5. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PENNSYLVANIA PUBLIC**
9 **UTILITY COMMISSION?**

10 No, I have not previously testified before the Pennsylvania Public Utility Commission.

11 **6. CAN YOU DESCRIBE THE NATURE OF YOUR PROFESSIONAL**
12 **RELATIONSHIP WITH EAST COVENTRY TOWNSHIP?**

13 ARRO has served as Township Engineer for East Coventry Township (“East Coventry” or
14 “Township”) since approximately 2001. I have also personally been assisting the Township in
15 the capacity of Project Engineer since 2001. Over the last twenty-plus years, I have been
16 involved in a variety of engineering projects for the Township. One of the first projects I
17 worked on for East Coventry was a Special Act 537 Study, which was approved in 2003. I
18 have advised the Township extensively on the Parker Ford project described in this testimony.

1 **7. CAN YOU PLEASE GO INTO MORE DETAIL ABOUT THE TOWNSHIP’S**
2 **PRIOR ACT 537 PLANS?**

3 In 1997, the Township adopted an updated Act 537 Sewage Facilities plan (“1997 Plan”). At
4 that time, the Township did not provide wastewater collection and conveyance services to its
5 residents. The 1997 Plan was commissioned to investigate various “needs areas” within the
6 Township and develop a plan for providing collection and conveyance services within the
7 Township.

8 The 1997 Plan, among other things, designated the Village of Parker Ford, located within the
9 Township, as a “needs area.” The 1997 Plan described the existing land uses in the Parker Ford
10 area as “single-family residential, commercial, industrial, and a mobile home park.” The 1997
11 Plan noted that the homes in the Parker Ford area “have a history of on-lot malfunctions as
12 indicated by the Chester County Health Department and the 1978 East Coventry Sewage
13 Facilities Plan. A door-to-door survey revealed a 31% malfunction rate for the homes
14 surveyed.” Recommendations in the 1997 Plan related to Parker Ford included (1)
15 implementing a municipal on-lot management program in the area; (2) working with East
16 Vincent Township to provide public sewer service to Parker Ford in the future; and (3)
17 continuing to investigate alternatives for providing service to Parker Ford if the East Vincent
18 option did not move forward.

19 Subsequent to the 1997 Plan, ARRO (in its capacity as Township Engineer) performed, on
20 behalf of the Township, a “Wastewater Collection and Treatment Special Study” that was
21 finalized and approved in January 2003 (“2003 Special Study”). The purpose of the 2003
22 Special Study was to investigate engineering options, taking into consideration numerous

1 subdivision proposals and the Township’s projected growth, for providing a cost-effective
2 collection system for the needs areas identified in the 1997 Plan.

3 Parker Ford was again recognized in the 2003 Special Study as a needs area. During the process
4 of completing the 2003 Special Study, I had several conversations with officials at the
5 Pennsylvania Department of Environmental Protection (“DEP”). DEP was aware of, and
6 expressed concerns about, the malfunctioning on-lot systems in the Parker Ford area. In
7 conversations with me, DEP recognized Parker Ford as a needs area that would eventually
8 require public sewer connection.

9 Most of the Township’s wastewater collection and conveyance system was constructed
10 between 2004 and 2005. Several needs areas identified in the 1997 Plan and 2003 Special
11 Study were connected to the newly constructed system at that time, but the Parker Ford area
12 was not. Nevertheless, the 2003 Special Study did include a 20-year time horizon specifically
13 contemplating that homes in the Parker Ford area would later need to be connected to the
14 Township’s system.

15 **8. HAS ARRO CONDUCTED ACT 537 STUDIES FOR EAST COVENTRY**
16 **TOWNSHIP SINCE THE 2003 SPECIAL STUDY?**
17

18 Yes. On or around 2016, DEP authorized the Township’s request to prepare a new special Act
19 537 study (“New Special Study”). ARRO was tasked with performing the New Special Study
20 on behalf of the Township. At that time, I remained a Project Engineer for the Township. I was
21 appointed to take the lead in preparing the New Special Study.

22 The specific purpose of commissioning the New Special Study was to address the requirements
23 necessary to finally implement public sanitary sewer service to the Parker Ford planning area.

1 Shortly after I embarked on the New Special Study, I spoke with John Venezia, who at the
2 time was a DEP official for the Southeast region with the title of Sewer Planning Specialist II.
3 Mr. Venezia, who is now retired, expressed that he was happy to hear the Township was
4 undertaking a study investigating the possibility of providing public sewer access to the Parker
5 Ford area.

6 **9. DID THE NEW SPECIAL STUDY EVALUATE THE STATUS AND EFFICACY OF**
7 **ON-LOT SYSTEMS IN THE PARKER FORD AREA?**

8 Yes. One of the first and most important aspects of performing the New Special Study was
9 conducting what is called a “needs analysis.” The needs analysis for Parker Ford involved
10 observing and inspecting on-lot disposal systems in the area, with the objective of making
11 engineering decisions based on the status of such on-lot systems. After the needs analysis was
12 performed, a Sewage Enforcement Officer (or SEO) employed by ARRO reviewed it and
13 prepared a summary to be included in the New Special Study.

14 **10. WHAT DETERMINATIONS WERE MADE PURSUANT TO THE NEEDS**
15 **ANALYSIS IN THE PARKER FORD AREA?**

16 All properties within the Parker Ford area utilize on-lot disposal systems (“OLDS”). The
17 Township mailed 234 surveys to homeowners in Parker Ford. Of those surveys, eighty-six (86)
18 were completed and returned to the Township. Fifty-eight (58) of those surveys were verified
19 in the field, with well water samples taken and analyzed.

20 The needs analysis revealed indicators of OLDS that have the potential for malfunction due to
21 a variety of factors, including both observed conditions in and around these systems, and the
22 age of systems. With respect to observed conditions, the needs analysis identified several

1 systems with green/lush grass, spongy areas, ponding and odors. The observed conditions are
2 indicators of systems that are potentially malfunctioning. Twenty-four percent (24%) of OLDS
3 had troubling “observed conditions.” With respect to the age of OLDS in Parker Ford, forty-
4 four percent (44%) of those systems were thirty (30) years old or more, and sixty-seven percent
5 (67%) were either thirty-plus years old or had an unknown age. Older systems are more likely
6 to not function properly, especially when compounded with lack of maintenance. As OLDS
7 become older, their risk for malfunction increases.

8 Furthermore, water samples taken from OLDS in the Parker Ford area revealed troubling levels
9 of contaminants, specifically Coliform bacteria and nitrates. Thirty-seven percent (37%) of
10 samples indicated total coliform, and seven percent (7%) indicated fecal coliform. The United
11 States Environmental Protection Agency’s (“EPA”) maximum contaminant level (“MCL”) for
12 both total coliform and fecal coliform is zero. Coliform exceeding the MCL of zero may be
13 attributable to malfunctioning OLDS. Moreover, seventy-four percent (74%) of samples
14 indicated nitrate levels greater than 5 mg/L, and nine percent (9%) of samples indicated nitrate
15 levels greater than 10mg/L. EPA guidance indicates that nitrate levels greater than 3 mg/L
16 generally indicates contamination. While the EPA’s MCL for nitrate is 10 mg/L, other EPA
17 guidance explains that levels exceeding 5 mg/L indicate an area with the potential to exceed
18 the MCL.

19 Also of note, the SEO explained difficulties posed by Parker Ford being largely comprised of
20 “long and thin” properties smaller than one acre or one-half acre. When replacing a
21 malfunctioning system on a small property with long and thin dimensions, it is very difficult
22 to choose a new absorption area due to the current minimum horizontal isolation distance
23 requirements related to property lines and drinking-water wells. The OLDS surveys indicated

1 that 17% of properties had drinking water well isolation distances considerably below the
2 required distances, and 34% of properties had drinking water well isolation distances just
3 beyond the minimum. For all of those properties, a malfunction would render locating a new
4 and safe absorption area very difficult.

5 **11. WHAT RECOMMENDATIONS DID YOU OFFER REGARDING PLANS FOR**
6 **PUBLIC SEWER SERVICE IN THE PARKER FORD AREA?**

7 The chief recommendation I arrived at is that the Township should construct a new collection
8 and conveyance system (specifically, a regional pump station and force main) to serve roughly
9 450 residences in the Parker Ford planning area, with the wastewater being conveyed to the
10 Towpath Park Pump Station and ultimately to the North Coventry Wastewater Treatment Plant
11 (“NCWTP”). This recommendation is consistent with the 1997 Plan and 2003 Special Study,
12 which long ago contemplated providing public sewer service to the area.

13 **12. DID YOU CONSIDER ALTERNATIVES TO THE RECOMMENDED PLAN?**

14 Yes. There are two categories of alternatives. The first category involves scenarios where a
15 new collection and conveyance system is constructed, with the difference being where the
16 wastewater is treated.

17 In preparing the New Special Study, I considered the prospect of constructing new local
18 wastewater treatment sites. The estimated costs for the construction of new treatment sites are
19 considerable. The New Special Study identified several potentially suitable sites for new
20 treatment facilities. The estimated cost of new treatment sites spans from \$6,030,000 to
21 \$7,660,000 (the current costs are likely to be higher due to inflation and increased cost of
22 equipment). Crucially, investigation into the potential treatment sites revealed significant

1 environmental hurdles, specifically wildlife impact assessed by the Pennsylvania Fish and Boat
2 Commission and the U.S. Fish and Wildlife Service. These environmental hurdles would likely
3 cause major complications in the planning and construction process for new treatment sites.

4 The other alternative is conveying the wastewater to be treated in East Vincent Township (“East
5 Vincent”). This alternative is not optimal because the East Vincent treatment system would
6 require infrastructure improvements to expand the current treatment capacity, which are
7 estimated to cost approximately \$3.5 million. Other costs would drive the total cost of
8 treatment in East Vincent to be roughly \$4.6 million.

9 The major benefit of the proposed course of action is that NCWTP already has most of the
10 requisite infrastructure to handle the wastewater conveyed from the Parker Ford area. The costs
11 associated with conveying wastewater to NCWTP are significantly less than conveying
12 wastewater to East Vincent.

13 The second category of alternative is essentially to take no action and retain the OLDS in the
14 Parker Ford area. If no action is taken, and Parker Ford remains an area comprised solely of
15 OLDS, a number of adverse impacts are likely to follow. Given the findings of the needs
16 analysis and the SEO’s summary, it is not advisable to leave the current OLDS intact. When
17 OLDS fail, water quality and public health may be adversely affected. Furthermore, it will be
18 difficult or impossible to relocate OLDS on properties where the systems fail, for the reasons
19 noted above. Additionally, failing to provide public collection and conveyance facilities may
20 cause local businesses to relocate from the area, and may be found unfavorable to developers
21 interested in the area.

1 **13. CAN YOU DESCRIBE THE PROCESS THAT WOULD BE REQUIRED IF THE**
2 **TOWNSHIP WISHED TO EXECUTE THE RECOMMENDED PROJECT**
3 **ITSELF?**

4 The execution of a project involving the construction of a new regional pump station and force
5 main to serve the Parker Ford area would involve numerous steps over a number of years.

6 From an engineering standpoint, the entire project would span approximately six years starting
7 when DEP approves the New Special Study. At a high level, there are five steps involved in
8 the project: (1) design and permitting; (2) bidding and awarding; and (3) construction, which
9 for this project involves three phases. It is also important to note that the Township must
10 determine how it will fund the project, which represents another step in the project timeline.

11 The execution of the Project would be the responsibility of the Township and the Township
12 Public Works Department, in conjunction with ARRO as Township Engineer. Generally,
13 ARRO would likely be responsible for coordinating the entire project. However, the Public
14 Works Department of the Township would also be heavily involved because absent a sale, they
15 are responsible for operating the Township's System and ultimately will be responsible for
16 operating the newly constructed system into perpetuity. It is also my understanding that the
17 growth of the System precipitated by such a project would require the Township to hire
18 additional staff and operators.

19
20 **14. DID ARRO ESTIMATE THE COSTS ASSOCIATED WITH CONSTRUCTION**
21 **FOR THE PRIMARY RECOMMENDATION?**

1 Yes. As Project Engineer, I performed an analysis of probable construction costs (“planning
2 level costs”) related to the construction of a regional pump station and force main to serve the
3 Parker Ford planning area.

4 The original planning level costs, calculated in 2021, were based on a three-phase plan for the
5 collection system reflecting three distinct planning areas. My original planning level costs are
6 as follows. I estimated a cost of \$3,000,000 for the pump station and force main. I also
7 estimated a cost of \$15,548,000 as the total for the three-phase construction of the collection
8 system. Thus, the total planning level costs is approximately \$18.5 million.

9 The planning level costs I calculated reflect construction costs only and do not include “soft
10 costs,” such as permitting, legal, and administrative costs which would be significant.

11 **15. HAVE YOU CALCULATED THE TOTAL COSTS FOR THE PARKER FORD**
12 **PROJECT?**

13 In 2021, ARRO compiled an estimate of the total costs for constructing the project, which
14 included in the calculation costs other than pure “construction costs” (as reflected in the
15 planning level costs). That estimate was created by Brady Flaherty, who at the time was
16 employed by ARRO and served in the role of Township Engineer. Mr. Flaherty still serves as
17 Township Engineer for the Township, but is now employed by another engineering firm, Carroll
18 Engineering.

19 Mr. Flaherty completed an updated total cost assessment for the Parker Ford project in June,
20 2025. Mr. Flaherty estimated that the “planning level costs” have increased from
21 approximately \$18.5 million to \$21.4 million, comprised of \$3,466,501 for the pump station
22 and force main, and \$17,965,718 for the three-phase construction of the collection system.

1 Other costs required to execute the Parker Ford project include engineering, legal, and
2 administrative costs of approximately \$5.3 million. Thus, Mr. Flaherty estimated the total
3 project cost to be \$26,790,274.

4 **16. DO YOU SUPPORT THE SALE OF THE SYSTEM TO PAWC?**

5 Yes, I believe the proposed sale is in the best interest of the Township. For the reasons stated
6 above, providing public sewer service to the Parker Ford area is necessary and in fact long
7 overdue, having first been identified as a needs area over two decades ago.

8 In my professional opinion, PAWC will be able to implement the Parker Ford project more
9 quickly than the Township could, and also in a more cost-effective manner. PAWC has the
10 benefit of employing hundreds of professionals that are able to plan and execute the project,
11 whereas the Township would be required to hire and/or retain many additional professionals
12 to construct and operate the expanded system. Furthermore, PAWC possesses the financial
13 resources needed to fund capital improvements and proactively maintain the system (rather
14 than reactively), which will ensure that the System operates safely, efficiently, and in
15 accordance with regulatory requirements for years to come.

1 **17. DOES THIS CONCLUDE YOUR TESTIMONY?**

2 Yes. However, I reserve the right to file additional testimony at a later date as may be necessary
3 or appropriate.

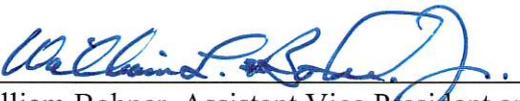
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wastewater service to the public in the Township of East :
Coventry, Chester County, Pennsylvania :
:

VERIFICATION

I, William Bohner, hereby state that the facts set forth in my Direct Testimony are true and correct to the best of my knowledge, information, and belief and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Dated: 10/6/25



William Bohner, Assistant Vice President and
Senior Project Manager, ARRO Consulting, Inc., on
behalf of Seller, East Coventry Township