



October 18, 2018

VIA E-FILE

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Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor – Filing Room
Harrisburg, PA 17120

**Re: TANYA J. MCCLOSKEY, ACTING CONSUMER ADVOCATE V. HIDDEN VALLEY
UTILITY SERVICES, L.P. – WATER, DOCKET NO. C-2014-2447138**

**TANYA J. MCCLOSKEY, ACTING CONSUMER ADVOCATE V. HIDDEN VALLEY
UTILITY SERVICES, L.P. – WASTEWATER, DOCKET NO. C-2014-2447169**

**PETITION OF HIDDEN VALLEY UTILITY SERVICES, L.P. FOR AN AMENDMENT OF
THE OPINION AND ORDER ENTERED MAY 3, 2018**

Dear Secretary Chiavetta:

Enclosed for filing with the Pennsylvania Public Utility Commission is the Petition of Hidden Valley Utility Services, L.P. for an Amendment of the Opinion and Order entered May 3, 2018.

All parties to this proceeding are being served as shown on the attached Certificate of Service.

Please contact me if you have any questions regarding this filing. Thank you.

Sincerely,

COZEN O'CONNOR

By: Jonathan P. Nase

Counsel for *Hidden Valley Utility Services, L.P.*

JPN:kmg

Enclosures

cc: Per Certificate of Service
Allison Kaster, Esq.
James M. Kettler

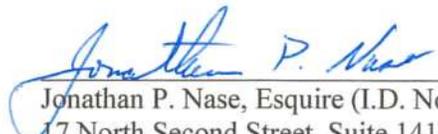
**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Tanya J. McCloskey, Acting Consumer Advocate	:	
	:	
v.	:	Docket No. C-2014-2447138
	:	
Hidden Valley Utility Services, L.P. – Water	:	
	:	
and	:	
	:	
Tanya J. McCloskey, Acting Consumer Advocate	:	
	:	
v.	:	Docket No. C-2014-2447169
	:	
Hidden Valley Utility Services, L.P. – Wastewater	:	

NOTICE TO PLEAD

TO: Parties at Docket Nos. C-2014-2447138 and C-2014-2447169

Pursuant to 66 Pa. C.S. § 703(g) and 52 Pa. Code § 5.572(d), you are hereby notified that Hidden Valley Utility Services, L.P. (“Hidden Valley”) has filed a Petition for an Amendment of the Opinion and Order entered May 3, 2018 in the above-referenced matters, to which you may file an answer within ten (10) days. Your failure to answer will allow the Commission to rule on the Petition without a response from you, thereby requiring no other proof. All pleadings such as an Answer to this Petition must be filed with the Secretary of the Pennsylvania Public Utility Commission at P.O. Box 3265, Harrisburg, PA 17105-3265, with a copy served on the undersigned counsel for Hidden Valley.



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Dated: October 18, 2018

construction of a pipeline to obtain water from another source). According to the engineer's report, implementing any of these recommendations will require at least four years. Additionally, the estimated cost of these options range from approximately \$850,000 to almost \$2,400,000. Based on this information, the Company requests that the one-year deadline in the Order be modified to adopt an approach similar to that commonly used in rail-highway crossing cases; rather than establishing a single deadline for the completion of construction, Hidden Valley requests that the Commission establish a series of deadlines for important milestones in the design/construction process. In support thereof, Hidden Valley avers as follows:

I. Introduction

1. Hidden Valley is a small utility providing water and wastewater service to the public in Hidden Valley, Somerset County, Pennsylvania.

2. On January 18, 2018, the Commission entered an order in these matters (the "January 2018 Order") (the January 2018 Order and the May 2018 Order are collectively referred to herein as the "Orders") finding the Company's water and wastewater service violated Section 1501 of the Pennsylvania Public Utility Code ("Code"), 66 Pa. C.S. § 1501, and ordering the Company to complete certain physical improvements and other tasks within specified time frames.

In pertinent part, the January 2018 Order provided:

6. That Hidden Valley Utility Services, L.P., shall obtain and file with the Commission a written report from an independent or third-party Pennsylvania licensed water and wastewater engineer concerning the adequacy of its water distribution system and water source; and said report shall contain recommendations and a cost analysis to correct any found deficiencies including a remedy to eliminate the rust or brown-colored water provided to customers in order to ensure that customers shall receive adequate service from the improved water facilities, and with said report, to include an evaluation and proposed

remedy to reassess the need, size and cost of the treatment plant to permanently solve the problems caused by iron and manganese, as well as alternative sources of water supply such as the Quemahoning River, within ninety (90) days from the date of entry of this Opinion and Order in this proceeding. In addition to estimating costs, the study will include an implementation schedule for completion of the design, repairs or improvements, obtaining permits, obtaining bids, awarding contracts, and completion of construction/start of operation. Additionally, the engineering report will include a schedule to replace and/or test customer meters in accordance with Section 65.8(b) that results in compliance by April 30, 2019. Hidden Valley Utility Services, L.P., will implement the replacement and testing schedule.

...

8. That Hidden Valley Utility Services, L.P. shall comply with all recommendations from the engineer in order to correct any identified deficiencies including a remedy to eliminate the rust or brown-colored water provided to customers in order to ensure that customers shall receive adequate service from the improved water facilities, and to reassess the need, size and cost of treatment plant to permanently solve the problems caused by iron and manganese, within one (1) year from the date of the engineer's report.

3. The January 2018 Order included mechanisms to ensure compliance with, and enforcement of, the Order. These enforcement mechanisms include, but are not limited to, the institution of proceedings pursuant to 66 Pa. C.S. § 529 (relating to power of commission to order acquisition of small water and sewer utilities) under certain circumstances. Ordering Paragraphs 21 and 26.

4. On February 2, 2018, Hidden Valley filed a Petition for Clarification, Reconsideration and Amendment ("Petition for Reconsideration") of the January 2018 Order. The Commission subsequently issued the May 2018 Order granting the Petition for Reconsideration in part, denying it in part, and modifying the January 2018 Order.

5. In pertinent part, the May 2018 Order modified Ordering Paragraph 8 to read as follows:

That, within one (1) year [from] the date of the engineer's report, Hidden Valley Utility Services, L.P., shall comply with all recommendations from the engineer in order (1) to correct any identified deficiencies including a remedy to eliminate the rust or brown-colored water provided to customers in order to ensure that customer shall receive adequate service from the improved water facilities, and (2) to reassess the need, size and cost of treatment plant to permanently solve the problems cause by iron and manganese.

6. On April 18, 2018, in compliance with Ordering Paragraph 6 in the January 2018 Order, Hidden Valley filed with the Commission two engineer's reports regarding its water system. One report concerned the required testing and replacement of water meters. The second report, attached hereto as **Appendix A**, outlined four options for addressing the iron and manganese levels in Hidden Valley's water. The engineer estimated that implementing any of these options will take more than four years. He also estimated the costs of each option, which ranged from approximately \$850,000 to almost \$2,400,000

7. Since April 18, 2018, management of Hidden Valley has been working with its engineers to obtain additional information, so that it may select the best option for Hidden Valley and its customers. On October 15, 2018, the engineer provided updated cost estimates. **Appendix B.**

II. Legal Standard

8. A party may seek relief following the issuance of a final decision pursuant to 66 Pa. C.S. § 703(f) and § 703(g), relating to rehearings, as well as the rescission and amendment of

orders. Such requests for relief must be consistent with 52 Pa. Code § 5.572, relating to petitions for relief following the issuance of a final decision.

9. The standards for granting a Petition for Amendment were set forth in *Duick v. Pennsylvania Gas and Water Company*, 56 Pa. P.U.C. 553 (1982). Under the standards of *Duick*, a Petition for Amendment may properly raise any matter designed to convince the Commission that it should exercise its discretion to amend a prior Order, in whole or in part. Such petitions are likely to succeed only when they raise “new and novel arguments” not previously heard or considerations which appear to have been overlooked or not addressed by the Commission. *Duick*, 56 Pa. P.U.C. at 559.

III. The Company has Satisfied the *Duick* Standard

10. The engineer’s report was filed with the Commission on April 18, 2018, and the Commission entered its Order on Reconsideration in this matter on May 3, 2018.

11. The engineer’s April 2018 report, and October 2018 update, were clearly unavailable when the Commission rendered its January 2018 Order.

12. The engineer’s April 2018 report was either submitted too late for the Commission to consider it when rendering the May 2018 Order, or the engineer’s report was overlooked by the Commission in rendering the May 2018 Order. In either case, the availability of this new evidence now satisfies the *Duick* standard.

13. The engineer’s update of October 15, 2018 was clearly unavailable to the Commission when it rendered the May 2018 Order.

14. The Commission’s Orders overlook the need for the Company to investigate and choose a financing plan for the project. Financing options are critical, considering the rate impact that any of the four options will have on the approximately 1,170 customers of the water system.

IV. The Commission Should Amend Paragraph 8 of the May 2018 Order

15. Ordering Paragraph 6 of the January 2018 Order, as restated in the May 2018 Order, requires the engineer's report to include "an implementation schedule for completion of the design, repairs or improvements, obtaining permits, obtaining bids, awarding contracts, and completion of construction/start of operation."

16. By requiring Hidden Valley to "correct any identified deficiencies including a remedy to eliminate the rust or brown-colored water provided to customers" within one year of receipt of the engineer's report, Ordering Paragraph 8 appears to require that all of the steps described above be completed, and a new treatment plant be constructed and operational by April 18, 2019, or a pipeline to an alternative water source be constructed and operational by April 18, 2019.

17. The basis for the Commission's one-year deadline for the Company to comply with Ordering Paragraph 8 is unclear.

18. Based on the engineer's report, it is clear that a new water treatment plant, or a new pipeline to an alternative water source, cannot be constructed and operational by April 18, 2019.

19. In the January 2018 Order, the Commission stated "Any subsequent delays in failing to remediate the problems due to the failure to meet compliance deadlines would be unacceptable. The one-year deadline for implementing the corrective measures established in the engineer's report sets an objective guideline for compliance. *If additional time is deemed critical, the Company may petition the Commission for relief to modify the deadline pursuant to Section 5.572(d) of the Code.*" January 2018 Order p. 31 (emphasis added).

20. The Company now files this petition to amend the deadline established in Paragraph 8, pursuant to Section 703(g) of the Code and 52 Pa. Code § 5.572(d). It is significant that the

Company is filing this Petition more than five months prior to the deadline established in the January 2018 Order.

21. The Company is making a good faith effort to comply with the January 2018 Order and the May 2018 Order. The Company has filed status reports every sixty days, as required by Ordering Paragraph 17, and those reports indicate that the Company has met every deadline established in the Order, as of this date.¹ In addition, as stated previously, management has been meeting with the engineer to obtain information so it can select the best option for Hidden Valley. Management has also filed a rate case to enable it to fund the extensive improvements required by the Orders. *Pa. Public Utility Commission v. Hidden Valley Utility Services, L.P.*, Docket Nos. R-2018-3001306 and R-2018-3001307.

22. Although several months remain before the applicable compliance deadline, it is clear that the Company will not be able to meet that deadline, despite the Company's best efforts. Considering the enforcement provisions contained in the May 2018 Order (including the possibility of a proceeding to order the sale of the company pursuant to 66 Pa. C.S. § 529, Ordering Paragraphs 21 and 27), the Company seeks to modify the deadline in Paragraph 8 so that the Company has a reasonable opportunity to comply with the Commission's Order.

23. The Company needs time to develop a plan for financing the project. Based on the engineer's October 15, 2018 update, the cost of the project ranges from approximately \$1,150,000 to almost \$2,400,000, depending on which option is selected. To assist in financing the project, the Company filed a rate case in April 2018, shortly after the Commission issued its original order

¹ Ordering Paragraph 14 required the Company to file correct information in its annual reports to the Commission, and to amend any prior reports that contain inaccurate or incorrect information, within 180 days of the date of the January 18, 2018 Order. HVUS filed corrected reports by the deadline, but some parties to the Company's on-going rate proceeding at Docket Nos. R-2018-3001306 and R-2018-3001307 contend that those reports still contain inaccurate information. The Company is reviewing the reports in view of these comments and will file further revised reports, if necessary. Even if those reports contain inadvertent errors, the Company's filing of fourteen revised annual reports by the deadline demonstrates a good faith effort to comply with the Commission's Order.

in this proceeding. However, that case will not be completed until early 2019. The outcome of this rate case will influence the Company's financing options, particularly because the Bureau of Investigation and Enforcement and the Office of Consumer Advocate argue that the Commission should deny the rate increase, in whole or in part, due to the Company's quality of service. As a result, the Company is having difficulty obtaining financing pending the outcome of that proceeding.

24. The Company requests that Paragraph 8 be amended as follows:

a. Paragraph 8 should be amended to adopt the approach the Commission commonly uses in rail-highway crossing cases. That is, rather than establishing one deadline for the completion of construction, the order should contain a series of deadlines for important milestones in the design/construction process. Specifically, the Company requests that Paragraph 8 be amended to:

(1) require the Company to file plans for the water treatment plant or pipeline, together with a financing plan, to the Commission's Bureau of Technical Utility Services ("TUS") by April 18, 2019, and to serve the other parties to this proceeding with a copy of this filing;

(2) permit the other parties to this proceeding to comment on the plans;

(3) permit TUS to require changes in the plans;

(4) direct TUS, upon approval of the plans, to issue a Secretarial Letter giving the Company an appropriate deadline for completing the project, based on the plans as approved.²

² During construction, the Company would continue to submit status reports every sixty days, as required by Ordering Paragraph 17 of the May 2018 Order.

b. In the alternative, the Company requests that Paragraph 8 be amended to substitute “within four (4) years from the date of the engineer’s report” for “within one (1) year from the date of the engineer’s report.”

25. The Company submits that the approach described in Paragraph 24(a) is preferable to the approach described in Paragraph 24(b) because the former approach ensures that the Commission approves the Company’s plans *before* the Company undertakes the project to address the iron and manganese in the water. Under the current Order, the Commission determines the adequacy of the Company’s actions after-the-fact. See May 3, 2018 Order, Ordering Paragraphs 20 and 21. Considering the possible consequences of a determination that the project did not adequately address the iron and manganese in the water (including the possibility of a Section 529 proceeding pursuant to Ordering Paragraph 21), the latter approach makes it difficult for the Company to find investors and lenders willing to finance the project.

26. In addition, the Company submits that the approach in Paragraph 24(a) is preferable to the approach described in Paragraph 24(b) because the former approach better enables the Commission to ensure that the Company remains “on track” with the required improvements by requiring the Company to meet important milestones in a timely manner. The enforcement provisions of the May 3, 2018 Order should apply if the Company fails to meet the deadline for any important milestone.

V. The Commission Should Make Conforming Amendments to the May 2018 Order

27. If the Commission amends Ordering Paragraph 8, conforming changes will need to be made in other ordering paragraphs. For example:

a. Ordering Paragraph 19 requires Hidden Valley to file a final status report with the Commission on January 31, 2019, or as soon as all repairs, modifications and

improvements have been made. The deadline in this paragraph should be modified to establish a near deadline for the Company to submit a final status report.

b. Ordering Paragraph 20 requires TUS to investigate the quality of the water, as well as the water and wastewater services being received by Hidden Valley, on or before March 31, 2019 or within sixty days after receipt of a written report of all completed rehabilitative measures from Hidden Valley. The deadline in this paragraph should be modified to reflect the amendment to Ordering Paragraph 8.

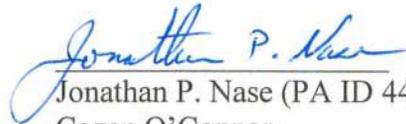
IV. Conclusion

WHEREFORE, for the foregoing reasons, Hidden Valley Utility Services, L.P., respectfully requests that the Commission:

- (a) grant this Petition;
- (b) amend Ordering Paragraph 8 in the May 3, 2018 Order to:
 - (1) require the Company to file plans for the construction of a water treatment plant or pipeline, together with a financing plan, with the Bureau of Technical Utility Services by April 18, 2019, and to serve the other parties to this proceeding with a copy of this filing;
 - (2) permit the other parties to this proceeding to comment on the plans;
 - (3) permit TUS to require changes in the plans;
 - (4) direct TUS, upon approval of the plans, to issue a Secretarial Letter giving the Company an appropriate deadline for completing the project, based on the plans as approved.

(c) amend other Ordering Paragraphs in the May 3, 2018 Order (including Ordering Paragraphs 19 and 20) to reflect the amendment to Ordering Paragraph 8.

Respectfully submitted,



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Counsel for *Hidden Valley Utility Services, L.P.*

Date: October 18, 2018

APPENDIX A

Project Hidden Valley Utility Services, L.P.
 Calculated By FDN Date 4/16/2018
 Checked By BRS Date 4/16/2018
 Subject Schedule for Water Treatment Upgrades



Estimated Schedule for upgrades to Hidden Valley Water Treatment Plant

<u>Task</u>	<u>Period</u>
Authorization to Proceed	0 days
Pilot Water Treatment Program	270 days
Preliminary Design	120 days
Prepare and Submit Permit Applications	120 days
Receive Approval(s) from Appropriate Agencies	270 days
Final Design	120 days
Bid Contract	90 days
Award Contract	60 days
Construction	365 days
Appropriate Agency Review and Inspection	60 days
Total Estimated Time Period for Water Treatment Upgrades	1475 days or 4 years and 1 month

Project Hidden Valley Utility Services, L.P.
 Calculated By FDN Date 4/16/2018
 Checked By BRS Date 4/16/2018
 Subject Schedule for Interconnection with Bakersville Water System



Estimated Schedule for Hidden Valley connection to Bakersville Water System

<u>Task</u>	<u>Period</u>
Authorization to Proceed	0 days
Intermunicipal Agreement	270 days
Preliminary Design	120 days
Prepare and Submit Permit Applications	120 days
Receive Approval(s) from Appropriate Agencies	270 days
Final Design / Obtain Right-of-Ways	180 days
Bid Contract	90 days
Award Contract	60 days
Construction	365 days
Appropriate Agency Review and Inspection	60 days
Total Estimated Time Period for Water Treatment Upgrades	1535 days or 4 years and 3 months

Project Hidden Valley Utility Services, L.P.
 Calculated By FDN Date 4/16/2018
 Checked By BRS Date 4/16/2018
 Subject Schedule for Water Service Meter Testing and Replacements



**Hidden Valley Utility Services, L.P.
 Water Service Meter Breakdown**

	Touch Read Meter Units	100 Gallon Register Meter Units	1000 Gallon Register Meter Units	Total Units
Residential	422	559	82	1,067
Commercial	1	0	1	19
Industrial	0	0	0	1
Totals	423	559	83	1,087

Residential	1,063	5/8-inch Meters	Commercial	1	3-inch Meter
	4	2-inch Meters		2	2-inch Meters
Industrial	1	5/8-inch Meter		4	1 1/2-inch Meters
				2	1-inch Meters
				8	5/8-inch Meters

- Per our discussion with Hidden Valley Water System's Licensed Operator, all touch read meters have been installed within the last 20 years. Per PA Code § 65.8(b) Meters, meters smaller than 1-inch shall be tested or replaced every 20 years. Because the touch read meters have been installed within the last 20 years, they are not included in the following schedule for testing and replacing water meters.
- Per PUC Order, Hidden Valley Utility Services has until April 30, 2019 to achieve compliance for replacement and/or testing of customer meters in accordance with PA Code § 65.8(b).
- Per our discussion with Hidden Valley Water System's Licensed Operator, every 1000 Gallon Register Meter needs replaced due to age and inaccuracies at low flows.

Total Water Meters to be Tested and/or Replaced	559	Meters
Total Water Meters to be Replaced (At Minimum)	83	Meters
Working days between April 30, 2018 and April 30, 2019	251	days
Minimum Meters Replaced or Tested each Working Day	3	Meters/day

Estimated Schedule to Test and/or Replace Customer Water Meters

<u>Task</u>	<u>Period</u>
Test Water Meters (Average 2 to 3 Meters tested per day)	251 working days April 30, 2018 to April 30, 2019
Replace 1000 Gallon Register Meters	251 working days April 30, 2018 to April 30, 2019

- Assumptions:
1. Assumes an average of two (2) to three (3) water meters per day can be tested or replaced.
 2. Assumes all work will be completed during a Monday thru Friday work week.

**Hidden Valley Utility Services
Potable Water System Feasibility Study
Jefferson Township, Somerset County, PA**

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Cover Letter

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ATTACHMENTS

- Attachment 1: PADEP DDWM Maximum Containment Levels (MCLs) and Maximum Residual Disinfectant Levels (MRDLs)
- Attachment 2: Filtronics Model FV-08, Electromedia® I Automatic Filter Station
- Attachment 3: WesTech Type II AERALATER® System
- Attachment 4: JTMA Connection Route Overall Map
- Attachment 5: SSMA Connection Route Overall Map

TABLES

Table 1	Option 1: Conventional Iron Filter Cost Estimate
Table 2	Option 2: AERALATER Iron Filter Cost Estimate
Table 3	Option 3: Hidden Valley Waterline Extension – Jefferson Township Water System Cost Estimate
Table 4	Option 4: Seven Springs Waterline Extension Cost Estimate

1.0 INTRODUCTION

On August 18, 2015, Hidden Valley Utility Services (HVUS) authorized CME Engineering LP (CME) to evaluate the water system iron and manganese removal alternatives. The existing HVUS Water System serves approximately 1,075 service connections at Hidden Valley Resort, which includes many seasonal and recreational residents. A report prepared by the Pennsylvania Office of Consumer Advocate (OCA) identifies deficiencies in the water system. The noted deficiencies included several “dead-end” water lines and small diameter piping within the water distribution system. Water quality issues concerning elevated iron and manganese levels were also discussed in the referenced report. The purpose of this study report is to address the iron and manganese issues and possible solutions. This report evaluates two treatment alternatives and two alternate water supplies. This report was prepared with input and assistance from the system operators. Although the preparation of this report was authorized in August, non-responsiveness from the solicited filter system vendors resulted in delays in preparing this report. We are still awaiting information on a list of systems in use for each treatment alternative and also detailed information on the availability and cost of pilot filtration units.

2.0 EXISTING WATER SYSTEM OVERVIEW

The existing water system consists of two wells, treatment facilities, high-service pumps, a 250,000 gallon storage tank, and a distribution system containing approximately 18 miles of water mains, fire hydrants, service lines, approximately 1,075 connections, and miscellaneous valves. The majority of connections on the system are seasonal/weekend customers. Demand on the system fluctuates with maximum demands occurring during weekends and holidays.

The water system has a history of iron and manganese issues dating back to inspections performed by the Pennsylvania Department of Environmental Protection (DEP) commencing on July 1, 2004. The iron and manganese levels in the water supplied by the wells have been recorded above 2.0 mg/L (DEP allows a Maximum Contaminant Level of 0.3 mg/L for iron and 0.05 mg/L for manganese) and cause water quality issues for the resort, resort’s guests, and residents served by the water system. The standard PADEP Division of Drinking Water Management Maximum Containment Levels (MCLs) and Maximum Residual Disinfectant Levels (MRDLs) can be found in Attachment 2.

An issue with piping was resolved in Well No. 1 in 2006, and brought the iron level below 1.0 mg/l. A sequestering system was added for Well No. 1 (DEP permits sequestering to be used when iron levels are below 1.0 mg/l) in an effort to bring the iron

and manganese content to acceptable levels. Well No. 1 was then used full time in place of Well No. 2 which still had iron levels above the maximum treatable by sequestering. Further tests in the following years have shown iron content above 2.0 mg/l at the storage tank and numerous complaints of brown, muddy, or discolored water filed by customers poses the need for a permanent solution to the problem. The findings of the OCA report suggest the sequestered iron is only effective for a brief period of time (a few days) and then reemerges when it lies stagnant in the water system.

3.0 PROPOSED SYSTEM SOLUTIONS

This report evaluates four (4) possible solutions to replace the sequestering treatment currently being used:

3.1 Conventional Iron Filter (Filtronics Model FV-08, Electromedia[®] I Automatic Filter Station)

A conventional iron filter system as manufactured by Filtronics, is an iron and manganese removal system that chemically oxidizes the iron in the raw water and filters the iron out. Based on water quality data submitted to Filtronics, the recommended filter system consists of a chemical pretreatment system, two reaction vessels, and filter vessel. The quotation, specifications, and schematic of the system can be found in Attachment 2: Filtronics Model FV-08, Electromedia[®] I Automatic Filter Station. For purposes of this study, a flow rate of 175 GPM is used to match the existing pump capacity of the supply well. The quoted system is designed for a maximum flow of 175 gpm, and utilizes a chemical pretreatment of sodium hypochlorite and sodium bisulfite along with coagulation filtration in the reaction vessels and filter vessel to bring iron and manganese levels into compliance with State regulations. Two complete systems (duplicate) are required per Department of Environmental permitting/regulations and the estimated cost for this option reflects that requirement.

The system supplied by Filtronics, includes two reaction vessels, a filter vessel, filter internals, applicable coatings and finishes, full automatic controls, pretreatment chemical feed systems, one Electromedia I load, and select piping and valves as shown in black on the attached schematic. The system is approximately 18' long by 8' wide.

The proposed iron filter system would be installed within a newly constructed building at a location within the existing sewage treatment plant facilities. Water from the existing groundwater well pumps would pump raw water to the proposed filter system which would then discharge filtered water to the existing wet well for the high service pumps to feed the main system storage tank for the resort.

Backwash pressure will be provided by system pressure from the storage tank and backwash discharge will go into the sewage treatment system. The installation of the proposed system will include various state and local permits, electrical connections, and miscellaneous yard piping.

The total estimated cost for Option 1 is **\$1,081,000**. The user fees would increase from an estimated \$10.50 per month to an estimated \$20.00 per month with this option. A cost breakdown for Option 1 can be found in Table 1.

3.2 WesTech Type II AERALATER[®] System

An alternative to the conventional iron filter system discussed in Section 3.1 above, would be a system using aeration to oxidize the iron and manganese in the water rather than using chemicals. A system as manufactured by WesTech is considered for evaluation purposes of this report. The Type II AERALATER system quotation, specifications, and schematic of the system can be found in Attachment 3: WesTech Type II AERALATER[®] System. The system is utilized for iron, manganese, and arsenic removal at a flow rate of 175 gpm, and is a self-contained treatment plant combining aeration, detention, and filtration in a single unit. The system also claims to reduce H₂S, Radon, VOC, Odor, and other dissolved gasses.

The WesTech system treats the water by first passing through an aeration system, then a flocculation unit. The water then flows through a filtration zone where it exits the system through a common underdrain. The system can also perform the backwash operation within itself and does not require additional pumps to backwash.

The WesTech system would be housed in a building (similar to the conventional filter system) on the existing wastewater treatment plant site. Due to the height of the system, a portion of the detention unit normally extends out of and above the roof of the building which it is housed as shown in the attachments. The system includes a pump-down feature that automatically lowers the water level below the roofline during shutdown periods to avoid freezing. The WesTech system would be located between the existing groundwater well pumps and the wet well pump, similar to the conventional treatment system. The installation of the proposed system will include various state and local permits, electrical connections, and miscellaneous yard piping.

The total estimated cost for Option 2 is **\$1,157,000**. The user fees would increase from an estimated \$10.50 per month to an estimated \$19.50 per month with this option. A cost breakdown for Option 2 can be found in Table 2.

3.3 Connection to Jefferson Township Municipal Authority (JTMA) System

Option 3 forgoes adding a treatment facility to the existing system, and proposes a new connection to the JTMA public water system. The JTMA system serves the Bakersville area and has a storage tank located just east of the Hidden Valley Resort on Gardner Road. The JTMA currently has 108 service connections and the HVUS extension would add approximately 1,075 new service connections, bringing the total connections served by the JTMA system to approximately 1,183. This option would eliminate the use of water supplied by existing wells, and the installation of a new waterline approximately 1.6 miles to supply the HVUS water system is proposed. The proposed route will start at the existing JTMA storage tank and will travel northwest within the right of way of Township Road T-587 (Gardner Road) to the entrance road for the Hidden Valley Golf Course where the waterline will tie into the HVUS system. The ownership of the proposed waterline from the JTMA tank to the HVUS tie-in has not been decided at this time. An overall map of the proposed JTMA connection route can be found in Attachment 4: JTMA Connection Route Overall Map.

The waterline proposed will consist of approximately 1,000 LF of 6" ductile iron pipe and 7,500 LF of C900 or C909 PVC pipe. The ductile iron pipe will be used near the JTMA storage tank where the highest head pressures are present. The waterline will require a booster pump station at a location to be determined during design, to supply the HVUS system that is located approximately 700 feet in elevation above the JTMA tank. The waterline installation will also include various gate valves and boxes, fire hydrants, water service connections, and various state and local permits.

HVUS will purchase the water at a set amount from JTMA. HVUS will then utilize the current meters and billing system in place to charge customers for water usage.

The total estimated cost for Option 3 is **\$852,000**. The user fees would increase from an estimated \$10.50 per month to an estimated \$18.50 per month with this option. A cost breakdown for Option 3 can be found in Table 3.

3.4 Connection to Seven Springs Municipal Authority (SSMA) System

Similar to Option 3, Option 4 forgoes adding a treatment facility to the existing system, and proposes a connection to the SSMA system. The SSMA supplies the Seven Springs Resort and is located south west of the Hidden Valley Resort. The SSMA currently has 1,000 service connections. The HVUS extension would add approximately 1,075 new service connections, bringing the total connections served by the SSMA to approximately 2,750.

This option would also eliminate the use of water supplied by HVUS wells, and would include tapping into and purchasing water from the SSMA system, and installation of a new waterline approximately 5 miles to supply the HVUS storage tank. The proposed route will begin south of the resort at the Seven Springs water treatment plant and travel south to an existing cleared right of way near the resort's sewage treatment plant. The waterline will then travel the cleared right of way east to County Line Road. The waterline will cross County Line Road and will travel north along Jones Mill Run Road to the location where it will turn east, travel up the hill to the Hidden Valley resort where a connection to the HVUS storage tank will be made. An overall map of the proposed SSMA connection route can be found in Attachment 5: SSMA Connection Route Overall Map.

A 6" diameter ductile iron waterline is proposed for this option. The SSMA system is supplied by the Lake Tahoe tank, which is at a similar elevation as the HVUS tank, therefore only one booster pump station is proposed to overcome the friction losses between Seven Springs and Hidden Valley. The waterline will also require various state and local permits for construction.

The total estimated cost for Option 4 is **\$2,429,000**. The user fees would increase from an estimated \$10.50 per month to an estimated \$30.50 per month with this option. A cost breakdown for Option 4 can be found in Table 4.

4.0 SUMMARY AND CONCLUSIONS

The objective of this report was to determine options, associated system requirements and estimated costs to remedy the iron and manganese treatment issues at the HVUS water system. A cost summary table for the four alternatives discussed in this report is as follows:

	Alternative	Total Estimated Cost	Approximate Monthly User Fee Increase
1	Conventional Iron Filter	\$ 1,081,000	\$9.50
2	WesTech Aeralater Iron Filter	\$ 1,157,000	\$9.00
3	Connection to JTMA System	\$ 852,000	\$8.00
4	Connection to SSMA System	\$ 2,389,000	\$20.00

**PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF DRINKING WATER MANAGEMENT
MAXIMUM CONTAMINANT LEVELS (MCLs)
MAXIMUM RESIDUAL DISINFECTANT LEVELS (MRDLs)**

PRIMARY CONTAMINANTS

Volatile Organic Chemicals (VOCs):

BENZENE	0.005	mg/L	MONOCHLORO BENZENE	0.1	mg/L
CARBON TETRACHLORIDE	0.005	mg/L	STYRENE	0.1	mg/L
o-DICHLORO BENZENE	0.6	mg/L	TETRACHLOROETHYLENE	0.005	mg/L
para-DICHLORO BENZENE	0.075	mg/L	TOLUENE	1	mg/L
1,2-DICHLOROETHANE	0.005	mg/L	1,2,4-TRICHLORO BENZENE	0.07	mg/L
1,1-DICHLOROETHYLENE	0.007	mg/L	1,1,1-TRICHLOROETHANE	0.2	mg/L
cis-1,2-DICHLOROETHYLENE	0.07	mg/L	1,1,2-TRICHLOROETHANE	0.005	mg/L
trans-1,2-DICHLOROETHYLENE	0.1	mg/L	TRICHLOROETHYLENE	0.005	mg/L
DICHLOROMETHANE	0.005	mg/L	VINYL CHLORIDE	0.002	mg/L
1,2-DICHLOROPROPANE	0.005	mg/L	XYLENES (Total)	10	mg/L
ETHYLBENZENE	0.7	mg/L			

Synthetic Organic Chemicals (SOCs):

ALACHLOR	0.002	mg/L	GLYPHOSATE	0.7	mg/L
ATRAZINE	0.003	mg/L	HEPTACHLOR	0.0004	mg/L
BENZO(a)PYRENE	0.0002	mg/L	HEPTACHLOR EPOXIDE	0.0002	mg/L
CARBOFURAN	0.04	mg/L	HEXACHLORO BENZENE	0.001	mg/L
CHLORDANE	0.002	mg/L	HEXACHLOROCYCLOPENTADIENE	0.05	mg/L
2,4-D	0.07	mg/L	LINDANE	0.0002	mg/L
DALAPON	0.2	mg/L	METHOXYCHLOR	0.04	mg/L
DIBROMOCHLOROPROPANE (DBCP)	0.0002	mg/L	OXAMYL (Vydate)	0.2	mg/L
DI(2-ETHYLHEXYL) ADIPATE	0.4	mg/L	PCBs	0.0005	mg/L
DI(2-ETHYLHEXYL) PHTHALATE	0.006	mg/L	PENTACHLOROPHENOL	0.001	mg/L
DINOSEB	0.007	mg/L	PICLORAM	0.5	mg/L
DIQUAT	0.02	mg/L	SIMAZINE	0.004	mg/L
ENDOTHALL	0.1	mg/L	2,3,7,8-TCDD (Dioxin)	3 x 10 ⁻⁸	mg/L
ENDRIN	0.002	mg/L	TOXAPHENE	0.003	mg/L
ETHYLENE DIBROMIDE (EDB)	0.00005	mg/L	2,4,5-TP (Silvex)	0.05	mg/L

Disinfection Byproducts:

TOTAL TRIHALOMETHANES (TTHMs)	0.080	mg/L
(Chloroform, Chlorodibromomethane, Bromoform & Bromodichloromethane)		
HALOACETIC ACIDS (HAA5)	0.060	mg/L
(Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, & Dibromoacetic Acid)		
BROMATE	0.010	mg/L
CHLORITE	1.0	mg/L

Disinfectants (MRDLs): *Note 2*

CHLORINE (as Cl ₂)	4.0	mg/L
CHLORAMINES (as Cl ₂)	4.0	mg/L
CHLORINE DIOXIDE (as ClO ₂)	0.8	mg/L

MRDL = Maximum Residual Disinfectant Level

Radionuclides:

GROSS ALPHA	15	pCi/L
COMBINED RADIUM (226 + 228)	5	pCi/L
BETA PARTICLE & PHOTON ACTIVITY	4	mrem/yr
Gross Alpha MCL excludes Radon and Uranium particle activity. Beta Particle & Photon Activity MCL is for man-made radionuclides.		
URANIUM	30	µg/L

Inorganic Chemicals (IOCs):

ANTIMONY	0.006	mg/L	FLUORIDE	2	mg/L
ARSENIC	0.010	mg/L	LEAD **	0.005	mg/L
ASBESTOS (Fibers longer than 10µm)	7	million fibers/L	MERCURY	0.002	mg/L
BARIUM	2	mg/L	NITRATE (as Nitrogen)	10	mg/L
BERYLLIUM	0.004	mg/L	NITRITE (as Nitrogen)	1	mg/L
CADMIUM	0.005	mg/L	NITRATE + NITRITE (as Nitrogen)	10	mg/L
CHROMIUM	0.1	mg/L	SELENIUM	0.05	mg/L
COPPER **	1.0	mg/L	THALLIUM	0.002	mg/L
CYANIDE (free CN)	0.2	mg/L			

** The lead and copper primary MCLs are applicable only to bottled, vended, retail and bulk water hauling systems

Microbiological Contaminants: PRESENCE OR ABSENCE OF TOTAL COLIFORMS BASED ON NUMBER OR PERCENTAGE OF TOTAL COLIFORM POSITIVE SAMPLES/MONTH OR FECAL COLIFORM OR E.COLI POSITIVE ROUTINE OR CHECK SAMPLES

Turbidity 1 NTU (applicable only to unfiltered surface water sources)

**PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF DRINKING WATER MANAGEMENT
MAXIMUM CONTAMINANT LEVELS (MCLs)**

SECONDARY CONTAMINANTS

ALUMINUM	0.2	mg/L	MANGANESE	0.05	mg/L
CHLORIDE	250	mg/L	ODOR	3 T.O.N	
COLOR	15	color units	pH *	6.5 - 8.5	
CORROSIVITY		non-corrosive	SILVER	0.1	mg/L
FOAMING AGENTS	0.5	Mg/L	SULFATE	250	mg/L
IRON	0.3	Mg/L	TOTAL DISSOLVED SOLIDS	500	mg/L
			ZINC	5	mg/L

*The pH MCL represents a "reasonable goal for drinking water quality."

Notes:

mg/L = milligrams per liter = parts per million; μ g /L = micrograms per liter = parts per billion;
pCi/L = picocuries per liter (particle activity); mrem/yr = millirems/yr (annual dose equivalent)
 μ m = micrometers; T.O.N. = threshold odor number

Chapter 109, Safe Drinking Water Regulations, defines MCL and MRDL as follows:

MCL (Maximum Contaminant Level) – the maximum permissible level of a contaminant in water which is delivered to a user of a public water system, and includes the primary and secondary MCLs established under the Federal Safe Drinking Water Act, and MCLs adopted under the act. For MCLs incorporated into this chapter by reference, the term refers to the numerical value and the means of determining compliance with that value and does not refer to the EPA applications to specific types of public water systems or sources.

MRDL (Maximum Residual Disinfectant Level) – the maximum permissible level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. The consumer's tap means the entry point for bottled water and vended water systems, retail water facilities and bulk water hauling systems.

TABLE 1.

**Option 1: Conventional Iron Filter
Cost Estimate**

Item	Description	Quantity	Unit	Unit Cost	Total Cost
1	Filter Equipment Cost and Installation				
	a. Filter Equipment (Filtronics)	2	EA	\$ 210,150.00	\$ 420,300.00
	b. Installation	1	LS	\$ 315,230.00	\$ 315,230.00
2	Building (32' X 30')	960	SF	\$ 100.00	\$ 96,000.00
3	Electrical	1	LS	\$ 20,000.00	\$ 20,000.00
4	Miscellaneous Yard Piping	1	LS	\$ 10,000.00	\$ 10,000.00
5	Miscellaneous Concrete	15	CY	\$ 200.00	\$ 3,000.00
	Subtotal Construction				\$ 864,530.00
	Contingency (10%)				\$ 86,453.00
	Estimated Total Construction				\$ 950,983.00
	Engineering Basic Services (8.5%)				\$ 80,834.00
	Inspection (5%)				\$ 47,549.00
	Legal				\$ 1,000.00
	Administration				\$ 1,000.00
	Total Estimated Project				\$ 1,081,366.00
	Round to				\$ 1,081,000.00
	Estimated Annual O&M				
	Labor (2 hours/day, 5 days/week, @ \$20/hour)				\$ 10,400.00
	Heat/Electric				\$ 3,500.00
	Chemicals				\$ 8,000.00
	Parts and repairs				\$ 5,000.00
	Estimated Annual O&M				\$ 26,900.00
	Monthly Debt Service for Iron Filter (6.0%, 20 year term)				(\$7,744.62)
	Monthly Debt Service per customer at 1,075 customers (estimated)				(\$7.20)
	Additional Monthly O&M per customer for Iron Filter (estimated)				(\$2.09)
	Existing Bill for 1,500 gallons (\$6.97/1,000 gallons)				(\$10.46)
	Estimated Total Monthly cost to customer with Iron Filter Treatment				(\$19.74)
	Approximate User Fee Increase Per Month (Existing Bill est. \$10.50/mo.)				(\$9.29)

TABLE 2.

Option 2: AERALATER Iron Filter

Cost Estimate

Item	Description	Quantity	Unit	Unit Cost	Total Cost
1	Filter Equipment Cost and Installation				
	a. Filter Equipment (WesTech)	2	EA	\$ 235,000.00	\$ 470,000.00
	b. Installation	1	LS	\$ 352,500.00	\$ 352,500.00
2	Building (35' X 20')	700	SF	\$ 100.00	\$ 70,000.00
3	Electrical	1	LS	\$ 20,000.00	\$ 20,000.00
4	Miscellaneous Yard Piping	1	LS	\$ 10,000.00	\$ 10,000.00
5	Miscellaneous Concrete	15	CY	\$ 200.00	\$ 3,000.00
	Subtotal Construction				\$ 925,500.00
	Contingency (10%)				\$ 92,550.00
	Estimated Total Construction				\$ 1,018,050.00
	Engineering Basic Services (8.5%)				\$ 86,534.25
	Inspection (5%)				\$ 50,902.50
	Legal				\$ 1,000.00
	Administration				\$ 1,000.00
	Total Estimated Project				\$ 1,157,486.75
	Round to				\$ 1,157,000.00
	Estimated Annual O&M				
	Labor (2 hours/day, 5 days/week, @ \$20/hour)				\$10,400.00
	Heat/Electric				\$3,500.00
	Chemicals				-
	Parts and Repairs				\$5,000.00
	Estimated Total Annual O&M				\$18,900.00
	Monthly Debt Service for Iron Filter (6.0%, 20 year term)				(\$8,289.11)
	Monthly Debt Service per customer at 1,075 customers (estimated)				(\$7.71)
	Additional Monthly O&M per customer for Iron Filter (estimated)				(\$1.47)
	Existing Bill for 1,500 gallons (\$6.97/1,000 gallons)				(\$10.46)
	Estimated Total Monthly cost to customer with Iron Filter Treatment				(\$19.63)
	Approximate User Fee Increase Per Month (Existing Bill est. \$10.50/mo.)				(\$9.18)

TABLE 3.

Option 3: Hidden Valley Waterline Extension - Jefferson Township Water System

Cost Estimate

Item	Description	Quantity	Unit	Unit Cost	Total Cost
1	Waterline				
	a. 6" Diameter (C900 or C909 PVC)	7,500	LF	\$ 45.00	\$ 337,500.00
	b. 6" Diameter DI	1,000	LF	\$ 60.00	\$ 60,000.00
2	Gate Valves and Boxes				
	a. 6"	4	EA	\$ 1,500.00	\$ 6,000.00
3	Fire Hydrant Installation	2	EA	\$ 3,000.00	\$ 6,000.00
4	Water Service Connection				
	a. 3/4" w/ Meter Pit	10	EA	\$ 1,800.00	\$ 18,000.00
5	Booster Pump Station	1	LS	\$ 250,000.00	\$ 250,000.00
6	Restoration (included in item 1)				
7	Miscellaneous Concrete	15	CY	\$ 200.00	\$ 3,000.00
	Subtotal Construction				\$ 680,500.00
	Contingency (10%)				\$ 68,050.00
	Estimated Total Construction				\$ 748,550.00
	Engineering Basic Services (8.5%)				\$ 63,626.75
	Inspection (5%)				\$ 37,427.50
	Legal				\$ 1,000.00
	Administration				\$ 1,000.00
	Total Estimated Project				\$ 851,604.25
	Round to				\$ 852,000.00
	Monthly Debt Service for Waterline (3.0%, 20 year term)				(\$4,725.17)
	Monthly Debt Service per customer at 1,075 customers				(\$4.40)
	Monthly O&M per customer (est. \$5,000/yr)				(\$4.65)
	JTMA Average water bill for 1,500 gallon/month @ \$6.30/1,000				(\$9.45)
	HVUS Average water bill for 1,500 gallon/month @ \$6.97/1,000				(\$10.46)
	Estimated Total Monthly cost to customer with JTMA Connection				(\$18.50)
	Approximate User Fee Increase Per Month (Existing Bill est. \$10.50/mo.)				(\$8.04)

TABLE 4.

Option 4: Seven Springs Waterline Extension

Cost Estimate

Item	Description	Quantity	Unit	Unit Cost	Total Cost
1	Waterline				
	a. 6" Diameter (C900 or C909 PVC)	0	LF	\$ 45.00	\$ -
	b. 6" Diameter DI	27,500	LF	\$ 60.00	\$ 1,650,000.00
2	Gate Valves and Boxes				
	a. 6"	20	EA	\$ 1,500.00	\$ 30,000.00
3	Fire Hydrant Installation	-	EA	\$ 3,000.00	\$ -
4	Water Service Connection				
	a. 3/4" w/ Meter Pit	5	EA	\$ 1,800.00	\$ 9,000.00
5	Booster Pump Station	1	LS	\$ 250,000.00	\$ 250,000.00
6	Restoration (included in item 1)				
7	Miscellaneous Concrete	15	CY	\$ 200.00	\$ 3,000.00
	Subtotal Construction				\$ 1,942,000.00
	Contingency (10%)				\$ 194,200.00
	Estimated Total Construction				\$ 2,136,200.00
	Right of Ways	5	EA	\$ 500.00	\$ 2,500.00
	Engineering Basic Services (8.5%)				\$ 181,577.00
	Inspection (5%)				\$ 106,810.00
	Legal				\$ 1,000.00
	Administration				\$ 1,000.00
	Total Estimated Project				\$ 2,429,087.00
	Round to				\$ 2,429,000.00
	Monthly Debt Service for Waterline (3.0%, 20 year term)				(\$13,471.18)
	Monthly Debt Service per customer at 1,075 customers				(\$12.53)
	Monthly O&M per customer (est. \$10,000/yr)				(\$9.30)
	SSMA Average water bill for 1,500 gallon/month @ \$5.80/1,000				(\$8.70)
	HVUS Average water bill for 1,500 gallon/month @ \$6.97/1,000				(\$10.46)
	Estimated Total Monthly cost to customer with JTMA Connection				(\$30.53)
	Approximate User Fee Increase Per Month (Existing Bill est. \$10.50/mo.)				(\$20.08)

APPENDIX B

Project Hidden Valley Utility Services, L.P.
 Calculated By FDN Date 10/15/2018
 Checked By BRS Date 10/15/2018
 Subject Water System Total Project Cost Estimates



**Hidden Valley Utility Services, L.P.
 Water System Construction Estimates**

Option 1: Conventional Iron Filter

Item	Quantity	Unit Price	Total Price
1. Filter Equipment Cost and Installation			
a. Filter Equipment	1	LS \$450,000.00	\$450,000.00
b. Installation	1	LS \$350,000.00	\$350,000.00
2. Building (32' x 30')	960	SF \$200.00	\$192,000.00
3. Electrical	1	LS \$30,000.00	\$30,000.00
4. Miscellaneous Yard Piping	1	LS \$30,000.00	\$30,000.00
5. Miscellaneous Concrete	30	CY \$250.00	\$7,500.00
6. Structural Backfill	50	CY \$125.00	\$6,250.00
7. Site Development	1	LS \$20,000.00	\$20,000.00
8. Backwash Sand Filter	1	LS \$100,000.00	\$100,000.00
Subtotal Construction			\$1,185,750.00
Contingency (10%)			\$118,575.00
Engineering - Basic Services	8.4%		\$100,000.00
Engineering - Construction Inspection (6 month Construction Period)			\$70,000.00
Engineering - Additional Services (Est.)			\$33,500.00
Public Water Supply Permit		\$7,500.00	
Building Permit(s)		\$4,000.00	
Geotechnical Investigation		\$10,000.00	
Preparation of Land Development and Survey		\$8,000.00	
Operation and Maintenance Manuals		\$3,000.00	
Right-of-Way Sketch(s)		\$1,000.00	
Legal			\$10,000.00
Administration/Certified Operator Effort			\$10,000.00
Total Estimated Project Cost			\$1,527,825.00

- Notes: 1. Equipment Unit Costs and Installation Costs are Based on CME Engineering, LP Report dated February 26, 2016.
 2. Unit Prices increased to adjust for rising cost of construction.
 3. Addition of Backwash Filter. Backwash from filter should be filtered prior to disposal in existing wastewater treatment plant. High concentrations of iron and manganese may have detrimental effects on the wastewater treatment process.

Project Hidden Valley Utility Services, L.P.
 Calculated By FDN Date 10/15/2018
 Checked By BRS Date 10/15/2018
 Subject Water System Total Project Cost Estimates



**Hidden Valley Utility Services, L.P.
 Water System Construction Estimates**

Option 2: Jefferson Township Water System Interconnection

Item	Quantity	Unit Price	Total Price
1. Waterline			
a. 6" Diameter	8,500 LF	\$55.00	\$467,500.00
2. Gate Valves	8 EA	\$2,000.00	\$16,000.00
3. Fire Hydrants	2 EA	\$3,500.00	\$7,000.00
4. Water Service Connections with Meter Pit Assembly	10 EA	\$2,000.00	\$20,000.00
5. Pumping Station	1 LS	\$200,000.00	\$200,000.00
6. Intermediate Pumping Station	1 LS	\$200,000.00	\$200,000.00
7. Intermediate Water Tank	1 LS	\$125,000.00	\$125,000.00
8. Miscellaneous Concrete	75 CY	\$250.00	\$18,750.00
Subtotal Construction			\$1,054,250.00
Contingency (10%)			\$105,425.00
Engineering - Basic Services	8.5%		\$90,000.00
Engineering - Construction Inspection (6 month Construction Period)			\$70,000.00
Engineering - Additional Services (Est.)			\$40,000.00
Public Water Supply Permit	\$5,000.00		
Building Permit(s)	\$4,000.00		
Geotechnical Investigation	\$10,000.00		
Preparation of Land Development and Survey	\$8,000.00		
Operation and Maintenance Manuals	\$3,000.00		
Right-of-Way Sketch(s) (Est. Total of 20)	\$10,000.00		
Legal			\$25,000.00
Administration/Certified Operator Effort			\$10,000.00
Total Estimated Project Cost			\$1,394,675.00

- Notes: 1. Waterline diameters and lengths are Based on CME Engineering, LP Report dated February 26, 2016.
 2. Unit Prices increased to adjust for rising cost of construction.
 3. Additional Pump Station and Intermediate Tank included in estimate. Jefferson Township Water and Sewer Authority indicated concerns over high pressure involved with only one (1) pump station.
 4. Additional gate valves included for isolation purposes in lieu of a break.

VERIFICATION

I, James Ketter, hereby state that the facts set forth above 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).

Date: October 18, 2018

James Ketter

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Tanya J. McCloskey, Acting Consumer Advocate	:	
	:	
	:	Docket No. C-2014-2447138
v.	:	
	:	
Hidden Valley Utility Services, L.P. – Water	:	
	:	
and	:	
	:	
Tanya J. McCloskey, Acting Consumer Advocate	:	
	:	
	:	Docket No. C-2014-2447169
v.	:	
	:	
Hidden Valley Utility Services, L.P. – Wastewater	:	

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing **Petition to Amend the Order of May 3, 2018** upon the parties, listed below, in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a party).

VIA FIRST CLASS MAIL:

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Counsel for *Hidden Valley Foundation, Inc.*

DATED: October 18, 2018



Jonathan P. Nase, Esquire
Counsel for *Hidden Valley Utility Services, L.P.*