Status Report:

John Musgrave is not available for a hearing on October 11-October 15, November 22 in the morning, and January 12 in the morning.

John Musgrave has filed a join stipulations with PWSA.

Revised Witnesses for Complainant John Musgrave 9/30/22 Docket No. C-2020-3020714

Tracy Smith Open Records Officer PWSA 1200 Penn Avenue Pgh., PA 15222 (Expert Witness) <u>Expected Testimony</u>: Verification of documents sent to Complainant and residents of 6055 Bunkherhill pertaining to the public vs. private nature of the water line at the end of Bunkerhill Street which has bearing upon who has maintenance responsibility of the water line.

Judith Musgrave 6059 Bunkerhill Street Pgh., PA 15206 (Fact/Lay Witness)

Expected Testimony: She will testify that there was a water line break in her rock garden which PWSA repaired at no charge circa 2007. She will testify that there was a water line break near 6059 Bunkerhill Street circa 1/22/18 which caused her yard and basement to be flooded. She will testify that she had to contribute to paying RDN Plumbing to make the repair of this break. She will testify that she contributed to paying RDN Plumbing for a water line break at 6045 Bunkerhill circa 2/13/18. She will testify that she contributed to paying Beverly Services to try to repair a water line break at 6041 Bunkerhill circa 7/27/20. She will testify that she bought bottled water and clean ice due to reports of low chlorine in her drinking water. She will testify that her son, John Musgrave, tested the chlorine level in their drinking water in their home and at the hydrant many times and communicated with PWSA lab and PWSA water testers regularly. She will testify that the fire hydrant at the end of Bunkerhill was opened on many occasions and was even allowed to run continuously for days on end in an effort to increase chlorine levels in her drinking water. She will testify that hoses needed to be purchased by her household for the purpose of conveying water from the hydrant to her home. She will testify that her son was given the responsibility of connecting the hoses from the hydrant to her home by PWSA. She will testify that there is no mention of a private water line on her deed. She will testify to the location of her curb stop before and after the work performed in the fall of 2020. She will testify to the location of her crock. She will testify that it is difficult to see her crock because it is some 200 feet away with trees, bushes, and cars blocking her view. She will testify that she has no agreement with 6045 Bunkerhill to protect her crock.

Dell and Kathy Ziegler 6041 Bunkerhill Street Pgh., PA 15206 (Fact/Lay Witness)

<u>Expected Testimony</u>: They will testify that there was a water line break under the street between 6041 and 6045 Bunkerhill circa March 20, 2017 which PWSA paid to repair. They will testify that there was a water line break on their property circa 7/27/20 and that Beverly Services was paid by the last 3 houses on Bunkerhill to make this repair. They will testify that they along with 6045 and 6049 Bunkerhill broke away from the party line circa 3/14/18 by hiring RDN Plumbing to run individual service lines from each house to the main. They will testify if any expert was consulted to assess how the leaving of 3 homes from the party line would affect the water quality of the remaining 3 homes on the party line. They will testify that the fire hydrant was opened for days on end. The will testify to the location of their curb stop and crock before and after the work performed in the fall of 2020.

Brooke McCartney and Justin Crowley 6045 Bunkerhill Street Pgh., PA 15206 (Fact/Lay Witnesses)

Expected Testimony: They will testify that circa March 20, 2017 there was a water line break under the street between 6041 and 6045 Bunkerhill which PWSA repaired. They will testify that circa 2/13/18 there was a water line break in their yard which RDN Plumbing repaired at the cost of the last 6 houses on the street. They will testify that they along with 6041 and 6049 Bunkerhill broke away from the party line circa 3/14/22 by hiring RDN Plumbing to run individual service lines from each house to the main. They will testify if any expert was consulted to assess how the leaving of the 3 homes from the party line would affect the water quality of the remaining 3 homes on the party line. They will testify that the fire hydrant was opened for days on end. They will testify to the location of their curb stop and crock before and after the work performed in the fall of 2020. She will testify that she currently has the crocks of 6045, 6049, 6053, 6055, and 6059 on her property next to her driveway. Brooke will testify that when John Musgrave tested a water sample from her house on 8/24/19 it was found to have a low chlorine concentration even though she was off of the party line and had an individual water line run to the main at this time.

Andrew McFarland and Rebecca Price 6049 Bunkerhill Street Pgh., PA 15206 (Fact/Lay Witnesses)

<u>Expected Testimony</u>: They will testify that there was a water line break in their yard circa winter / spring of 2015 which was repaired by PWSA. They will testify that they along with 6041 and 6045 Bunkerhill broke away from the party line circa 3/14/20 by hiring RDN Plumbing to run individual service lines from each house to the main. They will testify if an expert was consulted to assess how the leaving of 3 homes from the party line would affect the water quality of the remaining 3 homes on the party line. They will testify that the fire hydrant was opened for days on end. They will testify to the location of their curb stop and crock before and after the work performed in the fall of 2020.

Karen Toole 6053 Bunkerhill Street Pgh., PA 15206 (Fact/Lay Witness)

<u>Expected Testimony</u>: She will testify that there was a water line break near her property circa 1/22/18 for which RDN Plumbing was hired to repair. She will testify that the fire hydrant on Bunkerhill was opened for days on end. She will testify that John Musgrave met with PWSA employee Frank Davis several times for the purpose of testing the water quality at the hydrant. She will testify that she had to buy hose to be run by John Musgrave and her from the hydrant to her home. She will testify that she helped to instruct John Musgrave on how to dig a trench in his back yard at 6059 Bunkerhill to prevent further flooding of his basement when the water line broke circa 1/22/18. She will testify to the location of her curb stop and crock before and after the work performed in the fall of 2020.

Vivian Loftness and Volker Hartkopf 6055 Bunkerhill Street Pgh., PA 15206 (Fact/Lay Witnesses) Expected Testimony: They will testif

<u>Expected Testimony</u>: They will testify that there was a water line break near their property circa 1/22/18 for which RDN Plumbing was hired to repair. They will testify that the fire hydrant on Bunkerhill was opened for days on end. They will testify that they had to buy a hose which was run by John Musgrave and Volker Hartkopf from the hydrant to their home. They will testify that they are often out of the country during the summer which lessens the amount of water they consume at their residence during the summer. They will testify that they have read evidence supplied by PWSA in 2018 pertaining to the public vs. private nature of the water line at the end of Bunkerhill Street. They will present these documents including any mail envelope and explain how they acquired these documents. The will testify to the location of their curb stop and crock before and after the work performed in the fall of 2020.

Anne Massey 6035 Bunkerhill Street Pgh., PA 15206 (Fact/Lay Witness)

<u>Expected Testimony</u>: She saw John Musgrave taking testing water samples from the hydrant. She saw the hydrant being opened for days on end. She had her water quality tested by an independent water testing company and may be willing to share these results. John Musgrave found low chlorine concentration in her water on 8/14/20.

Michael Czypinski Water Quality Data Manager PWSA 1200 Penn Ave. Pgh., PA 15222 (Expert Witness)

<u>Expected Testimony</u>: He will testify that he was called by John Musgrave many times about low chlorine levels which John had tested on Bunkerhill. Michael will testify that in response to these calls he ordered PWSA to test the chlorine levels and to blow out the hydrant on Bunkerhill to draw more freshly chlorinated water to the end of Bunkerhill. He will testify that he told John Musgrave to flush his water for 20 minutes each morning before drinking any of it. He will testify to the chlorine levels that were being found on Bunkerhill and whether a flow regulator was used in the measurements.

Diana Szuch Water Production Administrator PWSA 1200 Penn Ave. Pgh., PA 15222 (Expert Witness) <u>Expected Testimony</u>: She was called several times by John Musgrave regarding low chlorine concentrations at the end of Bunkerhill. PWSA Emergency Dispatch
(Melissa, Debra, Shannon, etc.)
1200 Penn Ave.
Pgh., PA 15222
(Fact/Lay Witness)
<u>Expected Testimony</u>: They were called numerous times by John Musgrave concerning low chlorine concentrations at the end of Bunkerhill.

Frank Davis
Environmental Compliance Coordinator
PWSA
1200 Penn Ave.
Pgh., PA 15222
(Expert Witness)
<u>Expected Testimony</u>: He will testify that he measured some low chlorine levels at 6059
Bunkerhill Street, the Bunkerhill hydrant, and the Sheridan hydrant. He was informed by the
DEP about how to get more accurate readings of the chlorine level at the Bunkerhill hydrant using a flow regulator. He will testify that he did not always have the flow regulator available to him to test the chlorine level at the Bunkerhill hydrant and therefore, some of his chlorine measurements may not have been accurate. He will testify that he opened the Bunkerhill hydrant to bring fresh water with more chlorine to the end of Bunkerhill on many occasions.

Robert Gomez Chemist 1 Water Quality Team PWSA 1200 Penn Ave. Pgh., PA 15222 (Expert Witness) <u>Expected Testimony</u>: He took chlorine measurements from the Bunkerhill hydrant during the weekend when the flow regulator was not available, so his test findings may be inaccurate. He found low chlorine concentrations in some water samples that he took at 6059 Bunkherhill.

Kurt Fulmer Department of Chemistry PWSA 1200 Penn Avenue Pgh., PA 15222 (Expert Witness) <u>Expected Testimony</u>: He took a water sample from the hydrant at the end of Bunkerhill without using a flow regulator on 7/19/20, so his findings may be inaccurate.

Tina Rhoades and Lloyd Steiner 1376 Sheridan Ave. Pgh., PA 15206 (Fact/Lay Witness) <u>Expected Testimony</u>: The fire hydrant at the bottom of Sheridan was frequently flushed and opened for days on end. John Musgrave tested a low chlorine concentration in their water on 8/14/20. Lathe Haynes 1381 Sheridan Ave. Pgh., PA 15206 (Fact/Lay Witness)

<u>Expected Testimony:</u> The fire hydrant at the bottom of Sheridan was frequently flushed and opened for days on end. John Musgrave tested his water to have low free chlorine concentration on 9/29/19.

Rasheed Tunde Ibrahim Associate Project Manager PWSA 1200 Penn Ave. Pgh., PA 15222 (Expert Witness)

<u>Expected Testimony</u>: The piping configuration of the main water line at the end of Bunkerhill was changed in the fall of 2020 to improve the chlorine concentration to the homes at the end of Bunkerhill. He will be able to explain the changes that occurred in the piping configuration and provide drawings.

Sarah Bolenbaugh, PE Senior Group Manager Water Programs PWSA 1200 Penn Ave. Pgh., PA 15222 (Expert Witness)

<u>Expected Testimony</u>: The piping configuration of the main water line at the end of Bunkerhill was changed in the fall of 2020 to improve chlorine concentration to the homes at the end of Bunkerhill. She will be able to explain the changes that occurred in the piping configuration and provide drawings.

Brent Lahaie, PE Associate Project Manager PWSA 1200 Penn Ave. Pgh., PA 15222 (Expert Witness) <u>Expected Testimony</u>: The piping configuration of the main water line at the end of Bunkerhill was changed in the fall of 2020 to improve chlorine concentration to the homes at the end of Bunkerhill. He will be able to explain the changes that occurred in the piping configuration and provide drawings.

Zachary Shoff Sanitarian PA Dept. of Environmental Protection Bureau of Safe Drinking Water Southwest Region Office 400 Waterfront Drive Pgh., PA 15222 (Expert Witness) Expected Testimony: John Musgrave sent him chlorine testing data which he had taken at the end of Bunkerhill showing low chlorine levels. Jeffrey Czochara Plumbing Inspector Allegheny County Health Department Plumbing Section SA#1 Clack Health Center Building #5 3901 Penn Ave. Pgh., PA 15224 (Expert Witness)

<u>Expected Testimony</u>: He inspected 6059 Bunkerhill on 2/5/18 concerning the water line break. He can report on whether permits were file with the Allegheny County Health Department for the work performed at the end of Bunkerhill on the water lines. He can comment on whether the replacement of a party line requires the agreement of all homeowners. He can comment on recommended piping configurations to allow adequate chlorine concentrations. He can provide drawings showing how the piping configuration at the end of Bunkerhill was changed to improve chlorine concentration in the fall of 2020.

Ivo Miller Plumbing Program Manager Allegheny County Health Department Plumbing Division 3901 Penn Avenue Building #5 Pittsburgh, PA 15224 (Expert Witness)

<u>Expected Testimony</u>: John Musgrave spoke to Ivo Miller in the fall of 2020 concerning the water lines on the end of Bunkerhill and the low chlorine concentration. Mr. Miller will testify to how the piping configuration was changed to improve chlorine concentration in the fall of 2020. Mr. Miller will testify that proper permits were filed and inspections were made with the Allegheny County Health Department Plumbing Division. Mr. Miller can provide drawings of the construction plans to show how the piping at the end of Bunkerhill changed to improve the chlorine concentration.

Julie Quigley Director of Customer Service PWSA 1200 Penn Ave. Pgh., PA 15222 (Expert Witness) Expected Testimony: She reco

<u>Expected Testimony</u>: She received calls from John Musgrave concerning low chlorine levels and that the men from PWSA doing chlorine testing at the Bunkerhill hydrant were not always using the flow regulator, so their results may be inaccurate.

Rich Obermeier Director of Field Services PWSA 1200 Penn Ave. Pgh., PA 15222 (Expert Witness)

<u>Expected Testimony</u>: At a meeting of the street residents which was held at John Musgrave's home, he said that the only way for us to get clean water was to connect a water line from the Bunkerhill hydrant to the water line at the bottom of Heberton and that PWSA would be studying feasibility of this project. He told John Musgrave to buy hoses to run them from the Bunkerhill hydrant to the homes at 6053, 6055, and 6059 Bunkerhill to supply them with water. John Musgrave reported low chlorine concentrations to him on several occasions.

RDN Plumbing LLC Jerry Johnson General Manager 1060 Forest Ave. West Homestead, PA 15120 (Expert Witness)

<u>Expected Testimony</u>: They will testify that they were paid by money collected from the last 6 houses on Bunkherhill to repair the water line breaks circa 1/22/18 near 6059 Bunkerhill and circa 2/13/18 at 6045 Bunkerhill. They will testify that they were hired by 6041, 6045, and 6049 Bunkerhill to break them off of the party line and to run individual water lines from each of these 3 homes to the main. They will testify if they received permission from PWSA and the Allegheny County Health Department to perform this work. They will testify if any consideration was given to the water quality of the remaining 3 houses on the party line once these 3 houses broke off.

Beverly Services (Plumbing) 3044 Industrial Blvd.

Bethal Park, PA 15102

(Expert Witness)

<u>Expected Testimony</u>: They will testify that they tried to repair the water line break under the street at 6041 Bunkerhill on 7/27/20, but that they had to abandon the project due the deteriorated condition of the water line. They will testify that they were paid by the residents of 6059, 6053, and 6055 Bunkerhill for the work that they performed. They will testify that the repairing of the multiple breaks on the main line may have hastened the demise of the party line.

Michael Facchiano Contracting 801 McNeilly Road #4 Pittsburgh, PA 15226 (Expert Witness)

<u>Expected Testimony</u>: They will provide drawings and explanation about how the piping configuration at the end of Bunkerhill was changed to improve chlorine concentration. They will testify that the original price they gave the last 3 houses on Bunkerhill for paving the end of Bunkerhill was raised after the water lines were installed. They can testify to the original location curb stops for 6059, 6055, and 6053 Bunkherhill. They can testify to the new location of the curb stops and crocks for 6059, 6055, and 6053 Bunkerhill.

Jeff Allgyer Environmental Group Manager Dept. of Environmental Protection Rachel Carson State Office Building 400 Market Street Harrisburg, PA 17101 (Expert Witness)

<u>Expected Testimony</u>: He will testify to laws concerning safe chlorine levels in drinking water. He will define "distribution system" and how water quality must be maintained throughout the distribution system. He will testify that he received a call from John Musgrave concerning low chlorine levels. He will testify that he discussed with PWSA where they should be taking their water samples and the proper technique and equipment needed to acquire an accurate reading of chlorine concentration at the end of Bunkerhill. John Thomas Environmental Group Manager (Operations) Safe Drinking Water PA Dept. of Environmental Protection Southwest Region Office 400 Waterfront Drive Pgh., PA 15222 (Expert Witness) <u>Expert Testimony</u>: He will testify that he received chlorine test results from PWSA for the end of Bunkerhill, but that it was unclear how long the hydrant had been left open when the samples were taken.

Renee Diehl Environmental Program Manager Safe Drinking Water PA Dept. of Environmental Protection Southwest Region Office 400 Waterfront Drive Pgh., PA 15222 (Expert Witness) <u>Expected Testimony</u>: She will testify that she was told by John Musgrave of low chlorine levels at the end of Bunkerhill. She will testify that she received water samples from John Musgrave to be tested at the lab. Tom McCaffrey Source Water Protection Coordinator PA Department of Environmental Protection Southwest Region Office 400 Waterfront Drive Pgh., PA 15222 (Expert Witness) <u>Expected Testimony</u>: He received a water sample from John Musgrave. He will testify that bacteria can live in the lining of water line pipes and enter the water supply when there is no chlorine.

Alan Eichler Oil and Gas Program PA Department of Environmental Protection Southwest Region Office 400 Waterfront Drive Pgh., PA 15222 (Expert Witness) Expected Testimony: He called John Musgray

<u>Expected Testimony</u>: He called John Musgrave on 5/21/18 after John dropped off a water sample to be tested at the DEP Southwest Region Office. He said the he would be contacting PWSA on behalf of John Musgrave's concerns about low chlorine concentration at the end of Bunkerhill.

John Musgrave 6059 Bunkerhill Street Pittsburgh, PA 15206 (Fact / Lay Witness)

Expected Testimony: There is no mention of a private water line on the deed for 6059 Bunkerhill Street. John Musgrave solicited PWSA for records pertaining to the private vs. public nature of the water line at the end of Bunkerhill Street. PWSA mailed him a number of such documents. There was a water line break in the rock garden of 6059 circa 2007 which PWSA repaired. There was a water line break circa 1/22/18 near 6059 Bunkerhill Street for which RDN Plumbing was hired by the last 6 houses on Bunkerhill to repair. There was a water line break at 6041 Bunkerhill circa 7/27/20 which Beverly Services tried to fix but had to abandon due to the deteriorated condition of the lines. The last 3 houses on Bunkerhill paid for this attempted repair. John Musgrave tested the free chlorine and total chlorine levels in the water at his home, the hydrant on Bunkerhill, and at some of his neighbor's homes. He found low chlorine levels at times which prompted him to buy bottled water and clean ice for his own safety. He took water samples to the DEP to be tested for coliform bacteria to make sure he would not become sick if he mistakenly happened to swallow some water from the tap. He called Mike Czypinski at the PWSA lab, PWSA Emergency Dispatch, and others many times to report low chlorine levels. He witnessed PWSA employees opening the Bunkerhill and Heberton hydrants to bring more chlorinated water into the area to improve the chlorine concentration. He witnessed the Bunkerhill hydrant being left open for days on end and an automated hydrant flusher be installed to bring more chlorinated water to the end of Bunkerhill. He learned from Frank Davis how a flow regulator needed to be used to get an accurate measurement of the chlorine concentration in the water that the residents at the end of Bunkerhill were actually using. John Musgrave witnessed that the PWSA employees did not always use the flow regulator when taking their chlorine samples making their measurements inaccurate. The curb stop at 6059 Bunkerhill was moved from a location in the rock garden approximately 9 feet from the side of the house to a location on the property of his neighbor at 6045 Bunkerhill which is about 200 feet away. He will testify that it is difficult to see his crock from his home because his crock is located some 200 feet away in his neighbor's yard which is blocked from clear view by trees, bushes, and cars. He will testify that he does not have an agreement with his neighbor at 6045 Bunkherhill to protect his crock. At the request of Rick Obermeier from PWSA, John purchased and installed hoses which he ran from the Bunkerhill hydrant to his home. He also assisted 6053 and 6055 in running their hoses from the hydrant.

Howard Ames 6031 Bunkerhill Street Pittsburgh, PA 15206 (Fact / Lay Witness)

<u>Expected Testimony</u>: He is able to testify that there were multiple breaks on the main line. He is able to testify that his water was turned on and off when the main line repairs occurred. He can testify to the heavy machinery used to make the main line repairs. He can testify that there may have been vibration of the main line during repairs that in turn vibrated the party line which connected to it.

Red and Kathy Whittaker 6030 Bunkerhill Street Pittsburgh, PA 15206 (Fact / Lay Witnesses)

<u>Expected Testimony</u>: They are able to testify that there were multiple breaks on the main line. They are able to testify that their water was tuned off and on when the main line repairs occurred. They can testify to the heavy machinery used to make the main line repairs. They can testify that there may have been vibration of the main line during repairs that in turn vibrated the party line which connected to it.

Mora McLaughlin Construction Communications Project Manager PWSA 1200 Penn Avenue Pittsburgh, PA 15222 (Expert Witness) <u>Expected Testimony</u>: She can testify that there was a man hired by PWSA to photograph the location of the original curb stop at 6059 Bunkerhill after the ground cover was removed and the pipes and valves were exposed.