THE MUNICIPAL AUTHORITY OF THE TOWNSHIP OF WASHINGTON CORRECTIVE ACTION PLAN SCHEDULE AND PROGRESS REPORT ATTACHMENT

Report Period 7/1/2023 to 12/31/2023

The Municipal Authority of the Township of Washington's (MATW) staff continues to investigate sources of infiltration and inflow (I/I) to reduce the peak wet weather flows being conveyed to the Lynnwood Pump Station as well as the Washington Heights Pump Station. These efforts consist of visual inspections, dye testing and camera inspections of residential sewer lateral lines.

In November 2018, MATW discovered two sump pumps at an apartment building that were directing stormwater into the sewage collection system. It was estimated at the time that this source was contributing up to 30,000 gpd into the collection system.

On March 13, 2019, the Township of Washington passed a dye testing ordinance that requires dye testing of any sale, transfer or refinancing of a property connected to the sanitary sewer system. To date, the MATW has inspected 16 properties and discovered four (4) properties that were in violation. These violations have been corrected.

In March 2019, MATW discovered that the seal between the Lynnwood Pump Station and its wet well was leaking. This seal was pressure grouted using a hydrophilic polyurethane resin, eliminating the source of infiltration.

In April 2019, MATW discovered a driveway drain connected to the sewage collection system that was taking on stormwater from the driveway and the downspouts from the adjacent house. This violation was in the area of the Washington Heights Pump Station and has been corrected.

In June 2019, MATW contracted with W. C. Weil Company to conduct yearly maintenance inspections of all three (3) of its sewage pump stations. The first inspection was June 27, 2019.

In August 2019, MATW installed four (4) manhole inserts in areas of suspected surface inflow and conducted visual inspections during rain events.

In September 2019, MATW performed smoke testing in cooperation with the Pennsylvania Rural Water Association. The testing found nineteen (19) broken or missing caps, two (2) broken or separated laterals, and one (1) downspout that was connected to the sanitary sewer. The Authority notified these customers to repair these deficiencies. Additionally, five (5) manhole inserts were installed in areas of suspected surface inflow, a leaking manhole was grouted and sealed, and risers were installed on three (3) manholes.

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In October 2019, additional smoke testing was performed on forty-one (41) homes. Twelve (12) violations were found, with ten (10) violations repaired immediately. The remaining two (2) violations consisted of laterals that were broken and separated and were in the process of being repaired. Three (3) manhole risers were also installed, and one (1) lamphole was repaired at Grove Avenue.

In November 2019, additional smoke testing was performed, and several violations were discovered. Additionally, MATW personnel found two (2) violations by making observations during rainfall events.

A leaking manhole was grouted and repaired, and several main sewer lines in the Lynnwood and Washington Heights areas were cleaned, flushed, and camera inspected by State Pipe. Four (4) manhole risers were installed. A broken sewer lateral identified during smoke testing in October on Delmont Avenue was repaired.

In December 2019, MATW discovered a major source of I/I by performing dye testing along Vernon Avenue that has been corrected. Additionally, the Authority identified another source of inflow along Vernon Avenue, and this source has been repaired.

In January 2020, a french drain was installed at the Lynnwood Pump Station to direct groundwater away from the pump station. In February 2020, each of the Authority's pump stations were cleaned to maximize available capacity in the wet wells.

In May 2020, six (6) homes were found to be in violation for surface water inflow within the Lynnwood collection system. Additionally, four (4) sewer cap violations were discovered. The Authority also installed two (2) manhole inserts and also made repairs to two (2) additional manholes. In June 2020, the Authority completed manhole repairs on one (1) manhole within the Lynwood collection system.

In the first half of 2020, the Authority performed ten (10) dye tests and found six (6) violations, all of which have been corrected. In the second half of 2020, the Authority performed eighteen (18) dye tests and found five (5) violations, all of which have been corrected. Additionally, the Authority discovered two (2) significant sources of inflow during a routine inspection of the collection system during a rainfall event. Both of these sources of inflow have been removed.

In the first half of 2021, the Authority performed nineteen (19) dye tests and found three (3) violations, all of which have been corrected. In the second half of 2021, the Authority performed thirty-four (34) dye tests and found sixteen (16) violations, all of which have been corrected.

In the first half of 2022, the Authority performed smoke and dye testing in the Corrective Action Plan area, found four (4) sources of I/I that were investigated and corrected. The Authority also installed flow meters in several locations and identified three (3) sources of I/I which were corrected and also conducted camera inspection of two (2) main sewer lines. Twenty-one (21) dye tests were performed and found four (4) violations, all of which have been corrected.

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In the second half of 2022, the Authority performed thirty-five (35) dye tests in the Corrective Action Plan area and found sixteen (16) violations that were corrected. The Authority also installed flow meters in several locations and also conducted camera inspection of two (2) main sewer lines.

In the first half of 2023, the Authority performed dye tests at four (4) homes and found one (1) violation (downspout and sump pump), which has been corrected. Repairs were made to a manhole that was damaged by the gas company.

In the second half of 2023, the Authority continued to performed dye tests and found one (1) violation (, stairwell, downspout and driveway drain), which has been corrected.

All of the customers that previously experienced backflow into their homes have since installed backwater valves on their sewer laterals. Despite significant rainfall events during 2020, 2021, 2022 and 2023, no sewage backups have occurred.

Corrective Action Plan Schedule and Progress Report

Reporting Period

Municipal Authority of Washington Township

None Identified 12/31/2023 Comments S. To: % of Task Complete 100 100 100 100 100 100 100 100 Yes Required Completion | Actual Completion Based on the above information, are you in compliance with the approved schedule? 7/1/2023 22-Mar 21-Jun 20-Dec 21-Jun 22-Jul 21-Jun 23-Dec Jun-20 Jun-21 Dec-21 Sep-23 Oct-23 Jul-21 Jul-22 Dec-22 Feb-24 Actual Start Date Fayette County Feb-19 Jun-18 Jun-15 Jul-15 Jun-15 22-Mar Jul-15 23-Jul Municipal Official **Proposed Start** 7/1/2015 6/1/2018 2/20/2019 3/20/2019 2/20/2022 2/20/2023 6/1/2015 7/1/2015 6/1/2015 2 3. Correct problems identified by smoke and dye testing Task Description 6. Cleaning and TV inpection of the sewers 2. Conduct dye testing and smoke testing 1. Conduct subsystem flow monitoring 8. Post-rehabilitation flow monitoring 9. Evaluate success of Phase 1 work 4. Conduct manholes inspections Taps utilized this reporting period Signature / Date 5. Repair defective manholes Tap Allocation for this year 7. Repair sewer defects Washington Township Engineer