

HSA SEWER PROJECT FAQs

Q1: Why do some residents in the Phase II project area have only 45 days to comply with the HSA water tightness regulations?

A1: Some homeowners in the Phase II project area are on a 45 day timeframe for compliance because their sewer lateral tap was relocated during construction of the new sanitary sewer main. Relocated taps are installed at the homeowner's request, or when necessary due to connection issues identified in the field during construction. Most residents that receive relocated taps are required to connect to the new system within a certain timeframe because their building sewer remains tied into the existing sewer until the homeowner's new private side lateral is constructed and connected to the relocated taps. This timeframe is necessary because the HSA's contractor is responsible for conversion of the old sanitary sewer system into a groundwater removal system, and this conversion cannot be completed with the existing sewer lateral connected to the old system.

Posted 9/19/2017

Q2: What is Infiltration and Inflow (I/I)?

A2: Infiltration is groundwater, or groundwater that is influenced by surface water, which enters sewer pipes (interceptors, collectors, manholes, or side sewers) through holes, breaks, joint failures, connection failures and other openings. Infiltration quantities often exhibit seasonal variation in response to groundwater levels. Storm events can trigger a rise in groundwater levels and increase infiltration flows. The highest infiltration flows are observed following significant storm events or following prolonged periods of precipitation.

Inflow is surface water that enters the wastewater system from yard, roof and footer drains, from cross-connections with storm drains, downspouts and sump pumps. Inflow occurs as a result of storm events such as rainfall, snowfall, springs or snow melt that contribute to excessive sewer flows. Peak inflow can occur during heavy storm events when storm sewer systems are surcharged, resulting in hydraulic backups and local ponding. Inflow and infiltration is clear water that enters the sanitary sewer system from a variety of sources.

Infiltration occurs when groundwater seeps into sewer pipes through cracks, leaky pipe joints and/or deteriorated manholes.

Inflow occurs in direct proportion to the amount of rainfall. Inflow is storm water that enters the wastewater system through rain leaders, basement sump pumps or foundation drains that are illegally connected directly to a sanitary sewer pipe.

Posted 9/21/2017

Q3: Why is I/I a problem?

A3: I/I ends up at the regional wastewater treatment plant, where it must be treated like sewage, resulting in higher treatment costs.

I/I often requires new and larger wastewater treatment facilities, conveyance systems or holding tanks to convey, store and treat larger volumes of flow. This additional infrastructure results in higher capital expenditures.

I/I flows contribute to sewer system surcharging into local homes and overflows into the region's waterways (CSOs), negatively impacting public health and the environment. It is

estimated that inflow and infiltration make up 85 percent of peak flows during winter and rain events and as much as 70 percent of this peak flow comes from privately owned sewer networks.

Protecting the environment and decreasing wastewater treatment costs are the benefit of a responsible I/I control program.

Posted 9/25/2017

Q4: Why has the HSA decided to only replace certain sections of the sanitary sewer mains?

A4: Phase I of the Sanitary Sewer Improvements Project was initiated as part of the HSA's mandated corrective action plan (CAP) for the M2 sub-basin (Legion Park Interceptor). Later, corrective action was mandated in the M11 sub-basin to address surcharging concerns in the East Fir Street area. These two CAPs were later combined into the M2/M11 Cap Plan and make up the Phase I project area.

Phase II was possible due to surplus PENNVEST monies secured by the HSA to fund the Phase I project. The Jones Street area sub-basin was selected as the focus area for the Phase II project due to its aged infrastructure, significant I/I contribution and connection to the Jones Street CSO.

Posted 9/25/2017

Q5: Why are only some portions of the Borough required to comply with the HSA's water tightness regulations?

A5: HSA regulations require that:

At the completion of all HSA mainline sewer replacement projects, all residential homes which have been provided sanitary sewer service by the Authority, must successfully pass an air or water pressure test.

Therefore, only those homes that are part of the sewer replacement project areas described above are required to meet the HSA water tightness regulations at this time.

Posted 9/25/2017

Q6: Will all of the larger public buildings in the project areas, such as the HASD buildings, churches and YMCA required to comply with the HSA water tightness regulations?

A6: Yes.

All buildings – residential, commercial and industrial – located within the project areas and connected to the HSA's new sanitary sewer main will be required to comply with the HSA's water tightness regulations. Compliance requirements for residential and commercial/industrial properties are addressed in §1703 of the HSA rules and regulations.

Posted 9/25/2017

Q7: Are there financing/funding options available to assist homeowners with the costs associated with meeting compliance with the HSA's watertightness regulations?

A7: Yes, there are financing/funding options available from the following institutions:

Institution:
S&T Bank
1100 Logan Boulevard, Altoona, PA
814-941-1080
stbank.com/hollidaysburgproject

Program Details:
Unsecured loan, minimum amount of \$2,000. APR starting @ 5.75%. Loan term based on amount borrowed. Loan to be used for the Hollidaysburg sewer line project.

Institution:
PHFA/PENNVEST
855-827-3466
www.phfa.org/programs/repairs.aspx

Program Details:
Secured loan (up to \$25,000). Up to 20 years at a fixed interest rate currently as low as 1.75%. No prepayment penalty if the loan is paid off early. Funds may be used for design charges, construction fees and costs, inspection and permit fees, and most loan origination fees.

(NEW PARTICIPANT)

Institution:
1st Summit Bank
7583 Admiral Perry Highway
Cresson, PA 16630
814-886-7527
smagnetti@1stsummit.com

Program Details:
Fixed interest rate for life of loan, currently as low as 1.75% for up to 20 years
Funds may be used for design charges, construction fees and costs, inspection and permit fees.
PHFA/PENNVEST participant

Institution:
Members Choice Financial Credit Union
800-834-0082
mcfu.org/loans/pennvest

Program Details:
Fixed interest rate for life of loan, currently as low as 1.75% for up to 20 years
Funds may be used for design charges, construction fees and costs, inspection and permit fees.
PHFA/PENNVEST participant

Institution:
Blair County CDBG Program
Contact: Trina Illig
Dept. of Social Services
Blair County Courthouse
423 Allegheny Street, Fourth Floor, Suite 441B
Hollidaysburg, PA 16648

Program Details:

Applicants who meet low to moderate income limits are eligible to apply for up to \$2,000 in grant money to assist in the repair, replacement and testing of their private sewer system.

Posted 3/26/2018

Q8: How exactly is pressure testing done? What needs to be tested?

A8: The system to be tested must first be isolated. This is done by installing a plug at each opening and connection to the building sewer (as illustrated in Figure 1). The system is then pressurized with compressed air. All buried piping, including under-slab piping, must be tested from the home to the property line. In order for the system to pass the pressure test and meet compliance with the HSA's watertightness regulations, the system must hold five (5) psi for 15 minutes.

Typical test points are as follows:

Home with Basement Service (Figure 1):

- View Port at HSA/Customer lateral transition
- Vent assembly
- Floor drains, sink drains and toilet assemblies (at or near floor level).
- Main sewer/vent stack (at or near floor level).

Home with without Basement Service (Figure 1):

- View Port at HSA/Customer lateral transition
- Vent assembly
- Building sewer at foundation wall

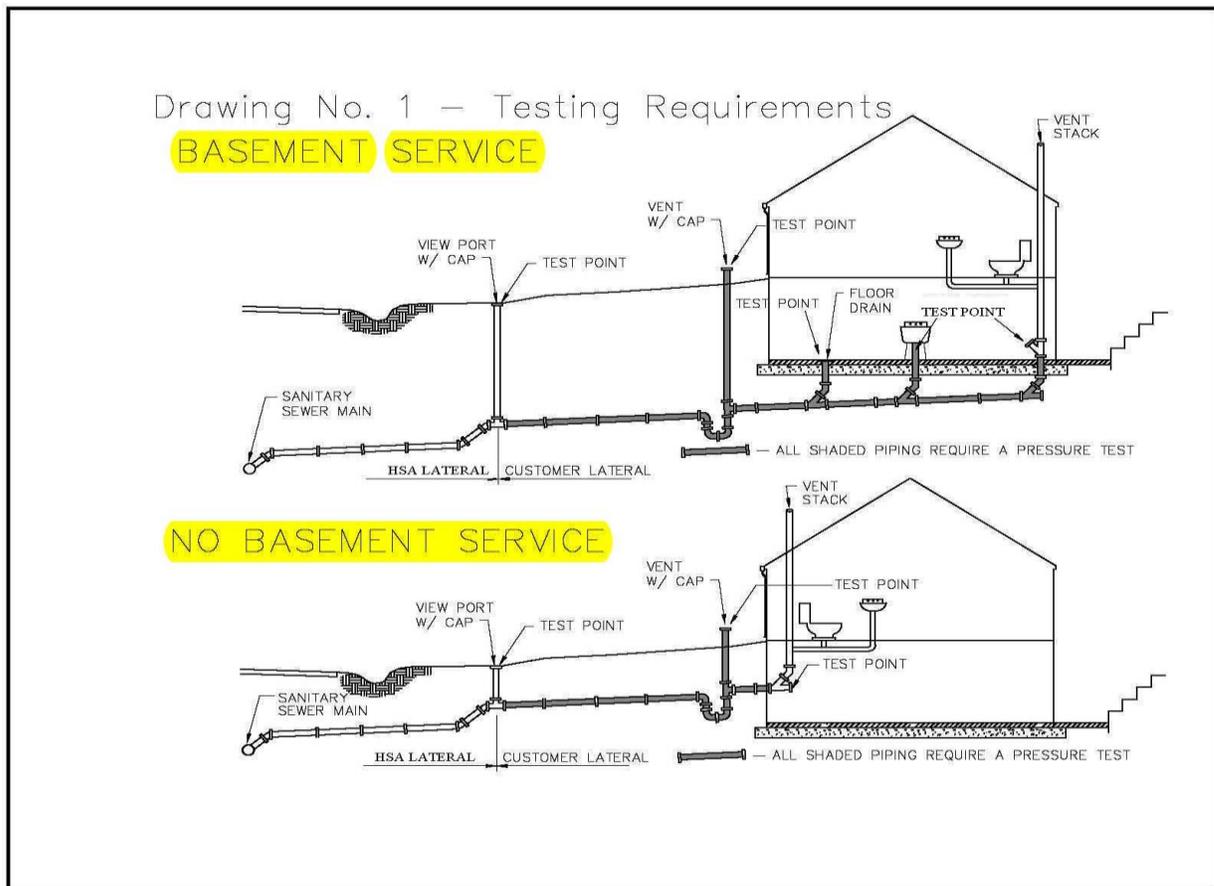


Figure 1

- Q9** Will the HSA Sanitary Sewer Improvements project reduce infiltration and inflow (I&I) in the sanitary system? Will the project reduce surcharge risks (i.e. sewer backups)?
- A9:** Yes. The completion of the public sector sanitary sewer work by the HSA, coupled with property owner compliance with the Authority’s rules and regulations, will significantly reduce I&I into the system, and therefore, reduce the risk of system surcharging.

Posted 11/21/2017

- Q10:** How many residents/customers are affected by the HSA’s Sanitary Sewer Improvements Project?

- A10:** In the Phase I project area, 466 residents and 2 commercial/industrial customers* are affected. In the Phase II project area, 195 residents and 0 commercial/industrial customers are affected.

- *Hollidaysburg Area School District
- *Hollidaysburg Area YMCA

Posted 11/27/2017

- Q11:** Is it possible to get a map of the Phase I project area that includes the points/locations where the contributing municipalities connect to the Hollidaysburg system?

- A11:** Yes. A complete, pre-construction sewer system map, entitled “Pre-Construction Sanitary Sewer System Map – Hollidaysburg Borough” is available on the Borough’s website. A printed full-size version of the map is also available at the Borough building for review.

Posted 11/27/2017

Q12: Why was the public not given the option of signing an easement and subsequent Hold Harmless Agreement so that the HSA could install private side-sewer laterals? Why was it “assumed” that the residents of Phase I would not sign a Hold Harmless Agreement? Were the residents of Phase I ever given a choice?

A12: The Authority decided not to include the laterals from the property line to the building foundation in the public sector project because PennVEST would require the Authority to own and maintain the private laterals for the life of the PennVEST loan.

Posted 11/30/2017

Q13: Approximately how much of the \$6,000,000 of Pennvest granted money was originally estimated and slated for to rehabilitate the resident sewer lateral of Phase I?

A13: The bid for the Phase I project included 12,000 feet of sanitary sewer lateral piping. The Contractor bid \$43 per foot, so \$516,000 of the \$4,624,290 bid was for laterals. This lateral item was used to pay the Contractor to install lateral piping from the new sewer main to the property line for each connection. The Phase I contractor installed 11,610 feet of lateral piping. Therefore, 390 feet of the lateral item was not utilized. At a contract unit price of \$43 per foot, the Authority saved \$16,770.

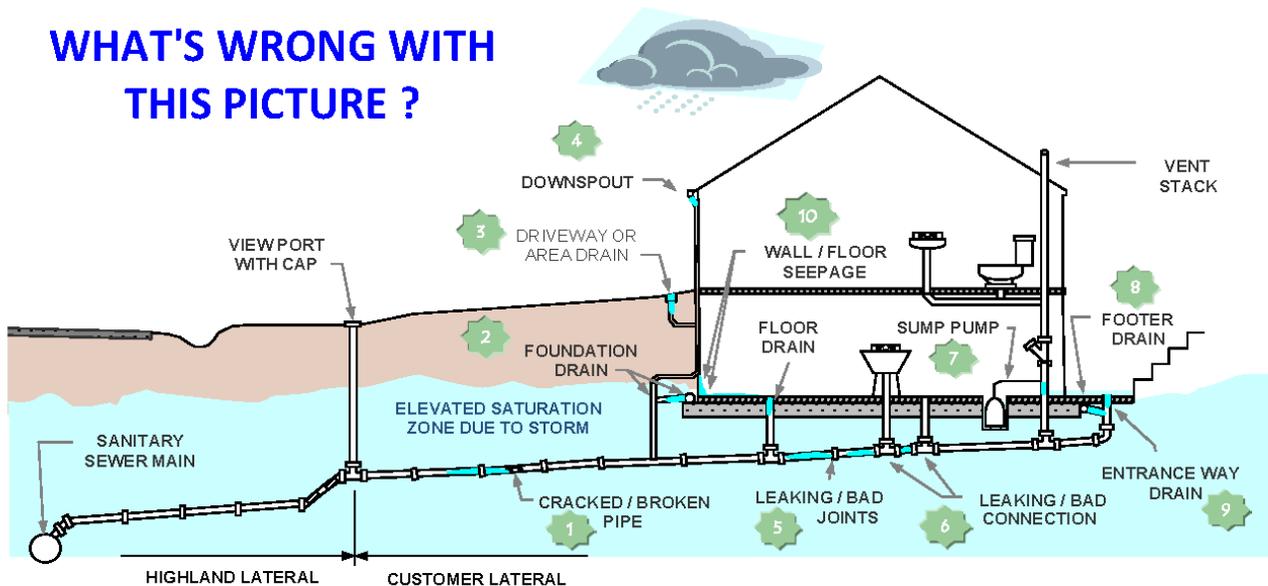
Posted 11/30/2017

Q14: How does ground water infiltration from under and around my basement get into my sewer lateral?

A14: Groundwater infiltration most often enters the sewer lateral through the piping under the basement floor (under-slab piping) through cracks, joints or broken pipe. As illustrated in Figure 2 below, rain storms can cause elevated water tables and increase ground saturation. When the water table rises to a level above the sewer lateral, or the ground surrounding the sewer lateral becomes saturated, the groundwater enters the underground piping network and is conveyed to the main sewer line, and ultimately to the wastewater treatment facility where it must be processed and treated as sewage.

Figure 2

WHAT'S WRONG WITH THIS PICTURE ?



CAN YOU SPOT ALL THE SOURCES OF UNPERMITTED (ILLEGAL) DRAINAGE OF STORMWATER AND GROUNDWATER POSSIBLE AT YOUR HOME ?

(10 OF THE MOST COMMON ARE SHOWN ABOVE) ANSWERS SHOWN BELOW

ANSWERS:

1. CRACKED / BROKEN PIPE 2. FOUNDATION DRAIN 3. DRIVEWAY OR AREA DRAIN 4. DOWNSPOUT 5. LEAKING JOINTS
6. LEAKING CONNECTIONS 7. SUMP PUMP DISCHARGE 8. FOOTER DRAIN 9. ENTRANCE WAY DRAINS 10. WALL / FLOOR SEEPAGE OR FLOW ARE ALL UNPERMITTED SOURCES OF ILLEGAL DRAINAGE

Posted 11/27/2017

Q15: Why was \$1.7 million diverted to Phase II when Phase I was the “highest priority” as determined by the Sewer System Evaluation Study (SSES) prepared by Gannett Fleming in 2000-2001?

A15: The PennVEST budget and funding offer included \$6,000,000 for construction. The budget and funding offer also included a contingency amount of \$295,000. The low bid for the phase I project was \$4,624,290 leaving a surplus of \$1,670,710 in construction funds. The Authority had to decide whether they wanted to petition PennVEST through a change of scope to keep the money for another project or turn the money back at the time of closing. The Authority was advised by their Engineer that the worst case scenario is 100% of any money turned back to PennVEST would be grant money or best case scenario the Authority would turn back the prorated amount of grant money. The Authority decided they would rather petition PennVEST through a change of scope to keep all of the construction money rather than turn back any grant dollars. A change of scope was presented to PennVEST to incorporate the Phase II project into the funding package. PennVEST approved the Authority’s request so \$1,670,710 was allocated for the Phase II project.

Posted 11/30/2017

Q16: What plans does the HSA have for the other townships to pay to rehabilitate their sewer lines that empty into the North Juniata Street Project Area and the M-11 Project Area?

A16: Currently, there are two methods in place to encourage contributing municipalities to reduce inflow and infiltration into the interceptors and to the wastewater treatment facility. First, the flow from the contributing municipalities is metered at each connection where it enters the interceptor or the Borough’s system. This data is used to calculate the annual contribution of flow from each municipality to the treatment plant. The annual contribution is then used to

calculate each municipality's portion of the treatment costs at the facility. Second, there is an Intermunicipal Peak Flow Agreement between the Borough and the contributing municipalities. This agreement establishes peak hourly and peak 24 hour flow limits for each municipality, and provides for monetary penalty when the limits are exceeded.

Posted 12/11/2017

Q17: Can the meter flow test required by the DEP approved corrective action plan be performed now?

A17: Flow meters could be installed at this time, however the flow levels in the strategic manholes on the Legion Park Interceptor must be met during a 2 year, 24 hour storm event of 2.8 inches. The HSA has chosen not to install the meters at this time because an event of that magnitude is unlikely this time of year.

Posted 12/11/2017

Q18: Have the majority of other sewer projects done in other municipalities, who have not required the under-slab work been successful in achieving the standards that they needed to achieve?

A18: Some other communities that do not require under slab work have been successful in compliance with DEP requirements. Some communities have not been successful and have had to circle back to the removal of excess flows inside the building foundation line to comply with DEP requirements. The approach any community adopts to address I & I removal is often times customized to that particular community because many different factors, such as groundwater table, geology, topography, combined sewer system, separate sewer system, etc., influence I & I.

Posted 12/11/2017

Q19: How many other townships share the Legion Park interceptor?

A19: Two: Blair and Allegheny Townships.

Posted 1/16/2018

Q20: With increasing urban sprawl, how has the contributing township's flow increased versus the borough residents measured flow?

A20: Over the past three years, the average contribution of Blair Township to the wastewater treatment facility, through the Legion Park Interceptor, has remained steady at about 2% of the total flow. The average contribution of Allegheny Township during that same time has remained steady at about 2.7% of the total flow.

Posted 1/16/2018

Q21: Will the HASD buildings located in the Phase I project area be required to comply with the HSA watertightness regulations by June 1, 2018?

A21: Yes.

Posted 1/16/2018

Q22: Will the schools also be required to have the basement drains blocked with regards to under-slab work? This would render the locker rooms useless.

A22: According to HSA regulations and specifications, no customer or resident is required to plug floor drains **as long as** the floor drains are connected to the sanitary sewer **and** the floor drains and the piping network that the floor drains are connected to have successfully passed the required pressure test. **No** floor drains are permitted to be connected to the storm water removal system.

Posted 1/19/2018

Q23: This interceptor [Legion Park] is metered to measure flow. Considering the outside townships are not required to participate in the Phase 1 flow reduction plan, what are the measured readings for the Legion Park Interceptor for the last 3 years?

A23: The three-year readings (2015-2017) for Blair Township are:

('15) 19,367,939 ('16) 21,390,395 ('17) 21,602,179

The three-year readings (2015-2017) for Allegheny Township are:

('15) 26,893,822 ('16) 26,948,728 ('17) 29,257,597

Posted 1/19/2018

Q24: How many residents have had to perform under-slab repair or replacement?

A24: As of 3/26/2018, the residential work breakdown is as follows:

Number of residents that performed under-slab repair or replacement work – **115**

Number of residents that passed the pressure test with no work necessary – **54**

Number of residents that repaired or replaced above-slab piping only (re-routed plumbing above-slab or did not have under-slab plumbing) – **95**

Updated 5/10/2018

The following is a list of local Municipalities/Authorities that have adopted policies that require pressure testing under slab.

A. Forest Hills Municipal Authority includes eight municipalities.

1. Adams Township
2. Croyle Township
3. Richland Township
4. Summerhill Township
5. Ehrenfeld Borough
6. South Fork Borough
7. Summerhill Borough
8. Wilmore Borough

B. Central Mainline Sewer Authority includes five municipalities.

1. Cassandra Borough
2. Parts of Cresson Township
3. Lilly Borough
4. Parts of Portage Township
5. Washington Township

C. Pegasus includes two municipalities.

1. Conemaugh Township
2. Richland Township

D. Portage Sewer Authority includes two municipalities.

1. Portage Borough
2. Portage Township

E. JETSA includes two municipalities.

1. Jackson Township
2. East Taylor Township

F. Brownstown Borough

G. Dale Borough

H. City of Johnstown

I. East Conemaugh Borough

J. Daisytown Borough

K. Highland Sewer and Water Authority includes two municipalities.

1. Geistown Borough
2. Richland Township