



**City of Hagerstown,
Utilities Department,
Wastewater Division**

**Cured-In-Place
Pipeline Rehabilitation Project**

Frequently Asked Questions

Q. What are the hours of construction?

A. Typically, construction will occur from 7 a.m. until 5 p.m., Monday through Friday, which means access in streets or alleys may be obstructed during that time. Water usage should be limited from 7 a.m. until you are advised by the contractor that you may do so.

In rare instances, where a particular task is begun and must be completed before the construction site can be abandoned for the day, work may extend beyond 5 p.m. The contractor will let you know if it is necessary to work late.

Q. Who has contracted with the City of Hagerstown to work on this project?

A. Miller Pipeline Inc. is the current contractor working with the City of Hagerstown to install the new Cured-In-Place Pipeline. Am Liner and others have provided this service in the past as well.

Q. What is the construction timeline?

A. The rehabilitation of the existing wastewater main is a two-part process: First, workers will clean and inspect your wastewater pipeline to be sure it is ready for rehabilitation. A flusher truck and video truck will likely be apparent during this operation.

Then, days to several weeks later, construction crews will return to install the new Cured-In-Place-Pipeline (CIPP) into the City's existing wastewater main. A Service Disruption Notice, in the form of a

door hanger, will be left on your door 48 hours before the work occurs. Just prior to lining, workers may come to your door to advise you the process is starting as well.

Q. Will there be an additional charge on my City of Hagerstown bill to pay for the improvements to the wastewater main?

A. No. This project is paid for through charges that already appear on monthly customer water bills. The Wastewater Usage Charge, for example, covers utility expenses for sewage processing and wastewater pipeline maintenance. Additional grant and zero interest loan money also supports this work.

Q. What is the Cured-In-Place Pipeline Replacement Project?

A. This City of Hagerstown Wastewater Infrastructure Project will rehabilitate the wastewater pipelines in the collections system. The CIPP process installs a lining within the old or damaged pipe to form a pipe-within-a-pipe.

Q. Why is this project necessary?

A. Many of Hagerstown's wastewater pipes are made of vitrified clay pipe and are more than 50 years old. Many are in disrepair, are being penetrated by roots, and have structural defects such as fractures. Also, many areas have failed joints, allowing infiltration of massive amounts of groundwater into the system, which could potentially cause overflows and inundate the capacity of the system.

Q. Will the old/existing wastewater pipeline be disturbed or removed?

A. No. City of Hagerstown will be using Cured-In-Place Pipeline (CIPP) technology to rehabilitate wastewater pipelines. This is a non-disruptive trenchless technology.

Q. Will there ever be the need for open-cut construction?

A. Open-cut construction may become necessary in exceptional situations, primarily if the wastewater pipe is in such disrepair that it must be excavated. Other than these exceptional circumstances no excavation is required and the time frame and disruption is drastically reduced when compared to the traditional excavate and replace method.

Q. What is the project timeline?

A. The current construction began in 2010, with the rehabilitation of nearly 100,000 linear feet of various sized wastewater pipes to occur through June 2012. Subsequent projects may occur in the future as well.

Q. How much noise during construction?

A. As with all construction projects, noise from equipment and workers on site can be expected. However, most construction will take place during the day, when many people are away from their homes at work.

Q. Will there be disruptions to my wastewater service?

A. Yes. During the installation of the Cured-In-Place Pipeline, water flows from your wastewater service to the wastewater main connection will be temporarily suspended. While your water service will not be turned off, you should not run any water into the wastewater line from the time services are blocked until the rehabilitation process is complete. This includes the use of your sinks, showers, dishwashers, washing machines and toilets. Use of water during the construction period could cause your structure to flood.

Q. How will I know when it is OK to run my water?

A. After the CIPP installation is complete, each resident affected by construction and a water disruption should be notified by the construction contractor when it is okay to begin running water into the main line. You should also note the absence of the construction equipment as an indication that service has been restored.

Please contact the contractor for the City should you have any indications of service issues after the lining. Contact information is listed on the last page of this document.

Q. What do I do if I sense the smell of plastic during the CIPP installation process?

A. If you notice a strong smell of plastic, it probably means that a floor drain trap, sink trap, or shower drain trap in your home/business is dry and is allowing sewer gas to escape into your structure. To resolve this, pour a quart or so of water/bleach mix into each of the drains.

Q. What is the CIPP installation process?

A. First, the wastewater main will be cleaned and videotaped to examine its condition. Then, if necessary, any root build-up in the line will be eradicated. Next, the new Cured-In-Place Pipeline, a resin-felt tube, is pulled through the main line; the liner is inflated and heated to cure the resin against the existing pipe and form a tight-fitting, jointless and corrosion-resistant replacement pipe; then the lateral residential and businesses connections are restored by a robotic cutting machine. Lastly, the rehabilitated pipe is inspected by closed-circuit TV.

Q. Does the City of Hagerstown need to access my property in order to complete its work?

A. No. The City of Hagerstown is performing work on the city wastewater

main line only. Residential and business building sewer lines that connect to the city wastewater line, and for which each property owner assumes maintenance responsibilities, are private property and not part of this work. (Structure to the Curb or Right-of-Way line)

It's important to note that a residential or business building sewer line that has not been regularly cleaned or maintained may be more vulnerable to back-ups now and in the future. The cause may be a result of old lateral pipes or root intrusion from trees and shrubs. Residents and business owners can contact a plumbing service to determine the condition of their sewer lines.

Q. Who should I contact if I have questions or problems?

A. Please reference these contacts to ask questions or resolve problems any time during the construction period:

CITY OF HAGERSTOWN

Weekday Telephone
301-739-8577 x 650

Brian Hopkins, Project Engineer
301-739-8577 x 681

Evening and Weekend Telephone
301-792-3205

MILLER PIPELINE INC.

Ron Callahan, Superintendent

443-506-5310

CIPP PROCESS



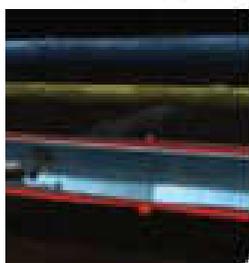
Step 1:

A resin-saturated, coated felt tube is inverted (shown) or pulled into a damaged pipe.



Step 2:

Hot water or steam is used to cure the resin and form a tight-fitting, jointless and corrosion-resistant replacement pipe.



Step 3:

Service laterals are restored internally with robotically controlled cutting devices and the rehabilitated pipe is inspected by closed-circuit TV.

CIPP Waste Water Main Rehabilitation Information

Regarding Styrene:

The Cured In Place Pipe (CIPP) reconstruction process involves the use of a liquid thermosetting plastic resin that is hardened within the existing deteriorated pipe to create a new pipe-within-a-pipe. The resin used for CIPP contains a substance called styrene, which takes part in polymerization or hardening when heated. Styrene has a distinctive odor, which can be detected by humans at concentrations far below any level associated with the established limits.

The CIPP material is constructed from the same type of plastic that is used in the transportation, construction, marine and clothing industries.

You may smell these styrene fumes while the lining contractor is working in your area, but don't be alarmed. Humans detect styrene odors at a concentration of approximately 0.017-1.9 parts per million (ppm) which is well below the permissible limit of 100 ppm for the work place (8 hours per day, 5 days per week).

It is estimated that on some occasions the general public may be exposed during a CIPP project to a concentration of styrene vapor of at most a few ppm, for a duration of several hours to several days. The most common way for this distinctive odor to enter your home is through one or more dry or defective basement traps that are connected to the Waste Water pipe. Therefore, to reduce these odors, please pour some water into your basement floor drain(s). This is a good practice on a regular basis to prevent sewer gasses from entering your home.

To summarize, the resin used in CIPP contains a substance called styrene with a distinctive odor that can be detected at very low levels. The concentration of styrene that may be experienced by the general public during CIPP projects may produce a distinctive odor, but is well below any level which could injure anyone.