

EXHIBIT A

Department of Licenses and Inspections

Regulations Under Philadelphia Code Provisions P-103.1 and P-104.2

THE PHILADELPHIA CODE

TITLE 4; SUBCODE P

(THE PHILADELPHIA PLUMBING CODE)

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CHAPTER 1 ADMINISTRATION

* * *

SECTION P-103.0 PERMITS

P-103.1 Applications: Applications for plumbing permits shall be submitted by a Registered Master Plumber or his/her authorized agent in accordance with Chapter 3 of the administrative code. All plumbing permit applications shall have a Registered Master Plumber's seal affixed.

* * *

Proposed Regulation

P-103.1: By whom application is made: The department shall accept plumbing permit applications from the owner or lessee of the building or structure, or agent of either, by the registered design professional employed in connection with the proposed work; or other licensed person authorized to apply for permits pursuant to the Philadelphia Administrative Code, so long as the Registered Master Plumber responsible for the work is identified prior to the issuance of the permit. Electronic confirmation of a valid license shall eliminate the need for affixing the Registered Master Plumber's seal to any paper permit application.

* * *

SECTION P-104.0 SUBCONTRACTORS

P-104.1 Disclosure: Any plumbing contractor who accepted a contract as a subcontractor from another plumbing or retail firm must indicate so on the permit.

P-104.2 Permit exclusive: A registered Master Plumber shall not work under another registered Master Plumber's plumbing permit except as a subcontractor or an employee. When work is being performed by a subcontractor, the department shall be notified in writing that such work is being performed with permission of the permitted registered Master Plumber holding the original permit.

* * *

Proposed Regulation

P-104.2.1(R) Permit holder: Because every permit application submitted requires the approval of the owner, the owner shall retain the right to change the Master Plumber associated with a permit to a new Master Plumber. The changing of plumbing contractors shall not require the issuance of a new permit, where the owner identifies a new Master Plumber to complete the work under such plumbing permit.

P-104.2.2(R) Multiple Master Plumbers: The Department reserves the right to issue a single permit for work to be performed by multiple Master Plumbers, provided that the owner is responsible for final compliance in the event of a dispute between the named Master Plumbers.

Department of Licenses and Inspections
Regulations Under Philadelphia Code Provisions P-103.1 and P-104.2

THE PHILADELPHIA CODE

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Proposed Regulation

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* * *

SECTION P-104.0 SUBCONTRACTORS

P-104.1 Disclosure: Any plumbing contractor who accepted a contract as a subcontractor from another plumbing or retail firm must indicate so on the permit.

P-104.2 Permit exclusive: A registered Master Plumber shall not work under another registered Master Plumber's plumbing permit except as a subcontractor or an employee. When work is being performed by a subcontractor, the department shall be notified in writing that such work is being performed with permission of the permitted registered Master Plumber holding the original permit.

* * *

Proposed Regulation

P-104.2.1(R) Permit holder: *Because every permit application submitted requires the approval of the owner, the owner shall retain the right to change the Master Plumber associated with a permit to a new Master Plumber. The changing of plumbing contractors shall not require the issuance of a new permit, where the owner identifies a new Master Plumber to complete the work under such plumbing permit.*

P-104.2.2(R) Multiple Master Plumbers: *The Department reserves the right to issue a single permit for work to be performed by multiple Master Plumbers, provided that the owner is responsible for final compliance in the event of a dispute between the named Master Plumbers.*

Department of Licenses and Inspections
Regulations Under Philadelphia Code Provision P-106.1

Key:

Deletions in [Brackets]

Additions in *Italic*

Revisions based upon hearing of May 4, 2017 are Underlined

THE PHILADELPHIA CODE

TITLE 4; SUBCODE P
(THE PHILADELPHIA PLUMBING CODE)

* * *

SECTION P-106.0 PLUMBING REGULATIONS.

P-106.1 Authorization: In enacting this code, the Council recognizes that the department has promulgated technical regulations governing the manner in which plumbing work is to be performed and the materials that are to be used. Those regulations are hereby reaffirmed. The department is authorized to promulgate additional such regulations and to amend existing such regulations as it deems necessary or appropriate from time to time. The department is also authorized to promulgate any other regulations necessary or appropriate to implement the provisions of this code. Promulgation of regulations shall be made subject to published notice and upon request, a public hearing.

* * *

Proposed Regulation

SECTION P-908
REPLACEMENT OF UNDERGROUND
SEWERS BY PIPE-BURSTING METHODS

P-908.1 General. This section shall govern the replacement of existing house drain (including house storm drain) piping by pipe-bursting methods.

P-908.2 Applicability. The replacement of house drain piping by pipe-bursting methods shall be limited to gravity drainage piping of sizes 6 inches (152 mm) and smaller. The replacement piping shall be of the same nominal size as the existing piping.

P-908.3 Pre-installation inspection. The existing piping sections to be replaced shall be inspected internally by a recorded video camera survey. The survey shall include notations of the position of cleanouts and the depth of connections to the existing piping.

P-908.4 Pipe. The replacement piping shall be manufactured with a standard dimension ratio (SDR) of 17 and in compliance with ASTM F 714.

P-908.5 Pipe fittings. Pipe fittings to be connected to the replacement piping shall be of extra-high molecular weight PE3408 material and shall be manufactured with an SDR of 17 and in compliance with ASTM D 2683.

P-908.6 Cleanouts. Where the existing house drain did not have cleanouts meeting the requirements of this code, cleanout fittings shall be installed as required by this code.

P-908.7 Post-installation inspection. The completed replacement piping section shall be inspected internally by a recorded video camera survey. The video survey shall be reviewed and approved by the code official prior to pressure testing of the replacement piping system.

P-908.8 Pressure testing. The replacement piping system as well as the connections to the replacement piping shall be tested in accordance with Section P-1506.

P-908.9 Joints. Joints between different piping materials shall be made with a mechanical joint of the compression or mechanical-sealing type conforming to ASTM C 1173, ASTM C 1460 or ASTM C 1461. Connectors and adapters shall be approved for the application and such joints shall have an elastomeric seal conforming to ASTM C 425, ASTM C 443, ASTM C 564, ASTM C 1440, ASTM F 477, CSA A257.3M or CSA B602. Joints shall be installed in accordance with the manufacturer's instructions.

EXHIBIT B

Department of Licenses and Inspections Regulations Under Philadelphia Code Provision P-106.1

Key:

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EXHIBIT C



Philadelphia Suburban Association of Plumbing ~ Heating ~ Cooling Contractors

P.O. Box 604, Broomall, Pennsylvania 19008

Phone: 484-574-0716 Fax: 610-514-5777

Email: psaphcc@gmail.com

This Testimony is submitted on behalf of the Philadelphia Suburban Association of Plumbing Heating Cooling Contractors in reference to the proposed changes to the Philadelphia Plumbing Code under the Philadelphia Code, Sections P-103.0 / P-103.1 and P-104.0 / P-104.1 & P-104.2 to the Philadelphia Department of Licenses & Inspections Board of Building Standards

Submitted by: Michael McGraw

Registered Master Plumber

Executive Director – Pennsylvania Association of
Plumbing Heating Cooling Contractors & Philadelphia
Suburban Association of Plumbing Heating Cooling
Contractors



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Section P-103.0 Permits, P-103.1 Applications

A plumbing permit application should only be accepted from the Master Plumber or his or her designated person. Allowing any licensed person who is authorized to apply for permits, to apply for a plumbing permit without affixing the seal of the Master Plumber just does not make sense. That seal is our identity for our license. Once someone has an application without the official seal there are many ways that someone could duplicate the electronic confirmation of a license. We are not comfortable with plumbing permit applications being accepted by another licensed person or without the Master Plumber's seal. We ask that you reconsider allowing this change.

Section P-104.0 Subcontractors

A licensed Master Plumber in the City of Philadelphia has had to fulfill many requirements to obtain his or her plumbing license. Allowing another master plumber to work under one's permit and giving the owner the authority to hire another plumber under the same permit whenever they want to is unacceptable. One protection we have as a Master Plumber is the current permit process and changing that process along with the current proposed change to section P-104.0 leaves the Master Plumber in a position where someone else can come in and finish a project. I can see situations where a Master Plumber is hired believing they are going to do the entire job when in reality the owner or general contractor is only using them for part of the work and will change plumbers midstream of the work for a lesser price under the same permit when the original permit holder may have not even been paid for the work they have done. Many times payments are due before an inspection of work, this ensures that the owner or general contractor will comply with the Master Plumber's contract. Allowing this change in the code will leave us unprotected from receiving payments we are due for work completed and in legal battles with the owner and/or general contractor.



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Perhaps there may be more efficient ways to complete the permitting processes that exist today but that way is not through these proposed changes. The Philadelphia Suburban Association of Plumbing Heating Cooling Contractors and its members are opposed to these proposed Philadelphia Plumbing Code changes.

Section P-908 Replacement of Underground Sewers by Pipe-Bursting Methods

While Pipe-bursting is becoming more relevant across the country and in some cases makes a lot of sense and is cost effective for certain projects we feel as though there needs to be additional standards in place before it would be an acceptable practice in the City of Philadelphia. One is that this type of underground sewer replacement should only be done by a Master Plumber and a plumbing permit must be required to do the work. Another is that there should be an approval process by the Department for each application as this may not be a cost effective process for the consumer in some instances. As we know many water services are laid on top of sewer lines in the city and replacing a sewer via pipe-bursting method is most certainly going to break the water service creating the need to excavate. Many existing sewers have bellies in them and in the pipe-bursting process the new pipe will be installed with the same belly. Will that installation pass or fail? Although we agree with pipe-bursting being an acceptable method of underground sewer replacement in Philadelphia we oppose the proposed code change as written.

Thank you for allowing us to share our thoughts on the proposed Philadelphia Plumbing Code changes today.

Respectfully Submitted

Michael McGraw

**TESTIMONY REGARDING PROPOSED CHANGES TO
REGULATIONS UNDER PHILADELPHIA CODE
PROVISIONS P-106.1 OF THE PHILADELPHIA
PLUMBING CODE**

**SUBMITTED MAY 4, 2017 TO
PHILADELPHIA DEPARTMENT OF LICENSES &
INSPECTIONS BOARD OF BUILDING STANDARDS**

SUBMITTED BY: WALT KRZYZANOWSKI

**REGISTERED MASTER PLUMBER, CITY OF
PHILADELPHIA #2749 - #16429**

**PRESIDENT & EXECUTIVE DIRECTOR - PLUMBING
CONTRACTORS - UNION AFFILIATED
CONTRACTORS, PLUMBERS UNION LOCAL #690**

MEMBER AND TRUSTEE OF PLUMBERS LOCAL #690

TESTIMONY SUBMITTED ON BEHALF OF:

**PLUMBING CONTRACTORS - UNION AFFILIATED
CONTRACTORS, PLUMBERS UNION LOCAL #690**

**PLUMBERS UNION LOCAL #690
PHILADELPHIA AND VICINITY**

**MECHANICAL AND SERVICE CONTRACTORS
ASSOCIATION OF EASTERN PA AND GREATER
DELAWARE VALLEY**

**PHILADELPHIA BROTHERHOOD OF MASTER
PLUMBERS**

**PENNSYLVANIA ASSOCIATION OF PLUMBING,
HEATING AND COOLING CONTRACTORS**

SOUTH PHILADELPHIA MASTER PLUMBERS ASSN.

**PENNSYLVANIA CHAPTER, AMERICAN SOCIETY OF
SANITARY ENGINEERING**

(2)

PROPOSED REGULATION P-908 REPLACEMENT OF UNDERGROUND SEWERS BY PIPE-BURSTING METHODS

As part of our testimony, please accept the 4 page outline attached that the Plumbing Industry Committee previously submitted to the Department. I will now read this outline into record.

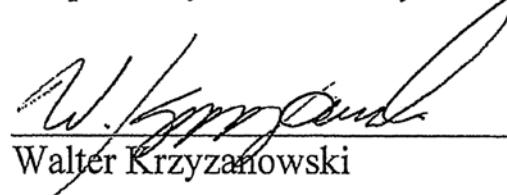
As mentioned in our previous attached outline, the Plumbing Community is excited to see that the Board and the Department is considering new and modern plumbing technologies. We agree and support the Board and Department's desire to introduce this into the Philadelphia Plumbing Code. We do however, feel the Board and the Department should table this decision and consider, with the help of the Plumbing Industry Committee/Plumbing Advisory Board to establish proper standards and methods for these installations. Other than the questions raised in our attached outline, we feel the following issues should be addressed.

- Identifying in the regulation a plumbing permit is required for this method of installation consistent with Section P-103 of the Philadelphia Plumbing Code.
- A plumbing permit should not be issued for this type of installation until proof is provided satisfactory to the Department that proper notification has been given to PA One Call.
- Ensure that all other applicable areas and sections of the Philadelphia Plumbing Code are enforced.
- To the best way possible, train and familiarize the field inspectors in the pipe-bursting process to maximize their ability to ensure compliance with all applicable code sections and standards.

- To clarify in the proposed regulation, this process applies to residential installations only.
- To clarify in the proposed regulation, this section approves pipe-bursting technologies and the use of SDR OF 17 ONLY and does not allow for replacement methods of pipe lining or similar methods.
- To clarify in the proposed regulation, the plumber must provide to the Department when applying for a permit for this method of installation, a pipe fusing certification as this is the method for joining the approved piping material.
- To clarify in the proposed regulation, that if any other materials are adopted to be used in pipe-bursting, they first have to be approved by the Board and the Department and a manufacturer's certification must be provided.

We look forward to the prospect of working hand in hand with the Board, the Department and all other city agencies on this and other ways of modernization to the Philadelphia Plumbing Code.

Respectfully submitted by:



Walter Krzyzanowski

PIPE BURSTING

The Plumbing Industry is enthused and inspired that the City of Philadelphia is considering new technologies. Although these new technologies more specifically pipe bursting technologies will enhance services offered to the consuming public. Caution should be exercised when considering admittance and acceptance to the Philadelphia Plumbing Code.

The Plumbing Industry would first comment that it is steadfast in the belief that a formal Plumbing Advisory Board should be established to write the proper standards and methods for installation surrounding this process. A formal Plumbing Advisory Board would have the technical background and practical knowledge as to when, where and how this technology would apply in areas of the City of Philadelphia.

This is a relatively new technology and therefore there are not many studies to determine whether these methods will stand the test of time. That said, the Plumbing Industry would agree that this technology could be accepted into the Philadelphia Plumbing Code, again with the correct methods established. There are many components with this technology and a thorough review should take place prior to admittance.

SUBJECT: Proposed Additions to Plumbing Code Regulations

Proposed Regulation

SECTION P-908

REPLACEMENT OF UNDERGROUND SEWERS BY PIPE-BURSTING METHODS

- Memorandum states the following: This method, if approved, would prove extremely useful in the repair of defective drain lines that run through an adjacent property where many times the owner of that property is not willing to allow access for traditional excavation and replacement of the defective pipe. - It should be noted that proper approval and authorization should be given by a home or property owner when this method of replacement takes place. One reason being as follows: In pipe bursting technologies considering proper manufacturer's installation methods, there is what is known as "**a zone of impact**". There is a formula where the zone of impact area is equal to ten times the difference between the O.D. of the bursting head and the I.D. of the old pipe. This formula was designed to consider possible disruption or damage to adjacent utilities. There is also what is known as "**the zone of upheaval**". The formula which calculates at what point you have to worry about the expansion affecting the surfaces. (ie: road surfaces, concrete finishes, floors, etc.). The zone in feet is equal to the differences between the O.D. of the bursting head and the I.D. of the old pipe in inches. There are documented cases when pipe bursting has been performed that it has damaged adjacent utilities and underground plants close to the line being worked on. Again, for these reasons and many more outlined, authorization should be mandatory when performing this process on an adjacent or common property.

- **P-908.1 General**

Would this apply to residential installations only?

Would this apply to the portion of the drainage system between the building/house to the house trap?

Under this section, it should be established that a plumbing permit is required for this method of replacement in accordance with Section P-103 of the code.

- **P-902 Applicability**

Who will determine where and when excavation is prohibited?

Will consideration be given under the permit review process whether or not the material to be installed remains consistent with other sections of the code?

This section states "the replacement piping shall be of the same nominal size as the existing piping". Question, In many applications, situations and replacements 4" pipe may be running out of the house/property but then increase in size to 5" when connecting to the house trap. It should be added to this section that the larger portion of the piping should take precedence and remain consistent through the replacement.

- **P-908.3 Pre-Installation Inspection**

Although the pre-installation inspection as suggested is a good idea, unfortunately in most cases the Plumbing Contractor is called to the house/property due to the fact the existing line is either obstructed or has failed entirely, therefore making this method of pre-installation inspection impossible.

Alternate means of pre-installation inspection should be suggested to help identify not only clean-outs but existing branch connections that may be present and would otherwise be rendered inoperable with this method of replacement.

Where practical, a flood test should be performed in concert with the pre-installation video inspection to determine whether sags or trapping conditions are present in the existing line. Visual inspections of the area is crucial to determine the presence of things such as: sink holes, depressions in the surface areas, etc. to determine if undermining has occurred that would prohibit this method of replacement.

- **P-908.4 Pipe**

It is important to note that the replacements proposed under this section are not consistent with and do not allow for pipe lining methods and are approved for pipe bursting methods only consistent with SDR OF 17 ONLY.

It is important to point out the method of joining the proposed piping lengths to each other is by a fusing method. There is a bead present on the inside of the piping from fusing the inside and the outside piping. Under this section, is the BBS considering a requirement to remove this internal bead so that it does not affect flow?

Often times this bead may be too big. Will the inspector check the piping prior to installation? Different soils affect pipe bursting and the stability of the new pipe. During an installation, if a soil begins to press on the piping, it will create drag and the pipe will actually stretch. The drag will be affected by the length of the burst, the type of soil, the O.D. of the bursting head, the type of equipment and the temperature of the pipe, as well as the time it takes to complete the burst. **Some specifications for installation call for the pipe to relax for 3 hours up to 24 hours before being connected on each end to the existing piping and being placed in service.** Due to the fact the O.D. of this new piping differs from the O.D. of the existing cast iron, PVC, terracotta, etc. the use of a rubber coupling with a full metal jacket (ARC) is required. In the worst case where the installed piping stretches a lot, the pipe can pull out of the couplings after it is buried. Will all these factors be considered either under the permit plan review or the field inspector or both?

- **P-908.5 Pipe Fittings**

It is important to point out the O.D. of this piping does not allow for the use of conventional PVC or cast iron fittings. If a fitting is added to this piping, a section must be removed and either a PVC or cast iron fitting must be inserted with the use of rubber couplings with a full metal jacket (ARC). The manufacturer does offer an alternate means, which is a bolt on saddle connection, which is not suggested because it is not consistent with other sections of the code.

- **P-908.6 Clean-outs**

No comment to this section with the exception of installing fittings into this piping consistent with comments in Section P-908.5.

- **P-908.7 Post Installation Inspection**

Along with an internal recorded video camera survey, the replaced line should be flood tested and then a follow-up internal recorded video camera survey performed to ensure there is no standing water in the line. This standing water would demonstrate a sag or trapped condition thus constitute failure of the installation.

It is important to realize that this method of replacement is relying on the fact that the existing piping was installed correctly. It is often difficult to ascertain if proper bedding was achieved during the initial installation of the existing piping. This is notable because the fill around the pipe will affect the pipe bursting procedures.

It is obviously impossible to determine pitch of the line by conventional means or use of a level. By flooding the replaced line with water and performing and recording a video camera survey, is the only means of determining proper pitch has been achieved.

- **P-908.8 Pressure Testing**

It should be spelled out under this section that not all procedures contained in P-1506 apply. As example, P-1506.3.1 would not apply to this method of replacement.

Another example, P-1506.3 may apply only before or after flood testing is performed to determine sags or traps in the line.

**CITY OF PHILADELPHIA
MEMORANDUM**

DATE: November 28, 2016

TO: Wayne Miller, Chairman, Board of Building Standards
FROM: Michael E. Flink, Chief Code Official
SUBJECT: Proposed Addition to Plumbing Code Regulations

The Philadelphia Home Rule Charter establishes the duties of the Board of Building Standards. Such duties include consideration of changes in regulations or new methods of construction in § 5-1007(d) as follows:

(The Board shall) Consider any suggested changes in standards and regulations, new and substitute materials, or new methods of construction, either with or without holding public hearings; but before the Board shall recommend any change or modification of such standards and regulations, it shall hold a public hearing at which all interested parties may present their views. After such public hearing the Board shall submit its findings and recommendations to the Commissioner of Licenses and Inspections for his approval. Upon approval by the Commissioner they shall become a part of the standards and regulations.

On behalf of the Commissioner, I am respectfully requesting that the Board consider a proposed Plumbing Code Regulation that would allow the use of "pipe burst" in the repair/replacement of defective house drains.

Pipe bursting is a relatively new trenchless sewer replacement method where a large cone-shaped head is hydraulically pulled by steel cable through the old sewer line, breaking apart the old pipe underground while at the same time pulling into place a seamless HDPE pipe that is the same size as the old pipe.

Two small holes are dug at either end of the sewer run that will be replaced. Cable is inserted at one end and fed through. One end of the cable is attached to a pneumatic jack while the other end is attached to a cone shaped bursting head. The bursting head is attached to a new seamless, heat-fused HDPE pipe. As the bursting head is pulled through the old sewer line, it simultaneously breaks apart the old pipe (even cast iron) and pulls behind the new pipe.

This method, if approved, would prove extremely useful in the repair of defective drain lines that run through an adjacent property where many times the owner of that property is not willing to allow access for traditional excavation and replacement of the defective pipe.

The 2015 International Plumbing Code (IPC) recognizes this new technology. The following proposed additional regulations for the Philadelphia Plumbing Code are based upon the language from the IPC.

Proposed Regulation

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cc: David J. Perri, P.E., Commissioner
 Ralph DiPietro, Deputy Commissioner
 Elizabeth Baldwin, P.E., Director, Development Services
 Tanya Sunkett, Supervisor, Boards Administration

EXHIBIT D

CITY OF PHILADELPHIA MEMORANDUM

DATE: June 16, 2017

TO: David J. Perri, PE, Commissioner
FROM: Wayne Miller, Chairman, Board of Building Standards
SUBJECT: Plumbing Code Regulations

On May 4, 2017, the Board of Building Standards held a public meeting to hear testimony concerning the following proposed Regulations to the Philadelphia Plumbing Code:

- P-103 and P-104 – providing clarification to the administrative processes related to the application and issuance of plumbing permits.
- P-908 – proposing a new methodology for the replacement of underground sewers by pipe-bursting.

The Board has considered all verbal and written testimony and provides the following recommendations:

P-103 and P-104 – Recommend Approval

While the Board has concerns that changes in the processing of permit applications and the issuance of permits have the potential to disrupt the current business practices of plumbing contractors, we recognize that the Department has the right to revise administrative processes to align with current technology and the Department's efforts to improve overall services. The Board is encouraged by the news that the Department has committed to the auditing of contractors and permits to ensure the integrity of a license or permit is not undermined by the illegal actions of some individuals.

P-908 – Recommend Approval with Modification

The Board supports the use of modern methods and materials in plumbing construction. However, the current Philadelphia Plumbing Code does not recognize the use of HDPE pipe, and therefore, there is no existing approved method for joining the new HDPE pipe to any existing cast iron or terra cotta building drain pipe.

The International Plumbing Code (IPC) approves the use of mechanical joints for joining dissimilar piping materials (P-705.19) and establishes that such joints conform to ASTM C 443, ASTM C 1460, or ASTM C 1461.

The Board recommends that the proposed regulation include the addition of the use of mechanical joints meeting the IPC referenced standards.



**City of Philadelphia
Department of Licenses and Inspections**

**Hearing on Proposed Regulations
PLUMBING CODE**

Report of Hearing Held on May 4, 2017

Regarding Proposed Regulations P-103, P-104 and P-908

Dated: 8/30/17

David Perri
David Perri
Commissioner, Department of
Licenses and Inspections

Dated: August 15, 2017

Approved: Martha Johnston
Law Department
By: Martha Johnston
Senior Attorney

Background

This is a Report of a hearing convened by the Department of Licenses and Inspections of the City of Philadelphia (“Department”), and its designee the Board of Building Standards (“Board”) on May 4, 2017, to consider proposed regulations modifying existing regulations to the Philadelphia Plumbing Code (“Code”), Chapters 1 and 9. The proposed regulations were filed with the Philadelphia Department of Records on March 13, 2017, and notice of their filing and of the scheduled public hearing on the regulations was published on March 21, 2017. This hearing report is being filed with the Philadelphia Department of Records pursuant to Section 8-407(c) of the Philadelphia Home Rule Charter.

The hearing was moderated by Wayne Miller, Chairman of the Board, and held before Board members Miller, Leonard Butler, Amy Rivera, and Ted Agoos, as well as Michael Fink, Chief Code Official for the Department. Also present was Martha Johnston, Senior Attorney, of the Law Department.

Proposed regulations P-103 and P-104, “Permits,” would update and clarify administrative provisions in the Plumbing Code pertaining to the plumbing permit application and issuance process, to allow for online applications and simplified procedures when the owner retains a new Master Plumber in the course of a project.

Proposed regulation P-908 would allow for the replacement of existing underground sewer piping by pipe-bursting methods, which are more economical for the homeowner than excavation, and are approved under the International Plumbing Code.

Hearing

At the May 4 hearing, each regulation was considered separately. Michael Fink first presented the proposed Permit Regulations under Code provisions P-103.1 and P-104.2. These regulations would allow for other design professionals besides the Master Plumber on a project to submit permit applications; for plans to be submitted to the Department electronically; and for owners who find it necessary to change the Master Plumber on a project before its completion to do so without being required to obtain a new permit.

Walt Krzyzanowski, R.M.P., testified on behalf of Plumbers Union Local 690 and many other organizations. He stated that while the plumbing industry in general supports the idea of updating the permit application process, they have concerns about the proposed regulations as drafted, particularly proposed Reg. 104.2.1. Mr. Krzyzanowski stated that this provision should be further clarified with respect to procedures for changes in the Master Plumber on a project, in order to be sure that the original Master Plumber would not be liable for the work of a subsequent plumber, and other concerns. Two other witnesses, Mike McGraw, Executive Director of the Philadelphia Suburban Association of Plumbing Heating and Cooling Contractors, and Lawrence DiGiovani, past President of the Brotherhood of

Master Plumbers of Philadelphia, also testified and echoed Mr. Krzyzanowski's concerns. These witnesses also submitted written testimony which was made part of the record, and a copy of which is attached hereto as Exhibit C.

Next, Regulation P-908, "Replacement of Underground Sewers by Pipe-Bursting Methods," was presented. Michael Fink described the proposed new technology allowed by the proposed regulation. Pipe bursting is a widely used trenchless sewer replacement method by which a large cone-shaped "bursting head" is pulled by a steel cable through the old sewer line, breaking apart the old pipe underground while at the same time pulling into place a seamless high density polyethylene ("HDPE") pipe that is the same size as the old pipe. This method is extremely useful for drain line repairs that would run through an adjacent property, where traditional excavation and replacement of defective pipe is not practical. A proposed code change allowing for this method was approved by the ICC governmental voters for the 2015 International Plumbing Code. The proposed Philadelphia Reg. P-908 is based on the language from the IPC.

Mr. Walt Krzyzanowski, R.M.P., testified that the plumbing industry is generally pleased that the Department is proposing to adopt this newer technology, which will be of benefit to the consuming public. However, he urged that numerous precautions need to be observed when using this method, and it should only be conducted under supervision of a master plumber. Mr. Krzyzanowski suggested that further review and industry input should be undertaken before the regulation is finalized, so that proper standards and methods are established. Mr. Michael McGraw also testified that while the pipe bursting method is becoming more accepted and may be cost effective for certain projects, there should be additional standards adopted, and an approval process before the Department for each application. See written testimony attached here to as Exhibit C.

Ms. Cheryl Gaston, attorney with Spruce Law Group, testified in favor of adoption of the regulation, based on her experience with a local client who has particular need to use that method for repairing pipe on residential property that he purchased, but is unable to do so because it is not currently approved in Philadelphia, though it is being widely used in other jurisdictions.

Conclusion

The Board reviewed and considered all of the testimony and the written submissions of the witnesses at the hearing, and provided recommendations to the Commissioner of the Department in a Memorandum dated June 16, 2017, attached hereto as Exhibit D. The Board recommended as follows:

Proposed Regulations P-103 and P-104.

The Board recommended approval of these regulations, although it noted some concerns that changes in the processing of permit applications and the issuance of permits have the potential to disrupt the current business practices of plumbing contractors. Upon

further review, the Commissioner recognized these concerns and those of plumbing contractors but did not agree that disruption would occur. The Commissioner concluded that any issues that may arise with the new procedures under these Regulations can be addressed by the Department as the regulations and procedures are implemented. The Commissioner determined that these Regulations should be adopted as proposed. A copy of these Regulations, unchanged from the previously advertised version, is attached as Exhibit A.

Proposed Regulation P-908.

The Board recommended approval of this Regulation with a modification. Because there is no existing approved method in the current Philadelphia Plumbing Code for joining the new HDPE pipe that would be installed with the pipe-bursting method to any existing cast iron or terra cotta building drain pipe, a provision for the use of mechanical joints meeting the IPC standards should be added to the regulation.

Upon review, the Commissioner noted the concerns of the plumbing contractors but concluded that these can be addressed as the new procedure is implemented under the guidance of the Department. The Commissioner also agreed that the modification recommended by the Board should be adopted. The Commissioner has therefore added a new section P-908.9 to the previously published Regulation, which provides as follows:

P-908.9 Joints. Joints between different piping materials shall be made with a mechanical joint of the compression or mechanical-sealing type conforming to ASTM C 1173, ASTM C 1460 or ASTM C 1461. Connectors and adapters shall be approved for the application and such joints shall have an elastomeric seal conforming to ASTM C 425, ASTM C 443, ASTM C 564, ASTM C 1440, ASTM F 477, CSA A257.3M or CSA B602. Joints shall be installed in accordance with the manufacturer's instructions.

The Regulation P-908, as modified following the public hearing, is attached hereto as Exhibit B. As modified per the recommendation of the Board as adopted by the Commissioner, this Regulation represents the considered judgment of the hearing panel and the Department that the methodology authorized therein should be approved for use as a safe, economical and appropriate method of pipe replacement in many residential locations.