

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

**Meeting of the Allegheny County Board of Health
September 1, 2021**

THIS MEETING WILL BE VIRTUAL

<https://www.alleghenycounty.us/Health-Department/Resources/About/Board-of-Health/Public-Meeting-Schedule.aspx>

Agenda

1. Call to Order
2. Approval of Minutes for the July 14, 2021 Meeting
3. Public Comments on Agenda Items
4. Director's Report
5. New Business – Action Items
 - A. Final Approval
 - a. Revisions to Article XV: Plumbing and Building Drainage (Site Work and Plumbing Fixtures)
 - b. Appointment of Edward Bigley to the Plumbing Advisory Board
 - B. Approval for Public Comment
 - a. Revisions to Article XXI: Air Pollution Control (Permit Notice Advertising)
6. Old Business
7. Public Comments on Non-Agenda Items
8. Adjournment

**Next Meeting of the Board of Health:
Wednesday, November 3, 2021**



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Allegheny County Board of Health
July 14, 2021
Minutes

Present: Lee Harrison, M.D., Chair
William Youngblood, Vice Chair
Debra Bogen, M.D, Secretary
Donald Burke, M.D.
Anthony Ferraro
Caroline Mitchell
Joylette Portlock
Edith Shapira, M.D.
Ellen Stewart, M.D.

Absent: Kotayya Kondaveeti, M.D.

1. Call to Order

Board Chair Dr. Harrison welcomed everyone to the first in-person meeting of the Allegheny County Board of Health since the outbreak of the Covid-19 pandemic. The meeting was called to order at 12:31PM in the Gold Room (Room 410) of the Allegheny County Courthouse.

Dr. Harrison announced that the Board of Health held an executive session to discuss matters of personnel and litigation.

2. Approval of the Minutes

Dr. Harrison asked members if they had any comments regarding the minutes for the May 5, 2021 meeting of the Board of Health. There were none.

Action: Dr. Shapira moved and Dr. Stewart seconded a motion to approve the minutes as presented.

The motion passed unanimously.

3. Public Comment on Agenda Items

Mr. Dowd reported that members of the Board of Health had received one written comment on the agenda items. That comment was in support of the proposed formulation of Article XXIV: Paid Sick Time. The commenter requested that employers with fewer than 24 employees be covered by the proposed regulations.

Dr. Harrison invited those who registered to provide public comment on agenda items to do so within the required three-minute time period.

Jay Ting Walker, Matthew Nemeth, David Bertenthal, Rachel Filipini and Myron Arnowitt spoke to the proposed Mon Valley Air Pollution Episode Rule.

4. Director's report

Dr. Bogen began her report with an update on Covid-19. As of this date, Allegheny County has had 102,059 cases of Covid-19, with 7,278 hospitalizations and 1,983 deaths. Since the beginning of the pandemic 584,421 people have been tested for the virus. Vaccinations rates vary by age and race but overall 66.1% of residents of Allegheny County have been partially vaccinated and 60.4% fully vaccinated. Dr. Bogen explained that the state had recently cleaned up its data to better match individual records and eliminate duplicates. The result led to the more accurate rates she presented. She explained that the Delta variant is present in the Commonwealth and the County and talked about the importance of the vaccines. She describe ongoing monitoring and vaccinating efforts.

Dr. Bogen turned to the non-Covid-19 related work of the Allegheny County Health Department. She announced that the Department is looking for a new Deputy Director for the Bureau of Environmental Health. This is an exciting time for environmental health work and she encouraged board members to share the recently published job posting far and wide.

Dr. Bogen highlighted the exciting work of Dr. Rod Harris's Bureau, Community and Family Health. The bureau recently hired James Weeden, Ph.D. to lead the Asthma Program. She talked about the important work and success of the Office of Violence Prevention as well as the various grants the bureau has successfully received and completed.

Kim Joyce, the Deputy of the Bureau of Administration, has brought in as well as elevated talent for the Bureau. Dr. Bogen welcomed Chris Cavendish, the new Human Resources Manger and Maura Jacobs, who had previously been a health policy fellow and has joined the Department as the Policy Specialist

Dr. Bogen turned the presentation over to Otis Pitts, the Deputy Director for the Bureau of Food, Housing and Policy, who provided an update on 2020 overdose data, which the ACHD recently released in on ACHD's overdose prevention work.

Mr. Pitts informed the board that after a year of decrease in overdose in 2018, the last two years have seen increases.

Mr. Pitts shared information that characterize substances involved. Prescriptions drugs then heroin, fentanyl introduced in to heroin and now other substances.

Mr. Pitts turned his attention to the impacted communities and pointed out rates death for different populations. He called attention to the fact that the death rate for Black males continues to climb and out pace other populations. He also made it clear that the age group most at risk are those age 55 -64. He provided information on communities with the highest number of deaths, highest death rates and the largest percentage increase in death from 2019 to 2020.

ACHD overdose prevention team, surveillance team and more than 30 partners use the data to hone in on the communities that are at the highest risk and to get resources, including NALOXONE into the hands of individuals who will most likely be in a position to best utilize it. He reminded the board members that ACHD is the authorized distributor of NALOXONE.

Board members expressed appreciation for the report and update as well as concern for the increase in deaths, particularly among black males.

Mr. Pitts also shared that ACHD has partnered with DHS to produce a dashboard to share the data and to see it through a variety of filters. The goal is to provide better data to the public so that people and most effectively react as quickly as possible.

ACHD will continue to partner with large region wide organizations as well as groups working “on the ground” close to the needs of individuals. ACHD is also partnering with healthcare centers to build out Medication for Opioid Use Disorder programs to support communities.

5. Action Items

a. Revisions to Article XXI: Mon Valley Air Pollution Episode Rule

Jayme Graham, a program manager of the Air Quality Program presented proposed changes to Article XXI explaining that the goal is to protect public health by reducing the number of exceedances for PM_{2.5}. She reminded the board that the proposed changes had gone the public for a 30 day comment period and that a public hearing had been held. The team prepared a comment response document which was provided to the board. Nearly every comment was in support of the regulation, and some asked for changes. The

Air Advisory Committee reviewed the proposed changes and recommended them for approval by the Board of Health.

Action: Dr. Stewart moved to approve the proposed changes to Article XXI as present. Dr. Portlock seconded the motion.

The motion passed unanimously.

b. Proposed Formulation of Article XXIV: Paid Sick Time

Otis Pitts, the Deputy Director for the Bureau of Food, Housing and Policy, presented the proposed formulation of Article XXIV: Paid Sick Time. The goal of the proposed regulation is to protect public health by ensuring employees in the county have the ability to accrue paid sick time. He reminded the Board of Health that the public had both a 30-day public comment period as well as a public hearing to provide comments on the proposed regulations. The team prepared a comment response document which the board received.

Board members expressed their support for the regulation and the need to evaluate the coverage provided by the proposed regulations and the impact on public health. They encouraged ACHD to make sure such reports were generated by the agency implementing the regulations and that such reports be provide to the Board of Health.

Action: Mr. Youngblood moved to approve the proposed regulations as presented. Dr. Portlock seconded the motion.

The motion passed with seven votes in favor and Mr. Ferraro abstaining citing a possible conflict of interest as a business owner in Allegheny County.

c. Approval of Certified Food Protection Manager Training Fees

Otis Pitts presented proposed changes in the fees for training for Certified Food Protection Managers. The goal of the proposed fee changes is to meet demands of a modern workforce. He presented a table showing the fee increases and explained that current pricing does not meet the cost of the services currently being provide for the training or anticipated costs for the coming years.

Board members asked when the fees were last established and Mr. Pitts explained that they last increase was in 2016.

Action: Mr. Ferraro moved to approve the changes to the fees as presented. Mr. Youngblood seconded the motion.

The motion passed unanimously.

- d. Environmental Health Fund Request: Lead (Pb) Community Outreach Coordinator

Mr. Pitts explained that the Housing and Community Environment Program was requesting funds from the Environmental Health Fund to support a new, one-year position, a lead (Pb) community outreach coordinator. As a result of the a settlement agreement between the commonwealth and the Pittsburgh Water and Sewer Authority funds were available to support a community coordinator position serving the City of Pittsburgh. In order to ensure that work covered all of Allegheny County, the program request funds sufficient to support 50% of the position. The remaining funds would come from the settlement agreement.

Board members expressed support for the request and encouraged outreach to child care providers and Kindergarten programs.

Action: Mr. Youngblood moved to approve the Environmental Health Fund request. Dr. Stewart seconded the motion.

The motion passed unanimously.

- e. Revisions to Article XXI: Stage II Vapor Recovery

Ms. Graham presented the proposed amendments to the Stage II Vapor Recovery section of Article XXI. The proposed amendments would update the tanker unloading rules, remove installation requirements and test procedures, add new test procedures and decommission outdated instructions.

Board members asked if the regulations applied only to commercial gas stations of any gas facilities. Ms. Graham was not sure it covered private facilities and said she would look into the matter further.

Action: Mr. Youngblood moved to send the proposed regulations to the public for comment. Dr. Stewart seconded the motion.

The motion passed 7-0-1 with Dr. Shapira abstaining.

6. Public Comment on Non-Agenda Items

Dr. Harrison asked for a summary of comments received electronically in advance of the board meeting. Mr. Dowd reported that members of the Board of Health received 9 comments from individuals who opposed the proposed changes to the Site Work section of Article XV: Plumbing and Building Drainage. There was one comment opposed to requiring students to quarantine during the school year.

Dr. Harrison invited those who registered to provide public comment to do so within the required three-minute time period.

Louis Oliverio spoke in opposition to the requirements that students quarantine. Loraine Starsky spoke in favor of ACHD retaining the WIC contract. Michelle Naccarati-Chapkis spoke regarding the importance of lead (Pb) prevention work. Barbara Lee Pace and Thaddeus Popovich spoke out against Metallico and encouraged ACHD to take the lead on communications related to fire emergencies. Gabrielle Monroe spoke in opposition to ACHD's overdose prevention program.

7. Adjournment

Action: Dr. Portlock moved to adjourn and Mr. Ferraro seconded the motion.

The motion passed unanimously and Dr. Harrison adjourned the meeting at approximately 12:38PM.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
 Comment and Response Document
 August 21, 2021**

| COMMENT | COMMENTER(S) |
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| ARTICLE XV COMMENTS | |
| <p>1. We demand that all plumbing piping be done by licensed plumbers only. I see no valid reason why our health department would even remotely consider changing our plumbing code to allow unskilled labor to install sanitary or any type of site water piping since the installers that would be employed would be untrained, unlicensed, and ill equipped to do these types of life supporting installations. Would you hire a someone who is not an electrician to install your electric to your house? Why would you let someone who doesn't know how to plumb do plumbing</p> | <p>Ron Edinger, Jay Estes, Jim Cook, Kevin Schmitt, Richard Yoest, Kevin J Hamilton, Michael Schatzman, Daryle Dufford, James Dixon, Zach Rothwell, Bernarr V Tucker, Conny Molander, James R. West, Charles Allen, Tim Patterson, Randy Winkler, Andrew Definis, Jonathan Smith, Brandon Heid</p> |
| <p>RESPONSE: Currently, section AC-106.4 Exceptions 2 Site Work requires that professional engineers, registered architects or registered master plumbers obtain permits for and install or supervise the installation of site work. It also requires ACHD plumbing inspectors inspect work to the standards laid out in Article XV. Violations are handled in a manner consistent with Article XV. If approved, the proposed revision to section AC-106.4 Exceptions 2 Site Work would require exactly the same. The proposed revisions would maintain the current regulations, which have been in place for decades.</p> | |

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

2. We expect and demand that all underground water and sanitary piping be installed by licensed plumbers only. Any piping that requires a plan be filed by a master plumber must be done by plumbers. The licensed plumber is the protection of the environment and the help of the nation.

John A Gombita, Cody Troesch, Zachary Taylor, Tim DeGore, Denise Hunt, Susan Nolder, Pietro Chirumbolo, Troy Moshier, Brian Sevacko, John Moffett, Jason Adamiak, Mark Huber, Stan Marciniak, Bob Birch, James Manion, Paul Bonenberger, Jason Adamiak, Shawn M Welsh, Greg Mansmann, Ron Reiber, Matthew McKay, Corey Shults, Jason Rider, Craig DeFinis, James Joyce, Don Parker, Robert c Rossi, Samuel Hunter IV, John Bakke, Wayne Nagle, Elmer J. Winter, Jason Pompa, Donald Fuller, Victor Hartman, Christopher Capicotto, Walter Pitschke Jr, Lou Cipriani, Damien Sarcone, Victor Hartman, Kevin Kieffer, David McRandal, Jayme Thomas, David Estra, Zachary Zottoli, William Roche, Larry White, Kevin, Joe Welsh, Dave Chinchilla, Reed F. Martin, Bob Montana, John B Kline, John Madigan, James Rokicki, Mark Runkey, Andrew Boocks, Russell Peterson, Christopher Capicotto, Andrew Papak, James Mitchell, Steven Meneely, Thomas Zelenski, James Templin, Nina, Frank Visco, Matthew Robinson, Craig King, James Cataldo, Charles Allen, Dennis Napoleon, John Simonic, Kolton Karwowski, Richard F Long, Dan Jones, Eric Marker, David McRandal, Allan M Povanda, Joseph McGee, Nick Patella, Charles McCleary, Nick McCall, Shawn Conroy, Michael J Bradley, Donald J Goulder, Mitchell Kelsea, John Simonic, Cody Killmeyer, Brandon Bauer, Zach Rothwell, Jacob Deer, Robert Manion, Robert Greiner, Gary R Hunter, Jeremy Kachurick,

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
 Comment and Response Document
 August 21, 2021**

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| | <p>Dominic Giorgianni, Jim Gilligan, Eric Marker, Matt Rosenfield, John Dennis, John Seiber, Thomas Smith, Mark Iebro, Erhon Greiner, Rick Freese, Howard Camp, Julian Donatelli, William Stein, John Guay, Allen M Hobaugh, Dylan J Huffman, Greg Petrovich, Eric Kostelnik, Jeffrey McElwain, Jason Glowacki, Joe Baldauff, James Held, Tyler Andres, Russell A Oliver, Nicholas Higgins, Joe O’Donnell, Matthew Wanner Jr, James L.Falconio, Richard Smith, Nathan Taylor, Stephen L. Gartland, Mathew Cornwell, Nicholas Niskach, Howard Camp, Michael Martinac, Daniel O’Brien, Guy Bianchi, John Gauy, Terry Breault, Edward Scott, Richard Long, Joseph Heid, Wes LaRue, Benjamin J Huff, Kyle Houser, David Boyle, Paul Murray</p> |
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RESPONSE: The proposed changes would maintain the current state. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.

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| <p>3. This is a matter of health and safety and should not be performed by a general laborer, which puts all of us at risk</p> | <p>Carol Sevacko, Timothy J Friedberg, Matt Vranish, Charles Walker, Robert Slater Jr., Brian Scanlon, Jason Kirchner, Chance</p> |
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**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

RESPONSE: ACHD agrees that plumbing is a matter of public health and safety. The proposed changes would maintain the current state. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.

4. Storm water drainage, sanitary sewers, and water are key components to a healthy civilization. Professional, trained, and licensed plumbers should be the only people touching these pipes.

Thomas Camilli, Jason Adamiak, Paul Hoehn, Nicholas Downing, John Carse, Shawn Conroy, Shawn Schwab, Steve Wengryn, Keith Howard, James Boyle, Eric Gerkey, Leo T. Carlin, Jim Schulties, Keith J Yeager, Jacob Deer, Leo Wolfe Jr., Tom Bauer, Fred Sala, Brandon Bauer, Dan Figura, Stephen Dietz, Joseph P. Costello, Jerry White, Beau Morgan, Casey Alsabonche, Patrick S Leslie Sr, Donald J McDonough, Kenneth Figura, Brian Sevacko, Ben Warholak, Nicholas Higgins, Ryan Hopchak, Steve Morgan, Michael J Bradley, Charles Kennedy, David Remaleyc, Kyle Stagle, David Dennis, Graham, James Houser, Michael Petrucci, Seth Lydon, Ben Siroky, Hans Dalke, Bryan Kozmin, James E Manion, William Carl, Evan Williams, Dan Dabulis, Jonathan Smith, Henry Hart Jr, Joe Pfeifer, Caiden Shaffer, JoHanna Clendenning, John Norbut, Jr, Michael Joseph Pisarcik, Steve Pollock

RESPONSE: The proposed changes would maintain the current state. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

5. It is imperative that plumbers install the piping for site work. If not, you will end up with shoddy work. If not, you will end up with flooding all over like you have in Millvale.

Shane Landy, Michael Patton, Phillip and Michelle Johnson, Dillon Mulvihill, Corey Borczuch, Jeffrey R Lohr, David Condie, John O'Connor, Joseph McDonaghhi, Richard Strahsmeier, Steven Yates, Jeff Mayer, Bryan Waskowiak, Dustin Chehovits, Donald Fuller, Patrick Diven, David Dunton, Geoff Cole, Chuck Downing, Thomas Smith, Joseph E. Kutschbach, Jr., Paul Hoehn, Michael Patton, Phillip and Michelle Johnson, Dillon Mulvihill, Martin Foor, John Bakke, Paul Dulski

RESPONSE: Regardless of the proposed changes, ACHD will continue to require plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.

6. If you let plumbing be done by non-plumbers that basically is making our licenses worth nothing in the county. We have gone thru years of training. Plumbers complete the 2000 work hours and 576 hours that is required to be a journeyman plumber in Allegheny county. Those who aren't licensed through the health department should not be responsible for any utility work in This would be a sad day for licensed plumbers.

Mike Ward, Sean Schreiber, John Schulte, Daniel V. Costello, John McDonough, Josh Ohrman, Alex Carlin, Shane Spaniol, Nicholas Vanzin, Mark Gault, Dennis Koch, Douglas Clark, Scott Singer Jr, Paul Murray, Kevin Bishop, Kyle Cygrymus, Douglas Clark, Josh Jenca, John A. Herman, Tyler Huber, Kolton Karwowski, Mark Gault, Al Lowman, Joe Sawich, Jacob Fitzpatrick, Martin Long, Jason C Sauer, John Kilian Muldoon, Matt Kobeda, Daryle Dufford, Nick Williams, Justin Antoline, Peter Boyum, Brian Kirchner

RESPONSE: The high standards of training maintained in Allegheny County will continue. Master plumbers, along with registered architects and engineers, will continue to oversee and supervise installation. These changes will maintain the status quo.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
 Comment and Response Document
 August 21, 2021**

7. All plumbing site work [should] be carried out by a licensed plumber or apprentice under the supervision of a licensed plumber. Site work is a critical part of the plumbing process that requires the filing of plans; therefore, a licensed plumber needs to do the work.

Terry Denoble, Corey Borczuch, Jeffrey R Lohr, David Condie, John O'Connor, Joseph McDonaghhi, Richard Strahsmeier, Steven Yates, Jeff Mayer, James Mitchell, Henry Hart Jr., Gary Hartman, Christopher Sciulli, Matt Rosenfield, Jason C Sauer, Andrew Cigna, Howard R. Camp, Marcus Pace, Garrett O'Brien, Nicholas Bickel, Andrew Allegro, Andrew Davies, Karl Hohman, David Brenning, Steve Yoho, Don Christy, Christopher Hewitt, David Gieske, William Logue, Nicholas Vogt, Jerry Hurley

RESPONSE: ACHD agrees that site work is a important part of the plumbing system. The proposed changes would maintain the current state. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.

8. Having taught the plumbing apprenticeship for 17 years at AMPAC and now a proud member of Local 27, I was always sure to impress upon all apprentices the importance of having your plumbing license to protect all of us.

Matt Nannini

RESPONSE: ACHD values the strong tradition of training and the high standards of the plumbing code to which plumbers hold themselves accountable to. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

9. This is just a jurisdiction move by the laborer’s union to claim licensed plumbing work. This isn't a change that will help a business owner or resident of Allegheny County in any way. We have the best plumbing code in the country. I travel all over the world as Chairman of the world plumbing council. I use Allegheny County code book as an example for others to use to replicate in their cities. I strongly urge the Allegheny County health dept. to reject the proposal by unlicensed plumbers from installing site work. There are three reputable plumbing schools that are available to them in Allegheny County to train their employees to be eligible to do the site work.

Thomas Bigley

RESPONSE: ACHD appreciates your service to the community of plumbers and the residents of the county. The proposed change to AC-106.4 Exceptions 2 Site Work, will maintain the current state of site work in Allegheny County.

10. I disagree with striking verbiage that was already adopted by the Plumbing advisory Board that states that the installation of the site work is regulated by this Article and must be installed by a plumber unless otherwise permitted by this Article. Any work that requires that a permit be filed by a licensed plumber must be installed by a licensed plumber. The county receives thousands and thousands of dollars in annual revenue from plumbers by way of permit and license fees yet ACHD thinks the code should allow others to do the work that were trained to do. Only plumbers are regulated by Article XV.

Edward Bigley

RESPONSE: ACHD values the advice received from the plumbing advisory committee and will continue to embrace that as we consider revisions to Article XV in which the ACHD Board of Health and Allegheny County Council are the final decision makers. The proposed changes would maintain the current state. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

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| <p>11. Please do not remove the section of our Allegheny County plumbing code that calls for licensed plumbers to do site work. Keep in mind the plumber protects the health of the nation not the laborer.</p> | <p>Michael J Bradley, Nicholas Higgins, Ryan Hopchak, Steve Morgan, Michael J Bradley, Charles Kennedy, John Norbut Jr., David Weigel</p> |
| <p>RESPONSE: ACHD agrees; plumbing and building drainage are important to public health. The current state of regulation for site work has protected public health for many years. The proposed changes would maintain the current state. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.</p> | |
| <p>12. If Allegheny county allows non licensed workers to do plumbing work I will drop my license, sell my properties and move out of the county</p> | <p>Karl e Hohman</p> |
| <p>RESPONSE: ACHD values the work of qualified plumbers. Fees are designed to pay for the cost of maintaining the system of training. The obligation of hiring qualified workers will remain unchanged in which it is the responsibility of the entity filing the plan to hire and supervise the installation of site work.</p> | |
| <p>13. The Plumbing code in Pittsburgh has always been highly characterized as one of the strictest codes in America. By taking away the requirements to have a license to do site work, I feel like you are jeopardizing that code. I am aware of the knowledge and skill that goes into it. It is a very important part of the plumbing system and having an unskilled, untrained, worker doing it can really put the American public at risk.</p> | <p>Daniel Hara, Michael Kimmell, Gregory C Conley</p> |
| <p>RESPONSE: The high standards of training maintained in Allegheny County will continue. ACHD intends Master plumbers, along with registered architects and engineers, will continue to oversee and supervise installation. These changes will maintain the status quo.</p> | |
| <p>14. As a master plumber in Allegheny County I demand that all plumbing be installed by licensed plumbers only. Any piping that requires a plan to be filed by a master plumber must be done by plumbers only. This is to ensure that all work is done properly and up to Allegheny county code and inspected.</p> | <p>Jerry Gehringerc, John Ullom, Paul Dulski, Dale Wampler, Jacob Gustic, Shae Conley, William Fritzley</p> |

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

RESPONSE: The obligation to ensure qualified individuals are hired and perform site work will remain the responsibility of the entity filing the plan. Additionally, ACHD will continue inspecting all work with the same high quality standards that are designated by the existing criteria outlined in Article XV.

15. I am a college graduate and have been an ACHD licensed plumber since 1966 (55 years) and worked under three (3) ACHD plumbing codes. Because most storm water extends from a combination (storm/sanitary) sewer, it is sensical that a licensed plumber allows only acknowledge treatable inflow to ALCOSAN. All plumbing piping should be installed by registered ACHD licensed plumbers only. Please incorporate into the ACHD Plumbing Code that any inspected piping that requires a plan to be filed by a master plumber must be done by only ACHD licensed plumbers. This will help control unjustified and uncontrollable substances into the combination sewer system. Thank You

George C. Schohn

RESPONSE: Article XV regulates plumbing and building drainage and those who perform this work. The proposed changes would maintain the current state. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

16. For over 130 years Pittsburgh Plumber's L.U.#27 has not only protected the health of the residents in Allegheny County, they have contributed in the development of one of the very best Plumbing codes in the Country. During the pandemic, the White House designated Plumber's as essential workers. The need for properly installed, properly maintained sanitary facilities was always important. But during the fight to stop the spread of COVID-19, these facilities took on added importance. The Plumber's quietly went to work each day, to provide the service for our neighbors, our hospitals, our nursing homes & our educational facilities, just to name a few. ACHD is considering language change, pertaining to site work, that will weaken the Allegheny County Plumbing Code. This change would allow, non-Plumber's to install piping. This piping which requires a Master Plumber, to file a plan, would be installed by untrained individuals. We should never lower our standards for safe drinking water or sanitary facilities, we should be looking to improve them! Plumber's must complete a rigorous 5 year apprenticeship program, not to mention ongoing Journeymen training, to maintain this level of excellence.

Patrick Bigley

RESPONSE: ACHD values and appreciates all of the work that has been put into developing Article XV which is exactly why the proposed changes would maintain the current state. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

17. I have been a licensed plumber since 1980 and a Master Plumber since 1987 in Allegheny County I see no valid reason why our health department would even remotely consider changing our plumbing code to allow unskilled labor to install sanitary or any type of site water piping since the installers that would be employed would be untrained, unlicensed, and ill equipped to do these types of life supporting installations. There is no valid reason to leave the public exposed to just that because there is a very real possibility of that happening! I understand this is all about money just like back in the 80's when a developer who was also a lawyer from Franklin Park sued the county over the installation of storm sewers in the same manner and we can all see the fruits of that and the enormous amount of money it cost us all due to how it added to the problem of flooding in the Millvale and Etna area. This was only rectified by the spending of millions upon millions of dollars on flood control along Babcock Boulevard upstream of Millvale not to mention the lives ruined due to this flooding that took place. In fact, due to that this type of storm piping should be returned to licensed plumbers to avoid the haphazard installations that took place adding to the flooding problems in the Millvale area.

John Strahsmeier

RESPONSE: Article XV regulates plumbing and building drainage and those who perform this work. The proposed changes would maintain the current state. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

18. If the proposed change to allow site plumbing work to be completed by anyone other than a licensed plumber passes, this could endanger public health. I have known of installers not installing controlling traps on storm sewers, which would potentially allow explosive fumes to enter the internal plumbing system of a building, backflow prevention devices not be installed in water meter pits, which would potentially allow contaminants to enter the potable water system, etc. Fortunately, these examples were properly remedied prior to any potential problems, but if installed originally by a licensed plumber, these instances would not have originally occurred. Please continue to protect public health by not allowing installers other than licensed plumbers to install exterior plumbing systems.

Albert Chlystek, David Mocello,
Damon Salego

RESPONSE: If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV. All of this is current practice for ACHD.

19. As a licensed plumber for Achd, it should always filed by a master plumber.

John Ios

RESPONSE: If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV. All of this is current practice for ACHD.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

20. To whom this may concern.. Recently I was alerted that the Allegheny health department is considering changing its code requiring Union contractors in its health facilities to complete construction projects. Years of specialized education are required for Union hands to attain enough knowledge to complete construction project tasks correctly, so no corners are cut and a healthy environment is always preserved. Furthermore projects at healthcare facilities are a large percentage of the work that the Union receives and if we lose that we lose our livelihoods. We ask that you uphold rules that have been enacted long ago, to ensure that the livelihood of the brothers and sisters who have committed their blood and sweat to building these healthcare facilities in the past.

Todd Dittman, Stephen Gartland

RESPONSE: The proposals on the table are not relevant to union versus non union. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV. All of this is current practice for ACHD.

21. I disagree with the action of the amendments for the Plumbing Code. As a registered Master Plumber that has been in business for the better part of 30 years. Gender neutral bathrooms should not be allowed due to Mens and Womens (ADAM AND EVE) Room as the code has stated for many years. WHY is this necessary? SITE WORK: We as Plumbers have always stood by the ACHD Plumbing code, Paid our License fees and filed our plans for 30 plus years. We are professionals that are trained in doing our work and should not have to worry about some under trained individual messing with the health of our nation and our community.

Ken Cuccaro

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
 Comment and Response Document
 August 21, 2021**

RESPONSE: Thank you for participating in the process. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV. All of this is current practice for ACHD.

22. The steps needed to attain licensure in any profession are intended to safeguard consumers from poorly trained, undereducated, and loosely regulated quasi-professionals. A person's home is typically their primary asset and as such needs to be protected from shoddy workmanship that can easily result in thousands of dollars in damage from mistakes a trained professional is far less likely to make. Please protect consumers and the professionals who have worked so hard to acquire the knowledge and skills to practice their trade.

Katie Capehart, Shannon Williams

RESPONSE: The effort it takes licensed professionals to be educated is valued by ACHD. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV.

23. There should always be a plumber doing site work, there's a reason it's a skilled trade. Laborers do not go to school for 5 years to learn the trade!! Therefor should not be doing our work.

Matt Rovnak, Michael Huger,
 Michael McNally, Rob Burger

RESPONSE: ACHD is not responsible for the hiring of individuals who perform site work. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV.

24. The more we give away the more we lose our livelihood

Kurt Smith, Dennis Koch,

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
 Comment and Response Document
 August 21, 2021**

RESPONSE: If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV.

25. Everyone already knows that many nonqualified people do plumbing work everyday with no consequences. Why should plumbers continue to pay dues and permit fees when you will be basically laying out the red carpet for any handyman to continue the practice of doing plumbing work without the requirements that plumbers all over Allegheny County have been doing for years.

Amy Poillucci

RESPONSE: Regardless of the proposed changes, violations of the code have been and would continue to be handled in a manner consistent with Article XV.

26. Plumbing business owner since 1980. Commented that the issue between gender bathrooms and site work should have been separated. I don't understand who, and what, and why they would try to hurt our livelihoods that pay through the nose licensing fees, permit fees, and pay for our employees to work and have a job, and do the right thing, and be in the American way. We do a lot of utility line replacement, and this will hurt us dramatically, dramatically. So with the plumbers and union plumbers the guys who are doing this, something needs to be done as fast as possible to sort this out. I'm sorry. I'm very sorry, this is happening and we as plumbers have to take our time instead of working doing stuff for our customers, we are here trying to put out a fire that shouldn't be.

Terry Mertz and Unregistered Speaker

RESPONSE: Thank you for participating in the process. If approved, AC-106.4 Exceptions 2 Site Work would require professional engineers, registered architects or registered master plumbers obtain permits and install or supervise the installation. It would also require ACHD plumbing inspectors to inspect the work to the standards of Article XV. Violations have been and would continue to be handled in a manner consistent with Article XV. All of this is current practice for ACHD.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
 Comment and Response Document
 August 21, 2021**

| | |
|---|-------------------------|
| <p>27. Mental Health Professional spoke to the benefits of having non gender restrooms as it pertains to client safety and healing and instances of being inclusive in many ways. Pleaded to vote for the removal of requirement of having gender specific bathrooms.</p> | <p>Jennifer Hudak</p> |
| <p>RESPONSE: ACHD must wait for the Commonwealth of Pennsylvania to approve the 2018 and eventually 2021 Plumbing codes. Only then and ACHD consider approving those codes for Allegheny County.</p> | |
| <p>28. Single Stalled restrooms should be universally acceptable. Advocating for a clear code that allows for businesses to construct multi-stall all gender restrooms.</p> | <p>Nica Ross</p> |
| <p>RESPONSE: ACHD must wait for the Commonwealth of Pennsylvania to approve the 2018 and eventually 2021 Plumbing codes. Only then and ACHD consider approving those codes for Allegheny County.</p> | |
| <p>29. Speaker on behalf of LGBTQ Health Commission spoke in favor of the Article XV revision. Revisions to expand criteria is a step in the right direction. Speaker denotes repercussions such as violent acts toward transgender individuals that have occurred as a result of this change not being implemented. Speaker encouraged the Board to not only accept single use restrooms but mandate them.</p> | <p>Luca Salerno</p> |
| <p>RESPONSE: Thank you for your participation in this process. Passage of these revisions to Article XV will move Allegheny County closer to the goal you identified. When the commonwealth approves the 2018 Universal Construction Code, ACHD will review it in a timely manner. Revisions to that code will move Allegheny County still closer to the goal.</p> | |
| <p>30. Pittsburgh Architect speaking on behalf of the transgender community in support of the minor revisions to the plumbing code to allow for gender neutral bathrooms. Additionally, advocating for further advancement of removal of all gender assignment requirements of bathrooms and emphasizes that other cities have done this, and this will likely attract new business to the county.</p> | <p>Jessie Catenacci</p> |

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
 Comment and Response Document
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RESPONSE: Thank you for your participation in this process. Passage of these revisions to Article XV will move Allegheny County closer to the goal you identified. When the commonwealth approves the 2018 Universal Construction Code, ACHD will review it in a timely manner. Revisions to that code will move Allegheny County still closer to the goal.

31. Ms. Holly spoke on behalf of her 18-year-old son who was too embarrassed to speak in public. Her son's brain works a little differently and so the task of utilizing a public restroom alone scares him. Being that he is the only person in his household who does not identify as female this makes it difficult when it comes to utilizing the facilities in public. This family is in support of businesses providing a safe space for non-gender specific bathroom utilization.

Holly

RESPONSE: Thank you for your participation in this process. Allegheny County Health Department (ACHD) continues to work toward improving the health and well-being of all Allegheny County residents where they live, work, and play.

32. I would like to speak at the code hearing on June 22, 2021 for Article XV section AC-106.4.2 and AC-403.1 Footnotes 14 and 21

Jody Handley, Jennifer Hudak, Nica Ross, Ginger Vermillion, Spencer Dennis, Luca Salerno, Jessie Catenacci, Noah Riley, Melissa Simonetti

RESPONSE: Thank you for your participation in this process. Allegheny County Health Department (ACHD) continues to work toward improving the health and well-being of all Allegheny County residents where they live, work, and play.

33. I'm in favor of the new code revision to Article XV section AC-106.4.2 and AC-403.1 Footnotes 14 and 21

Anonymous

RESPONSE: Thank you for your participation in this process. Allegheny County Health Department (ACHD) continues to work toward improving the health and well-being of all Allegheny County residents where they live, work, and play.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

34. My name is Lauren Aikin-Smith and I am a social worker, a mental health therapist, an educator, a married lesbian, and an adoptive and foster parent. My wife, a nurse, and I have been fostered parents for the past 8 years and due to our professional education and training we have only fostered youth who have significant development, intellectual, and/or physical impairments or “disabilities”. Every single one of the children that have been in our care over the years have needed assistance in the restroom, regardless of age. Currently, one of the children in my care has a genetic disorder and a diagnosis of Autism and whether he will ever be able to use the restroom on his own remains questionable. I implore you to change the plumbing code so that all single stall restrooms are designated All-Gender and that all facilities, buildings, and businesses have the ability to construct All-Gender multi stall restrooms with floor to ceiling stalls and enclosed urinals. These changes would increase accessibility, safety, and autonomy for my children, my family, other queer and same-sex families in the Pittsburgh area and perhaps most importantly for many of the other at-risk youth in our foster care system who are already too often pushed aside and forgotten.

Lauren N Aikin-Smith

RESPONSE: Thank you for your participation in this process. Passage of these revisions to Article XV will move Allegheny County closer to the goal you identified. When the commonwealth approves the 2018 Universal Construction Code, ACHD will review it in a timely manner. Revisions to that code will move Allegheny County still closer to the goal.

35. Pittsburgh Glass Center is considering a facility expansion and renovation and as part of that project, we wanted to create all-gender restrooms in our facility. We were surprised to learn from our architects that was not allowed by code in Allegheny County. We feel strongly the code should be changed.

Heather McElwee

RESPONSE: Thank you for your participation in this process. Passage of these revisions to Article XV will move Allegheny County closer to the goal you identified. When the commonwealth approves the 2018 Universal Construction Code, ACHD will review it in a timely manner. Revisions to that code will move Allegheny County still closer to the goal.

**Allegheny County Health Department Plumbing June 22, 2021 Article XV Section AC-106.4 –
Comment and Response Document
August 21, 2021**

36. All gender restroom access is not only important for trans and nonbinary people but also for people taking care of a child, disabled family member, or elderly person who isn't the same gender as them and needs assistance in the restroom and there are often no changing tables for infants in Men's restrooms. Also, worst case scenario, someone asks to see the gender on my ID and it's an X but there are only restrooms designated for Males and Females, am I just supposed to hold it until I get home? Not all people fit neatly into binary genders and I love that the state recognizes that on my ID but they need to work on making sure that's recognized everywhere in the state.

Mike Brigham

RESPONSE: Thank you for your participation in this process. Passage of these revisions to Article XV will move Allegheny County closer to the goal you identified. When the commonwealth approves the 2018 Universal Construction Code, ACHD will review it in a timely manner. Revisions to that code will move Allegheny County still closer to the goal.

37. I'm writing to you today in hopes that Pittsburgh can follow in the footsteps of Philadelphia, Denver, Austin, Vermont, and other cities and states that have successfully passed measures mandating city bureaus to label single-occupancy toilets in public spaces as unisex (or gender-neutral). Proposed modifications to Article XV are not enough. I encourage ACHD to change the plumbing code so that : - All single stall restrooms must be designated All-Gender, All Facilities/buildings/businesses should have the ability to construct all gender multi stall restrooms with floor to ceiling stalls and enclosed urinals.

Nicole Knight

RESPONSE: Thank you for your participation in this process. Passage of these revisions to Article XV will move Allegheny County closer to the goal you identified. When the commonwealth approves the 2018 Universal Construction Code, ACHD will review it in a timely manner. Revisions to that code will move Allegheny County still closer to the goal.

1. -----
2. Ron Edinger
3. Denise Hunt
4. John A Gombita
5. Tim DeGore
6. Zachary Taylor
7. Cody Troesch
8. Susan Nolder
9. Pietro Chirumbolo
10. Troy Moshier
11. Brian Sevacko
12. Carol Sevacko
13. Thomas Camilli
14. Shane Landy
15. John Moffett
16. Jason Adamiak
17. Mike Ward
18. Mark Huber
19. Stan Marciniak
20. Terry Denoble
21. Bob Birch
22. James Manion
23. Paul Bonenberger
24. Jason Adamiak
25. Matt Nannini
26. Shawn M Welsh
27. Thomas Bigley
28. Greg Mansmann
29. Ron Reiber
30. Matthew McKay
31. Corey Schults
32. Jason Rider
33. Craig DeFinis
34. James Joyce
35. Don Parker
36. Robert C Rossi
37. Samuel Hunter IV
38. Wes LaRue
39. Garrett O'Brien
40. Corey Borczuch
41. Jeffrey R Lohr
42. Jay Estes
43. David Condie
44. Marcus Pace
45. Mark Iebro
46. Nicholas Bickel
47. Erhon Greiner
48. Rick Freese
49. Howard Camp
50. Nicholas Higgins
51. Julian Donatelli
52. William Stein
53. John Guay
54. Edward Bigley
55. Allen M. Hobaugh
56. Andrew Allegro
57. Shane Landy
58. Ryan Hopchak
59. Dylan J Huffman
60. Greg Petrovich
61. Michael J Bradley
62. Andrew Davies
63. Eric Kostelnik
64. Jeffrey McElwain
65. Allen M Hobaugh
66. Jason Glowacki
67. Joe Bladauff
68. Steve Morgan
69. James Held
70. Tyler Andres
71. Karl E Hohman
72. John O'Connor
73. Russell A. Oliver
74. Local
75. Nicholas Higgins
76. Timothy J Friedberg
77. Joe O'Donnell
78. Matthew Wanner Jr
79. James L Falconio
80. Matt Nannini
81. Richard Smith
82. Nathan Taylor
83. David Brenning
84. Stephen L. Gartland
85. Mathew Cornwell
86. Joseph McDonaghhi
87. Nicholas Niskach
88. Howard Camp
89. Michael Martinac
90. Daniel Obrien
91. Steve Yoho
92. Guy Bianachi
93. Daniel Hara
94. John Guay
95. Terry Breault
96. Edward Scott
97. Richard Long
98. Joseph Heid
99. Charles Kennedy
100. Michael Patton
101. Richard Strahsmeier
102. Steven Yates
103. Jeff Mayer
104. Phillip & Michelle Johnson
105. Jerry Gehringer
106. Paul Hoehn
107. Nicholas Downing
108. George C. Schohn
109. John Carse
110. David Gieske
111. David Remaley
112. Patrick Bigley
113. Shawn Conroy
114. John Strahsmeier
115. Shawn Schwab
116. Steve Wengryn
117. Ryan Page
118. Keith Howard
119. Joseph Sears
120. Kyle Stagle
121. James Boyle
122. Eric Gerkey
123. James Boyle

124. Leo T. Carlin
125. Jim Scuhulties
126. Keith J Yeager
127. Don Christy
128. Jacob Deer
129. Leo Wolfe, Jr.
130. Tom Bauer
131. Albert Chylstek
132. David Mocello
133. Matt Vranish
134. James E Manion
135. Bryan Waskowisk
136. William Carl
137. Dustin Chehovits
138. Donald Fuller
139. Patrick Diven
140. David Dennis
141. David Dunton
142. Geoff Cole
143. Kevin Schmitt
144. Chuck Downing
145. Graham
146. Thomas Smith
147. Raymond Raget
148. Joseph E. Kutschbach, Jr.
149. James Houser
150. James Mitchell
151. Steve Weir
152. Sean Schreiber
153. Paul Hoehn
154. Jerry Hurley
155. Brandon Bauer
156. Michael Petrucci
157. Seth Lydon
158. Dan Figure
159. Stephen Dietz
160. Joseph P. Costello
161. Jerry White
162. John Shukte
163. Henry Hart Jr.
164. Evan Williams
165. Beau Morgan
166. Kevin J Hamilton
167. Joe Pfeifer
168. Richard Yoest
169. Michael Schtzman
170. Jim Cook
171. Joe Bennett
172. Caiden Shaffer
173. JoHANNA Clendenning
174. Donald J McDonough
175. Kevin Bishop
176. Kyle Cygrymus
177. Hans Dalke
178. Maurice Carwise
179. Kenneth Figura
180. Brian Sevacko
181. Zach Rothwell
182. Bernarr V Tucker
183. Conny Molander
184. James R. West
185. Ben Warholak
186. Charles Allen
187. Josh Jenca
188. John Ios
189. John A. Herman
190. Ben Siroky
191. David Wiegel
192. Nick Mccall
193. Daniel Specca
194. Michael Joseph Pisarcik
195. Tyler Huber
196. Jason C Sauer
197. Brian Scanlon
198. Kevin McDonough
199. Dominic Butera
200. Todd Dittman
201. Mark Gault
202. John Ullom
203. Paul Dulski
204. John Bakke
205. Dale Wample
206. Al Lowman
207. Jacob Gustic
208. Stephen L. Gartland
209. Jason Kirchner
210. Shae Conley
211. William Fritzley
212. Joe Sawich
213. Damon Salego
214. Benjamin J Huff
215. Martin Long
216. Jacob Fitzpatrick
217. Chance
218. Steve Pollock
219. Jason C Sauer
220. Michael Kimmell
221. Tim Patterson
222. Randy Winkler
223. Thomas Smith
224. Andrew Cigna
225. Andrew DeFinis
226. John Kilian Muldoon
227. Kolton Karwowski
228. Michael Mitchell
229. Ryan Rosenfield
230. Jacob Deer
231. Jonathan Smith
232. Matt Kobeda
233. John Seiber
234. John Dennis
235. Matt Rosenfield
236. Brandon Heid
237. Howard R Camp
238. Bryan Kozmin
239. Eric Marker
240. Daryle Dufford
241. Jim Gilligan
242. John Norbut, Jr.
243. Dominic Giorgianni
244. Douglas Clark
245. Matt Rosenfield
246. John Bakke

247. Martin Foor
248. Jeremy Kachurick
249. William Logue
250. Gary R Hunter
251. Ken Cuccaro
252. Robert Greiner
253. Martin Long
254. Robert Manion
255. Nick Williams
256. Paul Murray
257. Joe Bennett
258. Scott Singer, Jr.
259. Ben Siroky
260. Christopher Sciulli
261. Jacob Deer
262. Kyle Houser
263. Zach Rothwell
264. David Boyle
265. Shannon William
266. Jason C Sauer
267. Brandon Bauer
268. Katie Capehart
269. Cody Killmeyer
270. Matt Rovank
271. Michael McNally
272. Rob Burger
273. Douglas Clark
274. John Simonic
275. Michael Huger
276. Michelle Kelseas
277. Donald J Goulder
278. Michael J Bradley
279. Shawn Conroy
280. Gregory C Conley
281. Nick McCall
282. Charles McCleary
283. Nick Patella
284. Joseph McGee
285. Allen M Povanda
286. David McRandl
287. Eric Marker
288. Dan Jones
289. Richard F Long
290. Kolton Karwowski
291. John Simonic
292. Scott Daley
293. Dennis Napoleon
294. Charles Allen
295. James Cataldo
296. Craig King
297. Rob Burger
298. Matthew Robinson
299. Frank Visco
300. Nina
301. Edward Wilson
302. Brian Scanlon
303. James Dixon
304. Patrick S. Leslie Sr
305. Jonathan Smith
306. Gary Hartman
307. Allan M Povanda
308. Dennis Koch
309. James Templin
310. Mark Gault
311. Jerry Hurley
312. Thomas Zelenski
313. Steven Meneely
314. James Mitchell
315. Nicholas Vanzin
316. Andrew Papak
317. Shane Spaniol
318. Casey Alsabonche
319. Christopher Capicotto
320. Dan Dabulis
321. John Norbut, Jr.
322. Alex Carlin
323. Russell Peterson
324. Josh Ohrman
325. Peter Boyum
326. Andrew Boocks
327. Mark Runkey
328. James Rokicki
329. Nicholas Vogt
330. John Madigan
331. John McDonough
332. John B. Kline
333. Bob Montana
334. Kurt Smith
335. Reed F. Martin
336. Dave Chinchilla
337. Joe Welsh
338. Kevin
339. Larry White
340. William Roche
341. David Boyle
342. Zachary Zottoli
343. David Estra
344. Daniel V. Costello
345. Jayme Thomas
346. Robert Slater Jr.
347. David McRandal
348. Dillon Mulvihill
349. Kevin Kieffer
350. Victor Hartman
351. Damien Sarcone
352. Lou Cipriani
353. Christopher Hewitt
354. Walter Pitschke, Jr.
355. Fred Sala
356. Christopher Capicotto
357. David Boyle
358. Victor Hartman
359. Daryle Dufford
360. Justin Antoline
361. Donald Fuller
362. Paul Murray
363. Jason Pompa
364. Elmer J. Winter
365. Amy Poillucci
366. Wayne Nagle
367. Brian Kirchner
368. Charles Walker
369. David Boyle

370. John Bakke
371. Terry Mertz
372. Jennifer Hudak
373. Nika Ross
374. Luca Salerno
375. Jessie Catenacci
376. Holly
377. Jody Handley
378. Ginger Vermillion
379. Spencer Dennis
380. Noah Riley
381. Melissa Simonetti
382. Lauren N Aiken-Smith
383. Holly McElwee
384. Mike Brigham
385. Nicole Knight

ALLEGHENY COUNTY HEALTH DEPARTMENT
RULES & REGULATIONS
ARTICLE XV – PLUMBING AND BUILDING DRAINAGE

Deletions are shown with strikethroughs.
Additions are shown bolded and underlined.

Changes made after the November 4, 2020 Board of Health meeting are shown in red font, with deletions as strikethroughs and additions as larger underlined text. Text in red that is not underlined or with strikethrough is language that was indicated as deleted in prior version.

CHAPTER 1
ADMINISTRATION

SECTION 101
GENERAL

101.1 Title. These regulations shall be known as the Plumbing and Building Drainage Code of the Allegheny County Health Department, hereinafter referred to as "Article XV".

101.1.1 Effective date. This Article, after approval, shall become effective ~~no sooner than~~ ten (10) days after being advertised in a newspaper of general circulation in Allegheny County. Upon the effective date, all other provisions previous versions of Article XV shall be are repealed ~~superseded~~ and replaced.

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter ~~13~~ 14 and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements.

SECTION 104
DUTIES AND POWERS OF THE CODE OFFICIAL

104.4 Inspections. The Chief Plumbing Inspector and/or his designee shall make all required inspections or shall accept reports of inspections by approved agencies or individuals. All inspection reports shall be in writing; **may be stored and issued electronically**; and **shall** be endorsed by an officer of such approved agency or by an approved individual. The Chief Plumbing Inspector and/or his designee is authorized to engage such expert opinion as is deemed necessary to resolve unusual technical issues that arise, subject to the approval of the Director.

104.8 Department records. The code official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained ~~in the official records as long as the building or structure to which such records relate remains in existence~~ **for at least 5 years** unless otherwise provided for by other regulations, **Pennsylvania law, or federal law.**

SECTION 105
APPROVAL

AC-105.1 ~~Modifications~~ Variances. Whenever there are practical difficulties involved in carrying out the provisions of this code, the Director and/or his designee shall have the authority to approve modifications on a case by case basis, provided that the Director and/or his designee shall first find that special circumstances make the strict letter of this code impractical. ~~Such modifications shall be in conformity with the intent and purpose of this code, such that they do not negatively impact human or environmental health or fire safety.~~ **Any interested party may request a variance from the provisions of this Code. All requests must be in writing, state the reasons for the request, and provide evidence that the variance will pose no real or potential hazard to the health, safety or welfare of the public or any individuals.** The details of an action granting a ~~modification~~ **variance** to this code shall be recorded and maintained in the files of the Plumbing Program.

SECTION 106
PERMITS

AC-106.1 When permits are required. A permit is required to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge,

alter, repair, remove, convert or replace **all or any part of the** plumbing system, **including site work**, the installation of which is regulated by this Article, or to cause any such work to be done. Such permit may be obtained by application to the Plumbing Program.

106.1.1 Engaging in the business of plumbing. No person, other than a currently licensed master plumber, shall engage in the business of plumbing or expose the sign of plumbing or any advertisement pertaining thereto, except wholesale or retail plumbing fixture suppliers. Any firm or corporation desiring to engage in the business of plumbing shall have at least one member who possesses a valid master plumber's license, who shall register with the Department his or her name, along with the name(s) of all officers of the firm or corporation upon whose behalf he is registering.

106.1.2 Exempt Work. The following work shall be exempt from the requirement for a permit:

1. Repairs that involve the working parts of a faucet or valve, the clearance of stoppages, or the replacement of defective faucets or valves (**excluding hot water mixing valves in tub, shower, and/or combination tub and shower valves**), may be made without a permit. However, a permit shall be obtained when any part of the plumbing system becomes defective and requires replacement or alteration.

AC-106.4 By whom application is made. Application/plans for permits shall be made by the owner-occupant or master plumber installing all or part of any plumbing system. The applicant shall meet all qualifications established by statute, or by rules and regulations promulgated by this Code. The full name of and address of the applicant shall be stated in the application.

Exceptions:

1. **Existing single-family dwellings:** Any permit required by this Article to allow any work regulated by this Article may be issued to a bona fide owner who presently occupies an existing single-family dwelling, ~~who intends to occupy the existing single family dwelling and any of its accessory buildings,~~ exclusively for private purposes, on the condition that the said owner personally purchase all material and perform all labor in connection therewith. Such privilege does not convey the right to violate any of the provisions of this Article, nor is it to be construed as exempting any such property owner from obtaining a permit, nor covering or concealing work in any manner until after it has been inspected by the Administrative Authority's inspectors, nor from payment of required fees.
2. **Site Work:** When a commercial or industrial site is being developed, registered professional engineers, registered architects, or registered master plumbers may

file plans, ~~and~~ obtain permits, and install and/or supervise ~~for~~ the installation of sewers and water supply systems regulated by this Article from the point of public connection or proper disposal to a point five (5) feet from the building (commonly identified as "site work"). Where a new residential site is being developed and public sewers are not immediately available, registered professional engineers, registered architects or registered master plumbers may file plans, ~~and~~ obtain permits, and install and/or supervise ~~for~~ the installation of common private sewers and common water supply systems up to the point of individual sewer or individual water service pipe connections to the common line. In addition, the requirements of Section AC-701.3 and AC-701.3.1 shall also be required. ~~The installation of site work is regulated by this Article and must be installed by a licensed plumber unless otherwise permitted by this Article.~~

106.5 Retention of construction documents. One set of construction documents shall be retained by the code official until final approval of the work covered therein. One set of approved construction documents shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.

AC-106.5.7 Permission to proceed. Plans filed shall not constitute permission to proceed. A permit must be obtained prior to commencing any plumbing work.

Exception: When an emergency repair is immediately necessary to protect public health and safety, the repairs may be conducted without first applying for and receiving a plumbing permit. In this circumstance, a permit application must be submitted within three (3) business days after the repair is made and the repairs must remain visible for inspection until the plumbing program has inspected and approved the work. Fees for plumbing permit applications for emergency repairs shall not be subject to the additional 100% fee required by Section 106.6.1.

AC-106.7.8 Master plumber qualifications. No master plumber's license shall be granted to a journeyman plumber until he has had at least two (2) years of experience as a licensed journeyman plumber and has successfully passed the required examinations.

AC-106.7.12 License renewal. A licensed master or journeyman plumber desiring to continue in the business of plumbing, shall annually, within thirty (30) days of his birth date apply to the Department for a renewal of his license and pay the annual license renewal fee as specified in the

current fee schedule. **Plumbing licenses shall include a photograph of the licensed plumber and such license photographs shall be updated every five (5) years.** No examination shall be required for the renewal of a master or journeyman license, provided proper application and payment is made in the time period specified above. **Any plumber licensed by Allegheny County whose license has lapsed due to unpaid annual renewal fees for more than thirty (30) calendar days must pay, in addition to all delinquent annual renewal fees, a fifty percent (50%) late penalty prior to plumbing license reinstatement. Any plumber licensed by Allegheny County whose license has lapsed due to unpaid annual license renewal fees for two (2) or more years must pay all unpaid fees and a fifty percent (50%) late fee and pass a Department-approved examination prior to reinstatement.**

SECTION 108 VIOLATIONS

108.4 Violation penalties. Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof shall be guilty of the offenses listed below. For the purposes of this section, violations on separate dates shall be considered separate offenses. Each violation of a separate subsection or section of this Article shall constitute a separate offense.

AC-108.4.1 Summary Offenses. Pursuant to Section 12027(a) of the Pennsylvania Local Health Administration Law, 16 P.S. § 12027(a), any person who violates any of the provisions of this Article or any rule or regulation of the Allegheny County Health Department, or who interferes with the Director or any other agent of the Department in the discharge of his official duties, shall, for the first offense, upon conviction thereof in a summary proceeding before any District Magistrate in Allegheny County, be sentenced to pay the costs of prosecution and a fine of not less than thirty dollars (\$30) nor more than three hundred dollars (\$300) and, in default thereof, shall be subject to imprisonment for not less than ten (10) days and not more than thirty (30) days.

AC-108.4.2 Misdemeanors. Pursuant to Section 12027(b) of the Pennsylvania Local Health Administration Law, 16 P.S. § 12027(b), any person who violates any of the provisions of this Article or any rule or regulation of the Allegheny County Health Department, or who interferes with the Director or his or her representative in the discharge of his or her official duties, convicted of a second or subsequent offense, shall be guilty of a misdemeanor and shall, upon conviction thereof, be sentenced to pay a fine of not less than five hundred dollars (\$500) nor more than one thousand dollars (\$1000) or to undergo imprisonment not exceeding one (1) year, or both.

**SECTION 109
MEANS OF APPEAL**

AC-109.1 Application for appeal. Any person aggrieved by any action taken by the Director and/or his or her designee may request a hearing within ~~ten~~ **thirty (30)** days in accordance with the Allegheny County Health Department Rules and Regulations, Article XI, "Hearings and Appeals."

**CHAPTER 2
DEFINITIONS**

ALTERNATE ON-SITE NONPOTABLE WATER. Non-potable water from other than public utilities, on-site surface sources and subsurface natural freshwater sources. Examples of such water are gray water, on-site reclaimed water, collected rainwater, captured condensate and rejected water from reverse osmosis systems.

BACKFLOW PREVENTER. ~~A device or means to prevent backflow.~~ A backflow prevention assembly, a backflow prevention device or other means or method to prevent backflow into the potable water supply.

DEMAND RECIRCULATION WATER SYSTEM. A water distribution system where one or more pumps prime the service hot water piping with heated water upon a demand for hot water.

DRINKING FOUNTAIN. A plumbing fixture that is connected to the potable water distribution system and the drain-age system. The fixture allows the user to obtain a drink directly from a stream of flowing water without the use of any accessories.

GRAY WATER. Waste discharged from lavatories, bathtubs, showers, clothes washers and laundry trays.

AC-LEAD-FREE PIPE AND FITTINGS. ~~Containing not more than 8.0 percent lead.~~ The definition of lead-free pipe and fittings found in the Pennsylvania Plumbing System Lead Ban and Notification Act at 35 P.S. § 723.3 is hereby incorporated by reference and any

future revisions to that definition are also incorporated by reference on the day that they go into effect.

LEAD-FREE SOLDER AND FLUX. ~~Containing not more than 0.2 percent lead.~~ **The definition of lead-free solder and flux found in the Pennsylvania Plumbing System Lead Ban and Notification Act at 35 P.S. § 723.3 is hereby incorporated by reference and any future revisions to that definition are also incorporated by reference on the day that they go into effect.**

MECHANICAL JOINT. A connection between pipes, fittings, or pipes and fittings that is not screwed, caulked, threaded, soldered, solvent cemented, brazed or welded **or heat fused**. A joint in which compression is applied along the centerline of the pieces being joined. In some applications, the joint is part of a coupling, fitting or adapter.

METER. **A measuring device used to collect data and indicate water usage.**

ON-SITE NON-POTABLE WATER REUSE SYSTEM. **A water system for the collection, treatment, storage, distribution and reuse of non-potable water generated on site, including but not limited to a gray water system. This definition does not include a rainwater harvesting system.**

AC-PERMIT HOLDER. **The person to whom the Department has issued a plumbing permit.**

PLUMBING FIXTURE. A receptacle or device that is either permanently or temporarily connected to the water distribution system ~~of the premises and demands a supply of water therefrom; discharges wastewater, liquid borne waste materials or sewage either directly or indirectly to the drainage system of the premises; or requires both a water supply connection and a discharge to the drainage system of the premises.~~ **or discharges to a drainage system or both. Such receptacles or devices require a supply of water or discharge liquid waste or liquid-borne solid waste; or require a supply of water and discharge waste to a drainage system.**

PLUMBING SYSTEM. ~~Includes the water supply and distribution pipes; plumbing fixtures and traps; water treating or water using equipment; soil, waste and vent pipes; and sanitary and storm sewers and building drains; in addition to their respective connections, devices and appurtenances within a structure or premises.~~ **A system that includes the water distribution pipes; plumbing fixtures and traps; water-treating or water-using equipment; soil, waste**

and vent pipes , building drains and storm drains; in addition to their respective connections, devices and appurtenances within a structure or premises; and the water service, building sewer , building storm sewer and septic on lot system serving such structure or premise.

PRIVATE SEWER. A private sewer is a sewer **main or lateral** privately-owned and not directly controlled **or maintained** by **a municipality or** public **sewer** authority.

RAIN WATER. **Water from natural precipitation.**

RECLAIMED WATER. **Non-potable water that has been derived from the treatment of waste water by a facility or system licensed or permitted to produce water meeting the jurisdiction's water requirements for its intended uses. Also known as "recycled water".**

AC-SITE WORK. **Any sanitary sewer piping serving a building or water service piping serving a building that begins five feet from the outside foundation wall and extends to the public point of connection.**

STORM WATER. **Natural precipitation, including snowmelt, that has contacted a surface at or below grade.**

TOILET FACILITY. **A room or space that contains not less than one water closet, one urinal and one lavatory.**

WASTE RECEPTOR. **A floor sink, standpipe, hub drain, or floor drain that receives the discharge of one or more indirect waste pipes.**

WATER COOLER. **A drinking fountain that incorporates a means of reducing the temperature of the water supplied to it from the potable water distribution system.**

WATER DISPENSER. **A plumbing fixture that is manually controlled by the user for the purpose of dispensing potable drinking water into a receptacle such as a cup, glass or bottle. Such fixture is connected to the potable water distribution system of the premises. This definition also includes a free-standing apparatus for the same purpose that is not**

connected to the potable water distribution system and that is supplied with potable water from a container, bottle or reservoir.

CHAPTER 3 GENERAL REGULATIONS

SECTION 312 TESTS AND INSPECTIONS

AC-312.1 Required tests. The permit holder shall make the applicable tests prescribed in Sections 312.2 through 312.9 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the plumbing work is ready for tests. The equipment, material, power and labor necessary for the inspection and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests. All plumbing system piping shall be tested with either water or, for piping systems other than plastic, by air. After the plumbing fixtures have been set and their traps filled with water, the entire drainage system shall be submitted to final tests. The code official shall require the removal of any cleanouts if necessary to ascertain whether the pressure has reached all parts of the system. **The permit holder, or their authorized agent who is an apprentice, journeyman, or master plumber employed by the permit holder firm or company, must be present during all tests and inspections required by this Section.**

SECTION 304 RODENT PROOFING

304.4 Openings for pipes. In or on structures where openings have been made in walls, floors or ceilings for the passage of pipes, such openings shall be closed and protected by the installation of approved metal collars that are securely fastened to the adjoining structure. **The annular space between the pipe and the sides of the opening shall be sealed with caulking materials or closed with gasketing systems compatible with the piping materials.**

SECTION 305 PROTECTION OF PIPES AND PLUMBING SYSTEM COMPONENTS

AC-305.7 Waterproofing of openings. Joints at the roof and around vent pipes shall be made watertight by the use of ~~lead~~, copper, aluminum, or other approved flashing material. Exterior wall openings shall be made watertight. Floor drains installed above the basement floor with useable space below shall be waterproofed with approved flashing material. The flashing material shall be securely fastened to the waste outlet at the seepage entrance making a watertight joint between the flashing material and the floor drain. Flashing material shall extend a minimum of 18 inches from the center of the floor drain.

SECTION 307 STRUCTURAL SAFETY

307.5.1 Protection of footings. Trenching installed parallel to footings and walls shall not extend into the bearing plane of a footing or wall. The upper boundary of the bearing plane is a line that extends downward, at an angle of 45 degrees (0.79 rad) from horizontal, from the outside bottom edge of the footing or wall.

SECTION 308 PIPE SUPPORTS

308.1 General. All plumbing piping shall be supported in accordance with this section.

Footnotes to Table 308.5 Hanger Spacing.

b. ~~Midstory guide for sizes 2 inches and smaller.~~ **For sizes 2 inches and smaller, a guide shall be installed midway between required vertical supports. Such guides shall prevent pipe movement in a direction perpendicular to the axis of the pipe.**

308.9 Parallel water distribution systems. Piping bundles for manifold systems shall be supported in accordance with Table 308.5. Support at changes in direction shall be in accordance with the manufacturer's installation instructions. ~~Hot and cold water piping shall not be grouped in the same bundle.~~ **Where hot water piping is bundled with cold or hot water piping, each hot water pipe shall be insulated.**

SECTION 314 CONDENSATE DISPOSAL

[M] 314.2.5 Cleanouts. Condensate drain lines shall be configured to permit the clearing of blockages and performance of maintenance without requiring the drain line to be cut.

SECTION 315 **PENETRATIONS**

315.1 Sealing of annular spaces. The annular space between the outside of a pipe and the inside of a pipe sleeve or between the outside of a pipe and an opening in a building envelope wall, floor, or ceiling assembly penetrated by a pipe shall be sealed in an approved manner with caulking material, foam sealant or closed with a gasketing system. The caulking material, foam sealant or gasketing system shall be designed for the conditions at the penetration location and shall be compatible with the pipe, sleeve and building materials in contact with the sealing materials. Annular spaces created by pipes penetrating fire-resistance-rated assemblies or membranes of such assemblies shall be sealed or closed in accordance with Section 714 of the International Building Code.

CHAPTER 4 **FIXTURE, FAUCETS, AND FIXTURE FITTINGS**

SECTION 402 **FIXTURE MATERIAL**

402.2 Materials for specialty fixtures. Materials for specialty fixtures not otherwise covered in this code shall be of stainless steel, soapstone, chemical stoneware or plastic, or ~~shall be lined with lead~~, copper-base alloy, nickel-copper alloy, corrosion-resistant steel or other material especially suited to the application for which the fixture is intended.

402.4 Sheet lead. [REPEALED] ~~Sheet lead for pans shall not weigh less than 4 pounds per square foot (19.5 kg/m²) coated with an asphalt paint or other approved coating.~~

TABLE AC-403.1
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES
(See Sections 403.1.1 and 403.2)

| OCCUPANCY | DESCRIPTION | WATER CLOSETS | | LAVATORIES | | BATHTUBS/ SHOWERS | DRINKING FOUNTAIN | OTHER | FOOTNOTES |
|-----------|--|---|--|------------|---|----------------------|---|--------------------------|--|
| | | MALE | FEMALE | M | F | | | | |
| A-1 | Theaters and other buildings for the performing arts and motion pictures | 2 per 100 (up to 400) over 400, add 1 per 125 | 1 per 25 (up to 100) over 100, add 1 per 65 | 1 per 200 | | — | 1 per toilet room, but not less than 1 per 1000 | 1 service sink per floor | 2, 3, 4, 5, 6, 10, 13, 15, 16, 17 * |
| A-2 | Nightclubs, bars, taverns, dance halls, and buildings for similar purposes, restaurants, banquet halls, and food courts. | 2 per 1-50 3 per 51-100 4 per 101-160 over 160, add 1 per 40 | 1 per 25 2 per 26-50 3 per 51-100 4 per 101-160 over 160, add 1 per 40 | 1 per 75 | | — | — | 1 service sink per floor | 2, 3, 4, 5, 6, 10, 13, 14, 15, 16, 17 * |
| A-3 | Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades, and gymnasiums | 1 per 125 | 1 per 65 | 1 per 200 | | — | 1 per 500 | 1 service sink per floor | 2, 3, 4, 5, 6, 10, 13, 15, 16, 17 * |

| OCCUPANCY | DESCRIPTION | WATER CLOSETS | | LAVATORIES | | BATHTUBS/ SHOWERS | DRINKING FOUNTAIN | OTHER | FOOTNOTES |
|-----------|---|--|--|---|-----------|----------------------|----------------------|--------------------------|---|
| | | MALE | FEMALE | M | F | | | | |
| | Passenger terminals and transportation facilities | 1 per 500 | 1 per 500 | 1 per 750 | | — | 1 per 1000 | 1 service sink | 17, <u>20</u> * |
| | Places of worship and religious services | 1 per 150 | 1 per 75 | 1 per 200 | | — | 1 per 1000 | 1 service sink | 2, 3, 4, 5, 6, 10, 13, 14, 15, 16, <u>20</u> * |
| A-4 | Coliseums, arenas, skating rinks, pools, and tennis courts for indoor sporting events and activities | 1 per 75 for the first 1500 and 1 per 60 for the remainder exceeding 1520 | 1 per 40 for the first 1500 and 1 per 60 for the remainder exceeding 1520 | 1 per 200 | 1 per 150 | — | 1 per 1000 | 1 service sink | 2, 3, 4, 5, 6, 10, 15, 16, 17, <u>20</u> * |
| A-5 | Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities. | 1 per 75 for the first 1500 and 1 per 120 for the remainder exceeding 1500 | 1 per 40 for the first 1520 and 1 per 60 for the remainder exceeding 1520 | 1 per 200 | 1 per 150 | — | 1 per 1000 | 1 service sink | 2, 3, 4, 5, 6, 10, 15, 16, 17, <u>20</u> * |
| B | Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, light industrial and similar uses | 1 per 1-15 2 per 16-35 3 per 36-55 4 per 56-80 5 per 81-110 6 per 111-150 | 1 per 1-15 2 per 16-35 3 per 36-55 4 per 56-80 5 per 81-110 6 per 111-150 | 1 per 1-25 2 per 26-50 3 per 51-100 4 per 101-150 5 per 151-200 | | — | 1 per 100 | 1 service sink per floor | 9, 15, 16, 17 * |

| OCCUPANCY | DESCRIPTION | WATER CLOSETS | | LAVATORIES | | BATHTUBS/ SHOWERS | DRINKING FOUNTAIN | OTHER | FOOTNOTES |
|-------------|---|--------------------------------|--------------------------------|--------------------------------|---|----------------------|----------------------|--------------------------------|--|
| | | MALE | FEMALE | M | F | | | | |
| | | over 150, add 1 per 40 | over 150, add 1 per 40 | over 200, add 1 per 80 | | | | | |
| E | Elementary (students) | 1 per 40 | 1 per 30 | 1 per 50 | | Footnote 7 | 1 per 100 | 1 service sink per floor | 2, 3, 4, 5, 6, 8, 9, 10, 11, 16, 17 * |
| | Elementary (secondary) | 1 per 50 | 1 per 40 | 1 per 50 | | | 1 per 100 | | |
| | University, adult centers, etc. | 1 per 50 | 1 per 40 | 1 per 50 | | | | | |
| | Staff (all schools) | same as office buildings | same as office buildings | same as office buildings | | | | | |
| F-1 and F-2 | Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials | 1 per 25 up to 100 | 1 per 25 up to 100 | 1 per 25 up to 100 | | — | 1 per 100 | 1 service sink per floor | 9, 15, 16 * |
| | | over 100, add 1 per 100 | over 100, add 1 per 100 | over 100, add 1 per 50 | | | | | |
| I-1 | Residential care | 1 per 10 | | 1 per 10 | | 1 per 8 | 1 per 100 | 1 service sink | 2, 3, 4, 5, 6, 10, 13, 15, 16, 17, 18, 19, <u>20</u> * |
| I-2 | Hospitals, ambulatory nursing home patients | 1 per room | | 1 per room | | 1 per 15 | 1 per 100 | 1 service sink | 2, 3, 4, 5, 6, 10, 13, 15, 16, 17, 18, 19, <u>20</u> * |
| | Employees, other than residential care | 1 per 25 | | 1 per 35 | | — | 1 per 100 | 1 service sink | |

| OCCUPANCY | DESCRIPTION | WATER CLOSETS | | LAVATORIES | | BATHTUBS/ SHOWERS | DRINKING FOUNTAIN | OTHER | FOOTNOTES |
|-----------|---|---------------------|--------|---------------------|---|----------------------|----------------------|--------------------------|--|
| | | MALE | FEMALE | M | F | | | | |
| | Visitors, other than residential care | 1 per 75 | | 1 per 100 | | --- | 1 per 500 | --- | |
| I-3 | Prisons | 1 per cell | | 1 per cell | | 1 per 15 | 1 per 100 | 1 service sink | 2, 3, 4, 5, 6, 10, 15, 16, 17, 18, 19, <u>20</u> * |
| | Reformatories, detention centers, and correctional centers | 1 per 15 | | 1 per 15 | | 1 per 15 | 1 per 100 | 1 service sink | |
| | Employees | 1 per 25 | | 1 per 25 | | --- | 1 per 100 | --- | |
| I-4 | Adult day care and child care | 1 per 15 | | 1 per 15 | | 1 | 1 per 100 | 1 service sink | 2, 3, 4, 5, 6, 10, 11, 12, 15, 16, 17, 19, <u>20</u> * |
| | Day care and child care centers | 1 per 15 | | 1 per 15 | | | 1 per 100 | 1 service sink per floor | |
| | Children under 6 | 1 per 10 | | 1 per 10 | | <u>0</u> | | | |
| | Children over 6 | 1 per 12 | | 1 per 12 | | | | | |
| | Staff | 1 per 15 | | 1 per 15 | | | | | |
| M | Retail stores, service stations, shops, salesrooms, markets, and shopping centers | 1 per 500 | | 1 per 750 | | --- | 1 per 1000 | 1 service sink | 2, 3, 4, 5, 6, 10, 13, 15, 16, 17, <u>20</u> * |
| R-1 | Hotels, motels, boarding houses (transient) | 1 per sleeping unit | | 1 per sleeping unit | | 1 per sleeping unit | --- | 1 service sink | <u>20</u> |

| OCCUPANCY | DESCRIPTION | WATER CLOSETS | | LAVATORIES | | BATHTUBS/ SHOWERS | DRINKING FOUNTAIN | OTHER | FOOTNOTES |
|-----------|--|---------------------|--------|---------------------|---------------------|----------------------|----------------------|---|---|
| | | MALE | FEMALE | M | F | | | | |
| R-2 | Dormitories, fraternities, sororities, and boarding houses (not transient) | 1 per 10 | | 1 per 10 | | 1 per 8 | 1 per 100 | 1 service sink | <u>20</u> |
| R-2 | Apartment house | 1 per dwelling unit | | 1 per dwelling unit | 1 per dwelling unit | --- | --- | 1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units | --- |
| R-3 | One- and two-family dwellings | 1 per dwelling unit | | 1 per dwelling unit | 1 per dwelling unit | --- | --- | 1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per dwelling unit | --- |
| R-3 | Congregate living facilities with 16 or fewer people | 1 per 10 | | 1 per 10 | | 1 per 8 | 1 per 100 | 1 service sink | <u>20</u> |
| R-4 | Residential care/assisted living facilities | 1 per 10 | | 1 per 10 | | 1 per 8 | 1 per 100 | 1 service sink | 2, 3, 4, 5, 6, 10, 13, 15, 16, 17, 18, 19, <u>20</u> * |

| OCCUPANCY | DESCRIPTION | WATER CLOSETS | | LAVATORIES | | BATHTUBS/ SHOWERS | DRINKING FOUNTAIN | OTHER | FOOTNOTES |
|------------|---|---------------|--------|------------|---|----------------------|----------------------|----------------|------------------------|
| | | MALE | FEMALE | M | F | | | | |
| S-1 S-2 | Structures for the storage of goods, warehouses, storehouse and freight depots. Low and Moderate Hazard | 1 per 100 | | 1 per 100 | | See Section 411 | 1 per 1000 | 1 service sink | 15, 16, 20 * |

Footnotes to Table AC-403.1:

1. "Restaurant" occupancy refers only to establishments that sell food primarily to be consumed on the premises. Establishments that have only "stand-up" facilities for eight (8) or less persons and establishments that sell "take-out" food only shall not be classified as a "restaurant".
2. For establishments serving food and/or drinks, see Article III, "Restaurants" and Article IV, "General Food", of the Allegheny County Health Department Rules & Regulations.
3. Dipper wells ~~with running water~~ shall be provided in conjunction with the dispensing of ice cream, yogurt and/or related products.
4. One 3-compartment rinsing sink shall be installed in each bar.
5. A 3-compartment sink shall be provided when food is prepared or served on the premises.
6. Utility sinks shall be provided for washing utensils, equipment, and appurtenances in accordance with Article III, "Restaurants" and Article IV, "General Food".
7. Provide showers for 1/5 of the maximum number of students using gymnasium and/or pool at one time.
8. Staff facilities in university, college adult centers may be combined with student facilities.
9. Provide one lavatory for each five persons exposed to skin contamination with poisonous, infectious, or irritating material.
10. Sinks used for dishes, utensils and any other food related items shall be NSF approved.
11. Water closets for children under age 6 shall be of suitable size and height, and seats shall be of an open sanitary type.
12. Separate toilet facilities shall be provided in centers with daily enrollment of 25 or more children.
13. In A-2 occupancy, urinals are required in single occupancy bathrooms (does not include family bathrooms).
14. In A-2 occupancy, when the aggregate of 8 or more male and female water closets are provided, a **single-user toilet room, including** family assisted or assisted use bathroom, is required. **Single-user bath toilet, and family or assisted bathrooms may be identified as being available for use by all persons regardless of their sex.**
15. Drinking fountains are not required for occupants of 15 or fewer provided potable water is available for building occupants such as bottled water or break room sink.
16. The minimum number of required drinking fountains shall comply with Table AC-403.1 and Chapter 11 of the *International Building Code*. A single high/low drinking fountain shall be considered one fixture.
17. The occupant load for seasonal outdoor seating and entertaining areas shall be included when determining the minimum number of facilities required.
18. Toilet facilities for employees shall be separate from facilities for inmates or patients.

19. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient sleeping units shall be permitted where such room is provided with direct access from each patient sleeping unit and with provisions for privacy.
20. ~~May require more than 1 service sink per floor if no elevator equip in building.~~ **If there is no elevator equipment in the building, one (1) service sink per floor is required.**

21. If the minimum number of required plumbing fixtures for an occupancy under Table 403.1 exceeds the minimum number of required plumbing fixtures under Table 403.1 of the International Plumbing Code promulgated by the Pennsylvania Department of Labor and Industry, then the additional plumbing fixtures may be located in single-user toilet and bathing room(s), including family or assisted-use toilet and bathing room(s). Single-user toilet and bathing rooms, and family or assisted-use toilet rooms and toilet rooms and bathing rooms may be identified as being available for use by all persons regardless of their sex.

403.1.2 Family or assisted-use toilet and bath fixtures. Fixtures located within family or assisted-use toilet and bathing rooms required by Section 1109.2.1 of the *International Building Code* are permitted to be included in the number of required fixtures for either the male or female occupants in assembly and mercantile *occupancies*. **Family or assisted- use toilet facilities shall not be required to be identified for exclusive use by either sex as required by Section 403.4.**

403.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures. or tenant spaces with a total occupant load, including both employees and customers, of 15 or less.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 50 or less.

AC-403.2.1 Family or assisted-use toilet facilities serving as separate facilities. Where a building or tenant space requires a separate toilet facility for each sex and each toilet facility is required to have only one water closet, two family or assisted-

use toilet facilities shall be permitted to serve as the required separate facilities. Family or assisted- use toilet facilities shall not be required to be identified for exclusive use by either sex as required by Section 403.4. Urinals will still be required in occupancy type A-2.

403.3 Required public toilet facilities. Customers, patrons and visitors shall be provided with public toilet facilities in structures and tenant spaces intended for public utilization. The number of plumbing fixtures located within the required toilet facilities shall be provided in accordance with Section 403 for all users. Employees shall be provided with toilet facilities in all occupancies. Employee toilet facilities shall be either separate or combined employee and public toilet facilities.

Exception: Public toilet facilities shall not be required in:

1. **Open or enclosed parking garages where there are no parking attendants.**
2. **Structures and tenant spaces intended for quick transactions, including takeout, pickup and drop- off, having a public access area less than or equal to 300 square feet (28 m2).**

403.3.5 Door locking. Where a toilet room is provided for the use of multiple occupants, the egress door for the room shall not be lockable from the inside of the room. This section does not apply to family or assisted-use toilet rooms.

403.4 Signage. Required public facilities shall be designated by legible signs for each sex: **that designate the sex, as required by Section 403.2.** Signs shall be readily visible and located near the entrance to each toilet facility. **Signs for accessible toilet facilities shall comply with Section 1111 of the International Building Code.**

SECTION 404 ACCESSIBLE PLUMBING FACILITIES

404.1 Where required. Accessible plumbing facilities and fixtures shall be provided in accordance with the International Building Code.

404.2 Accessible fixture requirements. Accessible plumbing fixtures shall be installed with the clearances, heights, spacings and arrangements in accordance with ICC A117.1.

404.3 Exposed pipes and surfaces. Water supply and drain pipes under accessible lavatories and sinks shall be covered or otherwise configured to protect against contact. Pipe coverings shall comply with ASME A112.18.9.

**SECTION 405
INSTALLATION OF FIXTURES**

405.3 Setting. Fixtures shall be set level and in proper alignment with reference to adjacent walls.

405.3.3 Location of fixtures and piping. Piping, fixtures or equipment shall not be located in such a manner as to interfere with the normal operation of windows, doors or other means of egress openings.

**SECTION 407
BATHTUBS**

407.2 Bathtub waste outlets. Bathtubs shall have waste outlets ~~minimum of 1 1/2 inches (38 mm) in diameter~~ **and an overflow outlet. The outlets shall be connected to waste tubing or piping not less than 1 1/2 inches (38 mm) in diameter.** The waste outlet shall be equipped with an approved stopper.

**SECTION 412
FLOOR AND TRENCH DRAINS**

AC-412.3 Size of floor drains. ~~Floor drains shall have a minimum 2-inch diameter (51 mm) drain outlet.~~ **Floor drains installed below a basement floor must be a minimum of four (4) inches in diameter. Floor drains installed above the basement floor must be a minimum of three (3) inches in diameter. Residential emergency drains installed in laundry rooms on floors above usable space may be two (2) inches in diameter when it is properly connected to the drainage and vent system. All floor drains must be supplied with an automatic priming device. Exceptions: For residential installations, hose bibs or a laundry tray may be substituted for an automatic priming device when the fixture is located in the same room.**

**SECTION 413
FOOD WASTE GRINDER UNITS**

AC-413.1 Approval. Domestic food waste grinders shall conform to ASSE 1008. Commercial food waste grinders shall conform to ASSE 1009. ~~Food waste grinders shall not increase the drainage fixture unit load on the sanitary drainage system.~~ **The fixture unit value will increase with the installation of a food waste grinder.**

SECTION 417 SHOWERS

AC-417.3 Shower waste outlet. ~~Waste outlets serving showers shall be at least 1 ½ inches (38 mm) in diameter and, for other than waste outlets in bathtubs, shall have removable strainers not less than 3 inches (76 mm) in diameter with strainer openings not less than 0.25 inch (6.4 mm) in minimum dimension. Where each shower space is not provided with an individual waste outlet, the waste outlet shall be located and the floor pitched so that waste from one shower does not flow over the floor area serving another shower. Waste outlets shall be fastened to the waste pipe in an approved manner.~~ **Waste outlets serving showers when installed above the basement floor shall have a diameter of at least two (2) inches with removable strainers of not less than three (3) inches in diameter with strainer openings not less than 0.25 inches in minimum dimension. This requirement is not intended for bathtub-to-shower conversions that require a 1 ½ inch trap and drain connection. The connection from the waste outlet to the drainage system must be fastened in an approved manner.**

AC-417.5.2.3 Sheet lead. [REPEALED] ~~Sheet lead shall not weigh less than 4 pounds per square foot (19.5 kg/m²) coated with an asphalt paint or other approved coating. The lead sheet shall be insulated from conducting substances other than the connecting drain by 15 pound (6.80 kg) asphalt felt or its equivalent. Sheet lead shall be joined by burning.~~

SECTION 423 SPECIALTY PLUMBING FIXTURES

423.3 Footbaths, pedicure baths and head shampoo sinks. **The water supplied to specialty plumbing fixtures, such as pedicure chairs having an integral foot bathtub, footbaths, and head shampoo sinks, shall be limited to a maximum temperature of 120°F (49°C) by a water temperature limiting device that conforms to ASSE 1070 or CSA B125.3.**

SECTION 424 FAUCETS AND OTHER FIXTURE FITTINGS

424.9 Water closet personal hygiene devices. Personal hygiene devices integral to water closets or water closet seals shall conform to the requirements of ASME A112.4.

CHAPTER 5 WATER HEATERS

SECTION 501 GENERAL

501.3 Drain valves. Drain valves for emptying shall be installed at the bottom of each tank-type water heater and hot water storage tank. **The drain valve inlet shall be not less than 3/4-inch (19 mm) nominal iron pipe size and the outlet shall be provided with male garden hose threads.** Drain valves shall conform to ASSE 1005.

SECTION 504 SAFETY DEVICES

AC- 504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, **or** to an indirect waste receptor, ~~or to the outdoors. Where discharging to the outdoors in areas subject to freezing, discharge piping shall be first piped to an indirect waste receptor through an air gap located in a conditioned area.~~
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.

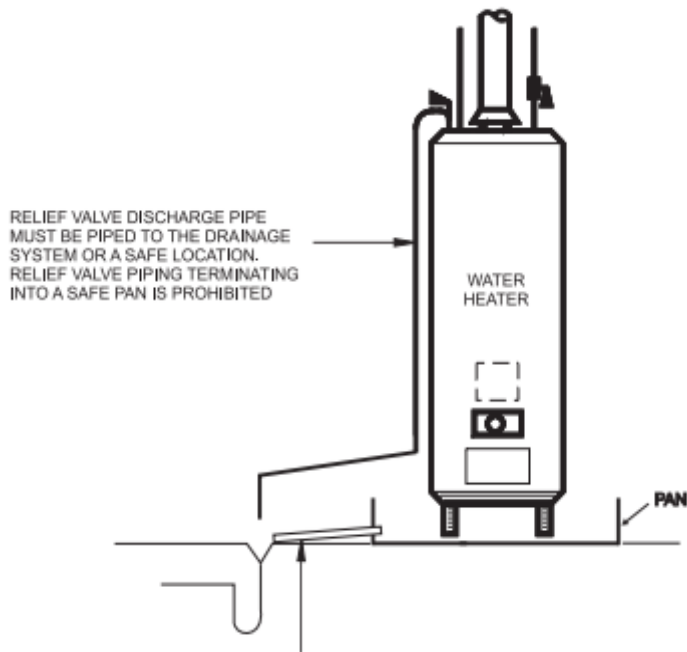
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. ~~Not terminate more than 6 inches (152 mm) above the floor or waste receptor.~~ **Terminate not more than 6 inches (152 mm) above and not less than two times the discharge pipe diameter above the floor or flood level rim of the waste receptor.**
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.

504.7 Required pan. Where water heaters or hot water storage tanks are installed in locations where leakage of the tanks or connections will cause damage, the tank or water heater shall be installed in a galvanized steel pan having a minimum thickness of 24 gauge, or other pans approved for such use.

504.7.2 Pan drain termination. The pan drain shall extend full-size and terminate over a suitably located indirect waste receptor or floor drain ~~or extend to the exterior of the building and terminate not less than 6 inches (152 mm) and not more than 24 inches (610 mm) above the adjacent ground surface.~~

504.7.3 Water heater floor drain or drain pan required. **All hot water heaters will require a floor drain or approved water heater drain pan regardless of their location to protect the structure and surrounding materials and areas from catastrophic failure of the water heater. This also includes basement floors.**

**FIGURE AC-504.7
WATER HEATER IN PAN**



THE PAN DRAIN MUST DISCHARGE TO WASTE RECEPTOR, FLOOR DRAIN OR TO THE EXTERIOR OF THE BUILDING.

CHAPTER 6 WATER SUPPLY AND DISTRIBUTION

SECTION 601 GENERAL

601.5 Rehabilitation of piping systems. Where pressure piping systems are rehabilitated using an epoxy lining system, such lining system shall comply with ASTM F 2831.

SECTION 605 MATERIALS, JOINTS, AND CONNECTIONS

AC-605.2 Lead content of water supply pipe and fittings. Pipe and pipe fittings, including valves and faucets, utilized in the water supply system shall have a maximum of 8-percent lead content be lead-free pipe and fittings, as that term is defined in Section 202 of this Article

and by the Pennsylvania Plumbing System Lead Ban and Notification Act at 35 P.S. § 723.3.

AC-605.2.1 Ban on repair of privately-owned lead water service lines. Repair of and/or partial replacement of existing privately-owned lead water service lines is prohibited by this Article. When an existing privately-owned lead water service line fails such that it needs to be repaired, the entire privately-owned lead water service line must be replaced with approved, lead-free pipe and fittings.

**TABLE 605.3
WATER SERVICE PIPE**

| MATERIAL | STANDARD |
|--|------------------------------------|
| ***** | ***** |
| <u>Asbestos-cement pipe [REPEALED]</u> | <u>ASTM C296 [REPEALED]</u> |
| ***** | ***** |
| <u>Galvanized steel pipe [REPEALED]</u> | <u>ASTM A53 [REPEALED]</u> |
| ***** | ***** |

TABLE 605.4

WATER DISTRIBUTION PIPE

| MATERIAL | STANDARD |
|-------------------------------------|-----------------------------------|
| ***** | ***** |
| <u>Galvanized [REPEALED]</u> | <u>ASTM A53 [REPEALED]</u> |
| ***** | ***** |

TABLE 605.5

PIPE FITTINGS

| MATERIAL | STANDARD |
|--------------------------------|---|
| ***** | ***** |
| <u>Steel [REPEALED]</u> | <u>ASME B16.9; ASME B16.11; ASME B16.28 [REPEALED]</u> |
| ***** | ***** |

605.11 Asbestos-cement. [REPEALED] Joints between asbestos-cement pipe or fittings shall be made with a sleeve coupling of the same composition as the pipe, sealed with an elastomeric ring conforming to ASTM D1869.

AC-605.13 Gray iron and ductile iron joints. Joints for gray and ductile iron pipe and fittings shall comply with AWWA C111 and shall be installed in accordance with the manufacturer's installation instructions.

AC-605.13.1 Rodding of joints on grey iron and ductile iron joints. All mechanical joints on grey iron and ductile iron pipe must be rodded in addition to the required thrust blocks at all changes in direction and other areas specified by the Administrative Authority.

AC-605.15 Copper tubing. Joints between copper or copper-alloy pipe or fittings shall comply with Sections 605.15.1 through 605.15.4 **605.15.5.**

605.15.5 Press-connect joints. Press-connect joints shall conform to one of the standards listed in Table 605.5 and shall be installed in accordance with the manufacturer's instructions. Cut tube ends shall be reamed to the full inside diameter of the tube end. Joint surfaces shall be cleaned. The tube shall be fully inserted into the press- connect fitting. Press-connect joints shall be pressed with a tool certified by the manufacture.

AC-605.16 CPVC plastic. Joints between CPVC plastic pipe and fitting shall comply with Sections 605.16.1 through 605.16.3.

605.16.2 Solvent cementing. Joint surfaces shall be clean and free from moisture, and an appropriate primer shall be applied. **Joints shall be made in accordance with the manufacturer's installation instructions. Where such instructions require that a primer be used, the primer shall be applied to the joint surfaces and a Solvent cement, orange in color and conforming to ASTM F 493, shall be applied to all the joint surfaces. Where such instructions allow for a one-step solvent cement, yellow in color and conforming to ASTM F 493, to be used, the joint surface shall not require the application of a primer before the solvent cement is applied.** The joint shall be made while the cement is wet, and in accordance with ASTM D2846 or ASTM F493. Solvent-cement joints shall be permitted above or below ground.

Exception: A primer is not required where all of the following conditions apply:

1. ~~The solvent cement used is third party certified as conforming to ASTM F 493.~~
2. ~~The solvent cement used is yellow in color.~~
3. ~~The solvent cement is used only for joining ½ inch (12.7 mm) through 2 inch (51 mm) diameter CPVC pipe and fittings.~~

4. ~~The CPVC pipe and fittings are manufactured in accordance with ASTM D 2846.~~

605.17 ~~Cross-linked polyethylene plastic~~– PEX Plastic. Joints between cross-linked polyethylene plastic tubing or fittings shall comply with Sections 605.17.1 and 605.17.2.

605.23 Stainless steel. Joints between stainless steel pipe and fittings shall comply with Sections 605.23.1 and 605.23.23.

605.23.3 Grooved and shouldered mechanical joints. Grooved and shouldered mechanical joints shall comply with ASTM F 1476, shall be made with an approved elastomeric seal and shall be installed in accordance with the manufacturer's instructions. Such joints shall be exposed or concealed.

605.24 Joints between different materials. Joints between different piping materials shall be made with a mechanical joint of the compression or mechanical-sealing type, or as permitted in Sections 605.24.1, 605.24.2 and 605.24.3. Connectors or adapters shall have an elastomeric seal conforming to ~~ASTM D 1869~~ or ASTM F 477. Joints shall be installed in accordance with the manufacturer's instructions.

605.24.1 Copper or copper-alloy tubing to galvanized steel pipe. Joints between copper or copper-alloy tubing and galvanized steel pipe shall be made with a brass fitting or dielectric fitting **or a dielectric union conforming to ASSE 1079**. The copper tubing shall be soldered to the fitting in an *approved* manner, and the fitting shall be screwed to the threaded pipe.

605.24.2 Plastic pipe or tubing to other piping material. Joints between different ~~grades~~ **types** of plastic pipe or between plastic pipe and other piping material shall be made with an *approved* adapters ~~fitting~~ **or transition fittings**.

605.25 PE-RT plastic. Joints between polyethylene of raised temperature plastic tubing and fittings shall be in accordance with Section 605.25.1.

605.25.1 Mechanical joints. Mechanical joints shall be installed in accordance with the manufacturer's instructions. Fittings for polyethylene of raised temperature plastic tubing shall comply with the applicable standards listed in Table 605.5 and shall be installed in accordance with the manufacturer's instructions. Polyethylene of raised temperature plastic tubing shall be factory marked with the applicable standards for the fittings that the manufacturer of the tubing specifies for use with the tubing.

AC-605.26 Chlorinated polyvinyl chloride/aluminum/chlorinated polyvinyl chloride (CPVC/AL/CPVC) pipe and tub-ing. Joints between CPVC/AL/CPVC plastic pipe or CPVC fittings shall comply with Sections 605.26.1 through 605.26.2.

605.26.1 Mechanical joints. Mechanical joints shall be installed in accordance with the manufacturer's instructions.

605.26.2 Solvent cementing. Joint surfaces shall be clean and free from moisture, and an approved primer shall be applied. Solvent cement, orange in color and conforming to ASTM F 493, shall be applied to joint surfaces. The joint shall be made while the cement is wet, and in accordance with ASTM D 2846 or ASTM F 493. Solvent cement joints shall be permitted above or below ground.

Exception: A primer is not required where all of the following conditions apply:

1. **The solvent cement used is third-party certified as conforming to ASTM F 493.**
2. **The solvent cement used is yellow in color.**
3. **The solvent cement is used only for joining ½-inch (12.7 mm) through 2-inch diameter (51 mm) CPVC/AL/CPVC pipe and CPVC fittings.**
4. **The CPVC fittings are manufactured in accordance with ASTM D 2846.**

AC-605.27 Approval of new material, joint, and connections in Allegheny County. Materials, joints, and connections not listed in this Code as approved may be approved for use by the Chief Plumbing Inspector, provided that such new material, joint, or connection does not present a hazard to public health or safety. The Chief Plumbing Inspector shall consult with the Plumbing Advisory Board when determining whether a new material can be approved for use. The Plumbing Advisory Board may also unilaterally recommend, by affirmative vote, that a new material, joint, or connection be approved for use by the Chief Plumbing Inspector. The Department shall maintain and publish on the Department website a list of materials approved by the Chief Plumbing Inspector in this manner.

SECTION 606 INSTALLATION OF THE BUILDING WATER DISTRIBUTION SYSTEM

606.7 Labeling of water distribution pipes in bundles. Where water distribution piping is bundled at installation, each pipe in the bundle shall be identified using stenciling or

commercially available pipe labels. The identification shall indicate the pipe contents and the direction of flow in the pipe. The interval of the identification markings on the pipe shall not exceed 25 feet (7620 mm). There shall be not less than one identification label on each pipe in each room, space or story.

SECTION 607 HOT WATER SUPPLY SYSTEM

607.2 Hot or tempered water supply to fixtures. The developed length of hot or tempered water piping, from the source of hot water to the fixtures that require hot or tempered water, shall not exceed 50 feet (15 240 mm). Recirculating system piping and heat-traced piping shall be considered to be sources of hot or tempered water.

[E] 607.5 Insulation of piping. For other than Group R2, R3 and R4 occupancies that are three stories or less in height above grade plane, piping to the inlet of a water heater and piping conveying water heated by a water heater shall be insulated in accordance with Section C404.4 of the International Energy Conservation Code. For Group R2, R3 and R4 occupancies that are three stories or less in height above grade plane, piping to the inlet of a water heater and piping conveying water heated by a water heater shall be insulated in accordance with Section R403.5.3 of the International Energy Conservation Code.

SECTION 608 PROTECTION OF POTABLE WATER SUPPLY

608.8 Identification of non-potable water systems. ~~In buildings w~~ **Where** nonpotable water systems are installed, the piping conveying the nonpotable water shall be identified either by color marking or metal tags in accordance with Sections 608.8.1 through 608.8.3~~2.3~~. ~~All nonpotable water outlets such as hose connections, open ended pipes, and faucets shall be identified at the point of use for each outlet with the words, "Nonpotable — not safe for drinking." The words shall be indelibly printed on the tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inches in height and color in contrast to the background on which they are applied.~~

608.8.1 Information Signage required. Nonpotable water outlets, such as hose connections, open ended pipes and faucets, shall be identified with signage that reads as follows: "Non- potable water is utilized for [application name]. CAUTION: NONPOTABLE WATER - DO NOT DRINK." The words shall be legibly and indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be

indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inch (12.7 mm) in height and in colors in contrast to the background on which they are applied. **In addition to the required wordage, the pictograph shown in Figure 608.8.1 shall appear on the required signage.**



FIGURE 608.8.1
PICTOGRAPH-DO NOT DRINK

608.8.2 Color. Distribution pipe labeling and marking. The color of the pipe identification shall be discernable and consistent throughout the building. The color purple shall be used to identify reclaimed, rain, and gray water distribution systems. **Nonpotable distribution piping shall be purple in color and shall be embossed, or integrally stamped or marked, with the words: "CAUTION: NONPOTABLE WATER - DO NOT DRINK" or the piping shall be installed with a purple identification tape or wrap. Pipe identification shall include the contents of the piping system and an arrow indicating the direction of flow. Hazardous piping systems. shall also contain information addressing the nature of the hazard. Pipe identification shall be repeated at intervals not exceeding 25 feet (7620 mm) and at each point where the piping passes through a wall, floor or roof. Lettering shall be readily observable within the room or space where the piping is located.**

608.8.32.1 Size Color. The size of the background color field and lettering shall comply with Table 608.8.3. **The color of the pipe identification shall be discernable and consistent throughout the building. The color purple shall be used to identify reclaimed, rain, and gray water distribution systems.**

608.8.2.2 Lettering Size. **The size of the background color field and lettering shall comply with Table 608.8.2.2.**

TABLE 608.8.32.2
SIZE OF PIPE IDENTIFICATION

| PIPE DIAMETER (inches) | LENGTH BACKGROUND COLORFIELD (inches) | SIZE OF LETTERS (inches) |
|------------------------|---------------------------------------|--------------------------|
| ¾ to 1¼ | 8 | 0.5 |
| 1½ to 2 | 8 | 0.75 |
| 2½ to 6 | 12 | 1.25 |
| 8 to 10 | 24 | 2.5 |
| over 10 | 32 | 3.5 |

608.8.2.3 Identification tape. Where used, identification tape shall be at least 3 inches (76 mm) wide and have white or black lettering on a purple field stating, “CAUTION: NONPOTABLE WATER – DO NOT DRINK”. Identification tape shall be installed on top of nonpotable rainwater distribution pipes, fastened at least every 10 feet (3048 mm) to each pipe length and run continuously the entire length of the pipe.

CHAPTER 7 SANITARY DRAINAGE

SECTION 701 GENERAL

AC-701.2 Sewer required. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a *public sewer*, where available, or an *approved private sewage disposal system* in accordance with the *International Private Sewage Disposal Code* **Pennsylvania Sewage Facilities Act, 35 P.S. §§ 750.1 – 750.20a., and its implementing regulations found at Title 25 of the Pennsylvania Code, Chapters 71 – 73.**

AC-701.3 Public Sewers and/or Water Mains Not Available. Where public sewers and/or water mains are not immediately available, it may become necessary to construct a private sanitary sewer, storm sewer, and/or water main to connect with a public utility. A variance must be obtained from the Director prior to construction of a private sanitary sewer, storm sewer, and/or water main. Plans indicating size, materials, and method of construction must be submitted to the Administrative Authority for approval. Private sewers and/or water mains shall be constructed on the outside of building or buildings and branched into each house or building separately. When private sewers and/or water mains must cross another property or properties to connect with a public sanitary sewer, storm sewer and/or water main, an easement shall be recorded in the deeds of all affected property owners. A mutual maintenance agreement shall be

recorded in the deeds of all such properties connected to a private sewer or water main system to affix equal responsibility in maintaining the private sewer (s) or water main(s). A copy of each deed shall be filed with the Administrative Authority.

AC-701.3.1 Existing Common Sewer Lateral. When the Administrative Authority identifies the existence of a common sewer lateral (CSL) that is not recorded in the Recorder of Deeds Office of Allegheny County, it may issue orders to all affected property owners to separately connect to an available public sewer, or in the alternative, to record in the Recorder of Deeds Office of Allegheny County, a document, approved by the Administrative Authority, identifying the existence of the CSL and adequately specifying the maintenance responsibilities for property owners.

AC-701.3.2 Avoiding Public Health Hazards. In order to prevent a public health hazard, all properties connected to a CSL must remain connected to that CSL until all requirements of Section 701.3.1, above, are met.

701.10 Separate sewer connection. A building having plumbing fixtures installed and intended for human habitation, occupancy or use on premises abutting on a street, alley or easement in which there is a public sewer shall have a separate connection with the sewer. Where located on the same lot, multiple buildings shall not be prohibited from connecting to a common building sewer that connects to the public sewer.

**SECTION 702
MATERIALS**

**TABLE 702.2
UNDERGROUND BUILDING DRAINAGE AND VENT PIPE**

| MATERIAL | STANDARD |
|--|-----------------------------|
| ***** | ***** |
| Asbestos-Cement Pipe [REPEALED] | ASTM C428 [REPEALED] |
| ***** | ***** |

**TABLE 702.3
BUILDING SEWER PIPE**

| MATERIAL | STANDARD |
|--|-----------------------------|
| ***** | ***** |
| Asbestos-Cement Pipe [REPEALED] | ASTM C428 [REPEALED] |
| ***** | ***** |

**TABLE 702.4
PIPE FITTINGS**

| MATERIAL | STANDARD |
|--|-----------------------------|
| ***** | ***** |
| Asbestos-Cement Pipe [REPEALED] | ASTM C428 [REPEALED] |
| ***** | ***** |

**SECTION 703
BUILDING SEWER**

AC-703.1 Building sewer pipe near the water service. Where the building sewer is installed within 10 feet (3048 mm) of the water service, the installation shall comply with the provisions of Section AC-603.2.

AC-703.1.1 Controlling trap. A controlling trap, such as a trap or trap manhole, shall be required when the building storm sewer is to be connected to a combination public sewer system or a storm sewer that connects to a public combination sewer.

703.6 Combined sanitary and storm public sewer. Where the public sewer is a combined system for both sanitary and storm water, the sanitary sewer shall be connected independently to the public sewer.

**SECTION 705
JOINTS**

705.3 Asbestos cement. ~~[REPEALED]~~ Joints between asbestos cement pipe or fittings shall be made with a sleeve coupling of the same composition as the pipe, sealed with an elastomeric ring conforming to ASTM D1869.

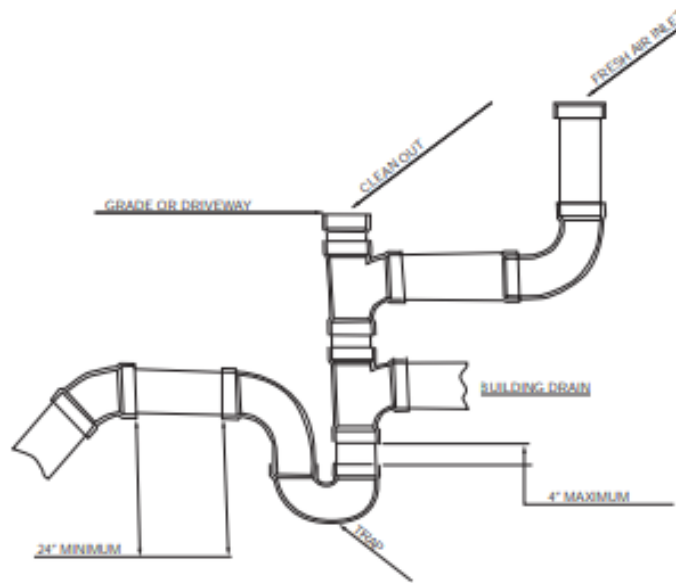
**SECTION 708
CLEANOUTS**

AC-708.3.1 Horizontal drains within buildings. All **6 inch and over** horizontal drains shall be provided with cleanouts located not more than 100 feet (30 480 mm) apart.

AC-708.3.2 Building sewers. Six-inch Bbuilding sewers shall be provided with cleanouts located not more than 100 feet (30 480 mm) apart measured from the upstream entrance of the cleanout. For building sewers 8 inches (203 mm) and larger, manholes shall be provided and located not more than 200 feet (60 960 mm) from the junction of the building drain and building sewer, at each change in direction and at intervals of not more than 400 feet (122 m) apart. Manholes and manhole covers shall be of an approved type.

AC-708.3.2.1 Four-inch building drains and building sewers. Cleanouts are required every 50 feet.

Exception. Cleanouts at the base of a stack and fixture connections can be substituted for floor cleanouts on building drains.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

**FIGURE AC-708.3.5.3(2)
BUILDING OR HOUSE TRAPS INSTALLED
GREATER THAN 4 FEET IN DEPTH UNDER A SIDEWALK, DRIVEWAY OR INSIDE
A BUILDING**

AC-708.4 Concealed piping. Cleanout access. Cleanouts on concealed piping or piping under a floor slab or in a crawl space of less than 24 inches (610 mm) in height or a plenum shall be extended through and terminate flush with the finished wall, floor or ground surface or shall be extended to the outside of the building. Cleanout plugs shall not be covered with cement, plaster or any other permanent finish material. **Required cleanouts shall not be installed in concealed locations. For the purposes of this section, concealed locations include, but are not limited to, the inside of plenums, within walls, within floor/ceiling assemblies, below grade and in crawl spaces where the height from the crawl space floor to the nearest obstruction along the path from the crawl space opening to the clean-out location is less than 24 inches (610 mm). Cleanouts with openings at a finished wall shall have the face of the opening located within 1½ inches (38 mm) of the finished wall surface. Cleanouts located below grade shall be extended to grade level so that the top of the cleanout plug is at or above grade. A cleanout installed in a floor or walkway that will not have a trim cover installed shall have a countersunk plug installed so the top surface of the plug is flush with the finished surface of the floor or walk-way.** Where it is necessary to conceal a cleanout or to terminate a cleanout in an area subject to vehicular traffic, the covering plate, access door or cleanout shall be of an approved type designed and installed for this purpose.

AC-708.4.1 Cleanout plug trim covers. **Trim covers and access doors for cleanout plugs shall be designed for such purposes and shall be approved. Trim cover fasteners that thread into cleanout plugs shall be corrosion resistant. Cleanout plugs shall not be covered with mortar, plaster or any other permanent material.**

AC-708.4.2 Floor cleanout assemblies. **Where it is necessary to protect a cleanout plug from the loads of vehicular traffic, cleanout assemblies in accordance with ASME A1 12.36.2M shall be installed.**

AC-708.10 Installation arrangement. **The installation arrangement of a cleanout shall enable cleaning of drainage piping only in the direction of drainage flow.**

Exceptions:

1. **Test tees serving as cleanouts.**
2. **A two-way cleanout installation that is approved for meeting the requirements of Section 708.3.5.3.**

708.11 Prohibited use. **The use of a threaded cleanout opening to add a fixture or to extend piping shall be prohibited except where another cleanout of equal size is installed with the required access and clearance.**

SECTION 712
SUMPS AND EJECTORS

712.3 Sump design. The sump pump, pit, and discharge piping shall conform to the requirements of Sections 712.3.1 through 712.3.5.

712.3.3 Discharge piping pipe and fittings. Discharge pipe and fittings shall be constructed of ~~approved materials.~~ **servicing sump pumps and ejectors shall be constructed of materials in accordance with Sections 712.3.3.1 and 712.3.3.2 and shall be approved.**

712.3.3.1 Materials. Pipe and filling materials shall be constructed of brass, copper, CPVC, ductile iron, PE, or PVC.

712.3.3.2 Ratings. Pipe and fittings shall be rated for the maximum system operating pressure and temperature. Pipe filling materials shall be compatible with the pipe material. Where pipe and fillings are buried in the earth, they shall be suitable for burial.

712.3.5 Ejector Pump connection to the drainage system. Pumps connected to the drainage system shall connect to the *building sewer, building drain, soil stack, waste stack, or horizontal branch drain* or shall connect to a wye fitting in the *building drain* at a minimum of 10 feet (3048 mm) from the base of any *soil stack, waste stack, or fixture drain*. Where the discharge line connects into horizontal drainage piping, the connector shall be made through a wye fitting into the top of the drainage piping **and such wye fitting shall be located not less than 10 pipe diameters from the base of any soil stack, waste stack, or fixture drain.**

712.4 Sewage pumps and sewage ejectors. A sewage pump or sewage ejector shall automatically discharge the contents of the sump to the building drainage system.

712.4.1 Macerating toilet systems. Macerating toilet systems shall comply with CSA B45.9 or ASME A112.3.4 and shall be installed in accordance with the manufacturer's installation instructions **require a variance approval from the Administrative Authority before installation.**

AC-712.5 Duplex pumping equipment. Sumps in other than one- and two-family resident receiving the discharge of six or more water closets shall be provided with duplex pumping equipment.

**SECTION 715
BACKWATER VALVES**

715.1 Sewage backflow. Where the flood level rims of plumbing fixtures are below the elevation of the manhole cover of the next upstream manhole in the public sewer, such fixtures shall be protected by a backwater valve installed in the building drain, branch of the building drain or horizontal branch serving such fixtures. Plumbing fixtures having flood level rims above the elevation of the manhole cover of the next upstream manhole in the public sewer shall not discharge through a backwater valve. **Where plumbing fixtures are installed on a floor with a finished floor elevation below the elevation of the manhole cover of the next upstream manhole in the public sewer, such fixtures shall be protected by a backwater valve installed in the building drain, or horizontal branch serving such fixtures. Plumbing fixtures installed on a floor with a finished floor elevation above the elevation of the manhole cover of the next upstream manhole in the public sewer shall not discharge through a backwater valve.**

Exception: In existing buildings, fixtures above the elevation of the manhole cover of the next upstream manhole in the public sewer shall not be prohibited from discharging through a backwater valve.

**SECTION 716
[RESERVED]**

**SECTION 717
REPLACEMENT OF UNDERGROUND SEWERS BY PIPE-BURSTING METHODS**

717.1 General. This section shall govern the replacement of existing building sewer piping by pipe-bursting methods.

717.2 Applicability. The replacement of building sewer 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.

717.3 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.

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

717.5 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.

717.6 Cleanouts. Where the existing building sewer did not have cleanouts meeting the requirements of this code, clean- out fittings shall be installed as required by this code.

717.7 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.

717.8 Pressure testing. The replacement piping system as well as the connections to the replacement piping shall be tested in accordance with Section 312.

CHAPTER 8 INDIRECT/SPECIAL WASTE

SECTION 802 INDIRECT WASTE

802.1 Where required. Food-handling equipment, **in other than dwelling units,** and clear water waste, **dishwashing machines and utensils, pots, pans and dishwashing sinks** shall discharge through an indirect waste pipe as specified in Sections 802.1.1 through 802.1.8. All health-care related fixtures, devices, and equipment shall discharge to the drainage system through an indirect waste pipe by means of an *air gap* in accordance with this chapter and Section 713.3. Fixtures not required by this section to be indirectly connected shall be directly connected to the plumbing system in accordance with Chapter 7.

AC-802.1.1 Food handling. Equipment and fixtures utilized for the storage, preparation and handling of food shall discharge through an indirect waste pipe by means of an air gap. **Each well of a multiple-compartment sink shall discharge independently to a waste receptor. Figure AC-802.1.1**

802.2 Installation. All indirect waste piping shall discharge through an *air gap* or *air break* into a waste receptor or standpipe. Waste receptors and standpipes shall be trapped and vented and shall connect to the building drainage system. All indirect waste piping that exceeds ~~2 feet (610 mm)~~ **30 inches (762 mm)** in *developed length* measured horizontally, or ~~4 feet (1219 mm)~~ **54 inches (1372 mm)** in total *developed length*, shall be trapped.

Exception: Where a waste receptor receives only clear- water waste and does not directly connect to a sanitary drainage system, the receptor shall not require a trap.

CHAPTER 9 VENTS

SECTION AC-902 MATERIAL

AC-902.1 Material. Vent pipe and fittings for the venting system shall comply with the provisions of IPC Section 702.

SECTION AC-905 VENT TERMINAL

AC-905.2 Waterproof flashing. ~~Each vent terminated shall be made watertight with the roof by proper flashing.~~ **The juncture of each vent pipe with the roof line shall be made water tight by an approved flashing.**

AC-905.4. Location of vent terminal. No vent terminal shall be located directly beneath any door, window, or other ventilating opening of the building or of an adjacent building, nor shall the vent terminal be within ten (10) feet horizontally of such an opening unless it is at least ~~two~~ **(2) feet three (3) feet (914 mm) or more** above the top of such opening. Vent terminals shall not terminate under the overhang of a building.

SECTION AC-911 VENTING REQUIREMENTS FOR FLOOR DRAINS AND SIMILAR FLOOR LEVEL CONNECTED FIXTURES

AC-911.1 Floor drains and similar floor level connected fixtures above basement floor. Floor drains above the basement floor shall have traps a minimum size of three (3) inches, except emergency floor drains in laundry rooms of single-family homes, in which two (2) inch traps may be used. These emergency floor drains shall be considered plumbing fixtures, and shall be properly vented. Floor drains or showers with a trap size of three (3) or four (4) inches, upstream of water closets or similar fixtures, may be circuit or loop vented. When floor drains or showers are placed on a common horizontal branch with water closets or similar fixtures and located on the downstream side of such fixtures, they shall be individually vented, or they shall be isolated on their own waste branch, and circuit or loop vented. Loop or circuit vents shall be sized as provided in Table AC-901.1. They shall vent or take off in front of the last fixture connection, or

be washed out by the fixture they serve, or the vent may be washed out by a higher connected fixture. **Floor drains shall not be stack vented.**

SECTION AC-921 **ISLAND FIXTURE VENTING**

AC-921.1 Limitation. Island fixture venting shall not be permitted for fixtures other than sinks and lavatories. Residential kitchen sinks with a dishwasher waste connection, a food waste disposer, or both, in combination with the kitchen sink waste, shall be permitted to be vented in accordance with this section.

AC-921.2 Vent connection. The island fixture vent shall connect to the fixture drain as required for an individual or common vent. The vent shall rise vertically to above the drainage outlet of the fixture being vented before offsetting horizontally or vertically downward. The vent or branch vent for multiple island fixture vents shall extend to a point no less than 6 inches (152 mm) above the highest island fixture being vented before connecting to the outside vent terminal.

AC-921.3 Vent installation below the fixture flood level rim. The vent located below the flood level rim of the fixture being vented shall be installed as required for drainage piping in accordance with Chapter 7, except for sizing. The vent shall be sized in accordance with Chapter 9 and Table AC-901.1. The lowest point of the island fixture vent shall connect full size to the drainage system. The connection shall be to a vertical drain pipe or to the top half of a horizontal drain pipe. Cleanouts shall be provided in the island fixture vent to permit rodding of all vent piping located below the flood level rim of the fixtures. Rodding in both directions shall be permitted through a cleanout.

CHAPTER 10 **TRAPS, INTERCEPTORS, AND SEPARATORS**

SECTION 1003 **INTERCEPTORS AND SEPARATORS**

1003.3 Grease interceptors. Grease interceptors shall comply with the requirements of Sections 1003.3.1 through 1003.3.5.

1003.3.1 Grease interceptors and automatic grease removal devices required. A grease interceptor or automatic grease removal device shall be required to receive the drainage from fixtures and equipment with grease-laden waste located in food

preparation areas, such as in restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias and clubs. Fixtures and equipment shall include pot sinks, pre-rinse sinks; soup kettles or similar devices; wok stations; floor drains or sinks into which kettles are drained; automatic hood wash units and dishwashers without pre-rinse sinks. Grease interceptors and automatic grease removal devices shall receive waste only from fixtures and equipment that allow fats, oils or grease to be discharged.

AC-1003.3.1.1 Grease interceptor location. ~~Grease interceptors, where necessary or required, shall not be located in any kitchen or room where food is prepared, cooked, mixed, baked, smoked, preserved, exposed, bottled, packed, handled, stored, or manufactured. This provision need not apply where a semi-automatic draw-off type grease interceptor is provided.~~ **A variance must be approved by the Administrative Authority for all grease interceptors located in areas where food is prepared, cooked, baked, smoked, preserved, exposed, bottled, packed, handled, stored, or manufactured regardless of what type of grease interceptor is used.**

1003.3.4 Hydromechanical Grease interceptors, fats oils and greases disposal systems and automatic grease removal devices. ~~Grease interceptors and automatic grease removal devices shall be sized in accordance with PDI G101, ASME A112.14.3, or ASME A112.14.4. Grease interceptors and automatic grease removal devices shall be designed and tested in accordance with PDI G101, ASME A112.14.3 or ASME A112.14.4. Grease interceptors and automatic grease removal devices shall be installed in accordance with the manufacturer's instructions.~~ **Hydromechanical grease interceptors; fats, oils, and greases disposal systems and automatic grease removal devices shall be sized in accordance with ASME A112.14.3, ASME 112.14.4, ASME A112.14.6, CSA B481.3 or PDI G101. Hydromechanical grease interceptors; fats, oils, and greases disposal systems and automatic grease removal devices shall be designed and tested in accordance with ASME A112.14.3, ASME 112.14.4, ICSA B481.1, PDI G101 or PDI G102. Hydromechanical grease interceptors; fats, oils, and greases disposal systems and automatic grease removal devices shall be installed in accordance with the manufacturer's instructions. Where manufacturer's instructions are not provided, hydromechanical grease interceptors; fats, oils, and greases disposal systems and automatic grease removal devices shall be installed in compliance with ASME A112.14.3, ASME 112.14.4, ASME A112.14.6, CSA B481.3 or PDI G 101.**

AC-Exception: Interceptors that have a volume of not less than 500 gallons (1893 L) **1000 gallons (3786 L)** and that are located outdoors shall not be required to meet the requirements of this section.

**TABLE 1003.3.4.1
CAPACITY OF GREASE INTERCEPTORS^a**

| TOTAL FLOW-THROUGH RATING (gpm) | GREASE RETENTION CAPACITY (pounds) |
|------------------------------------|---------------------------------------|
| 4 | 8 |
| 6 | 12 |
| 7 | 14 |
| 9 | 18 |
| 10 | 20 |
| 12 | 24 |
| 14 | 28 |
| 15 | 30 |
| 18 | 36 |
| 20 | 40 |
| 25 | 50 |
| 35 | 70 |
| 50 | 100 |
| 75 | 150 |
| 100 | 200 |

For SI: 1 gallon per minute + 3.785 L/m, 1 pound + 0.454 kg.

- a. For total flow-through ratings greater than 100 (gpm), double the flow-through rating to determine the grease retention capacity (pounds).

AC-1003.3.4.1 Grease interceptor capacity. Grease interceptors shall have the grease retention capacity indicated in Table 1003.3.4.1 for the flow-through rates indicated. **The minimum size grease interceptor at point of use inside a building is 25 gpm (95 L/m). The minimum size outside grease interceptor is 1000 gallons (3786 L).**

1003.3.6 Gravity grease interceptors and gravity grease interceptors with fats, oils, and greases disposal systems. **The required capacity of gravity grease interceptors and gravity grease interceptors with fats, oils, and greases disposal systems shall be determined by multiplying the peak drain flow into the interceptor in gallons per minute by a retention time of 30 minutes. Gravity grease interceptors shall be designed and tested in accordance with IAPMO/ANSI Z1001. Gravity grease interceptors with fats, oils, and greases disposal systems shall be designed and tested in accordance with ASME A112.14.6 and IAPMO/ANSI Z1001. Gravity grease interceptors and gravity grease interceptors with fats, oils, and greases disposal systems shall be installed in accordance with manufacturer's instructions. Where manufacturer's instructions are not provided, gravity grease interceptors and gravity grease interceptors with fats, oils, and greases disposal systems shall be installed in compliance with ASME A112.14.6 and IAPMO/ANSI Z1001.**

1003.3.7 Direct connection. The discharge piping from a grease interceptor shall be directly connected to the sanitary drainage system.

1003.4 Oil separators required. ~~At repair garages, car washing facilities, at factories where oily and flammable liquid wastes are produced and in hydraulic elevator pits,~~ **At repair garages where floor or trench drains are provided, car washing facilities, factories where oily and flammable liquid wastes are produced and hydraulic elevator pits, oil** separators shall be installed into which all oil-bearing, grease bearing or flammable wastes shall be discharged before emptying into the building drainage system or other point of disposal.

Exception: An oil separator is not required in hydraulic elevator pits where an approved alarm system is installed. **Such alarm systems shall not terminate the operation of pumps utilized to maintain emergency operation of the elevator by fire fighters.**

CHAPTER 11 STORM DRAINAGE

SECTION 1101 GENERAL

1101.1 Scope. The provisions of this chapter shall govern the materials, design, construction and installation of storm drainage.

AC-1101.1.1 Rain fall rate in Allegheny County. Rain fall rates, in inches per hour, are based on a storm of one-hour duration and a 100-year return period. The rain fall rate in Allegheny County is four inches per hour or shall be determined by the Administrative Authority.

AC-1101.6 Fittings and connections. All connections and changes in direction of the storm drainage system shall be made with *approved* drainage-type fittings **and material** in accordance with ~~Table 706.3.~~ **Section 702.** The fittings shall not obstruct or retard flow in the system.

SECTION 1102 MATERIALS

**TABLE 1102.4
BUILDING STORM SEWER PIPE**

| MATERIAL | STANDARD |
|--|---|
| ***** | ***** |
| Asbestos-cement pipe [REPEALED] | ASTM C 428 [REPEALED] |
| ***** | ***** |

**TABLE 1102.5
SUBSOIL DRAIN PIPE**

| MATERIAL | STANDARD |
|---|--|
| ***** | ***** |
| Asbestos-cement pipe [REPEALED] | ASTM C508 [REPEALED] |
| ***** | ***** |

**SECTION 1105
ROOF DRAINS**

AC-1105.5 General. Roof drains shall be installed in accordance with the manufacture’s instructions. The inside opening for the roof drain shall not be obstructed by the roofing membrane material.

**SECTION AC-1107
SECONDARY (EMERGENCY) ROOF DRAINS**

AC-1107.1 Secondary drainage required. Secondary (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason. **Where primary and secondary roof drains are manufactured as a single assembly, the inlet and outlet for each drain shall be independent.**

**SECTION AC-1108
COMBINED SANITARY AND STORM SYSTEM**

AC-1108.1 Size of combined drains and sewers. The size of a combination sanitary and storm drain or sewer shall be computed in accordance with the method in Section 1106.3. The fixture units shall be converted into an equivalent projected roof or paved area. Where the total fixture load on the combined drain is less than or equal to 256 fixture units, the equivalent drainage area in horizontal projection shall be taken as ~~4,000~~ **1000** square feet (~~372~~ **93** m²). Where the total fixture load exceeds 256 fixture units, each additional fixture unit shall be considered the equivalent of ~~15.6~~ **3.9** square feet (~~1.5~~ **.362** m²) of drainage area. These values are based on a rainfall rate of ~~14~~ **4** inches (~~25~~ **101.6** mm) per hour.

SECTION AC-1109 VALUES FOR CONTINUOUS FLOW

AC-1109.1 Equivalent roof area. Where there is a continuous or semi-continuous discharge into the building *storm drain* or building *storm sewer*, such as from a pump, ejector, air conditioning plant or similar device, each gallon per minute (~~L/m~~ **gpm**) of such discharge shall be computed as being equivalent to ~~96~~ **24** square feet (~~9~~ **2.23** m²) of roof area, based on a rainfall rate of ~~14~~ **4** inches (~~25.4~~ **101.6** mm) per hour.

CHAPTER 12 SPECIAL PIPING AND STORAGE SYSTEMS

SECTION 1202 MEDICAL GASES

[F] **1202.1 Nonflammable medical gases.** Nonflammable medical gas systems, inhalation anesthetic systems, and vacuum piping systems shall be designed and installed in accordance with NFPA 99C.

SECTION 1203 OXYGEN SYSTEMS

[F] **1203.1 Design and installation.** Nonmedical oxygen systems shall be designed and installed in accordance with NFPA 5055 and NFPA 51.

CHAPTER 13 ~~REFERENCED STANDARDS~~ NONPOTABLE WATER SYSTEMS

**SECTION 1301
GENERAL**

1301.1 Scope. The provisions of Chapter 13 shall govern the materials, design, construction and installation of systems for the collection, storage, treatment and distribution of nonpotable water. The use and application of nonpotable water shall comply with laws, rules and ordinances applicable in the jurisdiction.

1301.2 Water Quality. Nonpotable water for each end use application shall meet the minimum water quality requirements as established for the intended application by the laws, rules and ordinances applicable in the jurisdiction. Where nonpotable water from different sources is combined in a system, the system shall comply with the most stringent of the requirements of this code that are applicable to such sources.

1301.2.1 Residual disinfectants. Where chlorine is used for disinfection, the nonpotable water shall contain not more than 4 ppm (4mg/L) of chloramines or free chlorine when tested in accordance with ASTM D 1253. Where ozone is used for disinfection, the nonpotable water shall not contain gas bubbles having elevated levels of ozone at the point of use.

Exception: Reclaimed water sources shall not be required to comply with these requirements.

1301.2.2 Filtration Required. Nonpotable water utilized for water closet and urinal flushing applications shall be filtered by a 100-micron or finer filter.

Exception: Reclaimed water sources shall not be required to comply with these requirements.

1301.3 Signage Required. Nonpotable water outlets such as hose connections, open ended pipes and faucets shall be identified at the point of use for each outlet with signage that reads as follows: “Nonpotable water is utilized for [application name]. CAUTION: NONPOTABLE WATER – DO NOT DRINK.” The words shall be legibly and indelibly printed on a tag or sign constructed of corrosion-resistant waterproof material or shall be indelibly printed on the fixture. The letters of the words shall be not less than 0.5 inch (12.7 mm) in height and in colors in contrast to the background on which they are applied. In addition to the required wordage, the pictograph shown in Figure 1301.3 shall appear on the signage required by this section.



FIGURE 1301.3 PICTOGRAPH – DO NOT DRINK

1301.4 Permits. Permits shall be required for the construction, installation, alteration and repair of nonpotable water systems. Construction documents, engineering calculations, diagrams and other such data pertaining to the nonpotable water system shall be submitted with each permit application.

1301.4.1 Recording. The existence of a nonpotable water system shall be recorded on the deed of ownership for the property. The certificate of occupancy shall not be issued until the documentation for the recording required under this section is completed by the property owner.

1301.5 Potable Water Connections. Where a potable water system is connected to a nonpotable water system, the potable water supply shall be protected against backflow by a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 608.

1301.6 Approved Components and Materials. Piping, plumbing components and materials used in collection and conveyance systems shall be manufactured of material approved for the intended application and compatible with any disinfection and treatment systems used.

1301.7 Insect and Vermin Control. The system shall be protected to prevent the entrance of insects and vermin into storage tanks and piping systems. Screen materials shall be compatible with contacting system components and shall not accelerate the corrosion of system components.

1301.8 Freeze Protection. Where sustained freezing temperatures occur, provisions shall be made to keep storage tanks and the related piping from freezing.

1301.9 Nonpotable Water Storage Tanks. Nonpotable water storage tanks shall comply with Sections 1301.9.1 through 1301.9.11.

1301.9.1 Sizing. The holding capacity of the storage tank shall be sized in accordance with the anticipated demand.

1301.9.2 Location. Storage tanks shall be installed above or below grade. Above-grade storage tanks shall be protected from direct sunlight and shall be constructed using opaque, UV-resistant materials such as, but not limited to, heavily tinted plastic, fiberglass, lined metal, concrete, wood, or painted to prevent algae growth, or shall have specially constructed sun barriers including, but not limited to, installation in garages, crawl spaces or sheds. Storage tanks and their manholes shall not be located directly under soil piping, waste piping or any source of contamination.

1301.9.3 Materials. Where collected on site, water shall be collected in an approved tank constructed of durable, nonabsorbent and corrosion-resistant materials. The storage tank shall be constructed of materials compatible with any disinfection systems used to treat water upstream of the tank and with any systems used to maintain water quality in the tank. Wooden storage tanks that are not equipped with a makeup water source shall be provided with a flexible liner.

1301.9.4 Foundation and Supports. Storage tanks shall be supported on a firm base capable of withstanding the weight of the storage tank when filled to capacity. Storage tanks shall be supported in accordance with the International Building Code.

1301.9.4.1 Ballast. Where the soil can become saturated, an underground storage tank shall be ballasted, or otherwise secured, to prevent the tank from floating out of the ground when empty. The combined weight of the tank and hold down ballast shall meet or exceed the buoyancy force of the tank. Where the installation requires a foundation, the foundation shall be flat and shall be designed to support the weight of the storage tank when full, consistent with the bearing capability of adjacent soil.

1301.9.4.2 Structural Support. Where installed below grade, storage tank installations shall be designed to withstand earth and surface structural loads without damage and with minimal deformation when empty or filled with water.

1301.9.5 Makeup Water. Where an uninterrupted supply is required for the intended application, potable or reclaimed water shall be provided as a source of makeup water for the storage tank. The makeup water supply shall be protected against backflow by a reduced pressure backflow prevention assembly or an air gap installed in accordance with Section 608. A full-open valve located on the makeup water supply line to the storage tank shall be provided. Inlets to the storage tank shall be controlled by fill valves or other automatic supply valves installed to

prevent the tank from overflowing and to prevent the water level from dropping below a predetermined point. Where makeup water is provided, the water level shall not be permitted to drop below the source water inlet or the intake of any attached pump.

1301.9.6 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table 606.5.4. The overflow pipe shall be protected from insects or vermin and shall discharge in a manner consistent with storm water runoff requirements of the jurisdiction. The overflow pipe shall discharge at a sufficient distance from the tank to avoid damaging the tank foundation or the adjacent property. Drainage from overflow pipes shall be directed to prevent freezing on roof walkways. The overflow drain shall not be equipped with a shutoff valve. A cleanout shall be provided on each overflow pipe in accordance with Section 708.

1301.9.7 Access. Not less than one access opening shall be provided to allow inspection and cleaning of the tank interior. Access openings shall have an approved locking device or other approved method of securing access. Below-grade storage tanks, located outside of the building, shall be provided with a manhole either not less than 24 inches (610 mm) square or with an inside diameter not less than 24 inches (610 mm). Manholes shall extend not less than 4 inches (102 mm) above ground or shall be designed to prevent water infiltration. Finished grade shall be sloped away from the manhole to divert surface water. Manhole covers shall be secured to prevent unauthorized access. Service ports in manhole covers shall be not less than 8 inches (203 mm) in diameter and shall be not less than 4 inches (102 mm) above the finished grade level. The service port shall be secured to prevent unauthorized access.

Exception: Storage tanks less than 800 gallons (3028 L) in volume and installed below grade shall not be required to be equipped with a manhole, but shall have a service port not less than 8 inches (203 mm) in diameter.

1301.9.8 Venting. Storage tanks shall be provided with a vent sized in accordance with Chapter 9 and based on the aggregate diameter of all tank influent pipes. The reservoir vent shall not be connected to sanitary drainage system vents. Vents shall be protected from contamination by means of an approved cap or U-bend installed with the opening directed downward. Vent outlets shall extend not less than 4 inches (102 mm) above grade or as necessary to prevent surface water from entering the storage tank. Vent openings shall be protected against the entrance of vermin and insects in accordance with the requirements of Section 1301.7.

1301.9.9 Draining of Tanks. Where tanks require draining for service or cleaning, tanks shall be drained by using a pump or by a drain located at the lowest point in the tank. The tank drain pipe shall discharge as required for overflow pipes and shall not be smaller in size than specified in Table 606.5.7. Not less than one cleanout shall be provided on each drain pipe in accordance with Section 708.

1301.9.10 Marking and Signage. Each nonpotable water storage tank shall be labeled with its rated capacity. The contents of storage tanks shall be identified with the words “CAUTION: NONPOTABLE WATER – DO NOT DRINK.” Where an opening is provided that could allow the entry of personnel, the opening shall be marked with the words, “DANGER – CONFINED SPACE.” Markings shall be indelibly printed on the tank or on a tag or sign constructed of corrosion-resistant waterproof material that is mounted on the tank. The letters of the words shall be not less than 0.5 inch (12.7 mm) in height and shall be of a color in contrast with the background on which they are applied.

1301.9.11 Storage Tank Tests. Storage tanks shall be tested in accordance with the following:

Storage tanks shall be filled with water to the overflow line prior to and during inspection. All seams and joints shall be left exposed and the tank shall remain water tight without leakage for a period of 24 hours.

1. **After 24 hours, supplemental water shall be introduced for a period of 15 minutes to verify proper drainage of the overflow system and that there are no leaks.**
2. **The tank drain shall be observed for proper operation.**
3. **The makeup water system shall be observed for proper operation and successful automatic shutoff of the system at the refill threshold shall be verified.**

1301.10 System Abandonment. If the owner of an on-site nonpotable water reuse system or rainwater collection and conveyance system elects to cease use of, or fails to properly maintain such system, the system shall be abandoned and shall comply with the following:

1. **All system piping connecting to a utility-provided water system shall be removed or disabled.**
2. **The distribution piping system shall be replaced with an *approved* potable water supply piping system. Where an existing potable pipe system is already in place, the fixtures shall be connected to the existing system.**
3. **The storage tank shall be secured from accidental access by sealing or locking tank inlets and access points, or filling with sand or equivalent.**

1301.11 Trenching Requirements for Nonpotable Water Piping. Nonpotable water collection and distribution piping and reclaimed water piping shall be separated from the building sewer and potable water piping underground by 5 feet (1524 mm) of undisturbed or compacted earth. Nonpotable water collection and distribution piping shall not be located in, under or above cesspools, septic tanks, septic tank drainage fields or seepage pits. Buried nonpotable water piping shall comply with the requirements of Section 306.

Exceptions:

1. **The required separation distance shall not apply where the bottom of the nonpotable water pipe within 5 feet (1524 mm) of the sewer is not less than 12 inches (305 mm) above the top of the highest point of the sewer and the pipe materials conform to Table 702.3.**
2. **The required separation distance shall not apply where the bottom of the potable water service pipe within 5 feet (1524 mm) of the nonpotable water pipe is a minimum of 12 inches (305 mm) above the top of the highest point of the nonpotable water pipe and the pipe materials comply with the requirements of Table 605.4.**
3. **Nonpotable water pipe is permitted to be located in the same trench with a building sewer, provided that such sewer is constructed of materials that comply with the requirements of Table 702.2.**
4. **The required separation distance shall not apply where a nonpotable water pipe crosses a sewer pipe, provided that the pipe is sleeved to at least 5 feet (1524 mm) horizontally from the sewer pipe centerline on both sides of such crossing, with pipe materials that comply with Table 702.2.**
5. **The required separation distance shall not apply where a potable water service pipe crosses a nonpotable water pipe, provided that the potable water service pipe is sleeved for a distance of at least 5 feet (1524 mm) horizontally from the centerline of the nonpotable pipe on both sides of such crossing, with pipe materials that comply with Table 702.2.**
6. **Irrigation piping located outside of a building and downstream of the backflow preventer is not required to meet the trenching requirements where nonpotable water is used for outdoor applications.**

1301.12 Outdoor Outlet Access. Sillcocks, hose bibbs, wall hydrants, yard hydrants and other outdoor outlets supplied by nonpotable water shall be located in a locked vault or shall be operable only by means of a removable key.

SECTION 1302
ON-SITE NONPOTABLE WATER REUSE SYSTEMS

1302.1 General. The provisions of Section 1302 shall govern the construction, installation, alteration and repair of on-site nonpotable water reuse systems for the collection, storage, treatment and distribution of on-site sources of nonpotable water as permitted by the jurisdiction.

1302.2 Sources. On-site nonpotable water reuse systems shall collect waste discharge from only the following sources: bathtubs, showers, lavatories, clothes washers and laundry trays. Water from other approved nonpotable sources including swimming pool backwash operations, air conditioner condensate, rainwater, cooling tower blow-down water, foundation drain water, steam system condensate, fluid cooler discharge water, food steamer discharge water, combination oven discharge water, industrial process water and fire pump test water shall also be permitted to be collected for reuse by on-site nonpotable water reuse systems, as approved by the code official and as appropriate for the intended application.

1302.2.1 Prohibited Sources. Waste water containing urine or fecal matter shall not be diverted to on-site nonpotable water reuse systems and shall discharge to the sanitary drainage system of the building or premises in accordance with Chapter 7. Reverse osmosis system reject water, water softener discharge water, kitchen sink waste water, dishwasher waste water and waste water discharged from wet-hood scrubbers shall not be collected for reuse in an on-site nonpotable water reuse system.

1302.3 Traps. Traps serving fixtures and devices discharging waste water to on-site nonpotable water reuse systems shall comply with Section 1002.4.

1302.4 Collection Pipe. On-site nonpotable water reuse systems shall utilize drainage piping approved for use in plumbing drainage systems to collect and convey untreated water for reuse. Vent piping approved for use in plumbing venting systems shall be utilized for vents in the gray water system. Collection and vent piping materials shall comply with Section 702.

1302.4.1 Installation. Collection piping conveying untreated water for reuse shall be installed in accordance with Section 704.

1302.4.2 Joints. Collection piping conveying untreated water for reuse shall utilize joints approved for use with the distribution piping and appropriate for the intended applications as specified in Section 705.

1302.4.3 Size. Collection piping conveying untreated water for reuse shall be sized in accordance with drainage sizing requirements specified in Section 710.

1302.4.4 Labeling and Marking. Additional marking of collection piping conveying untreated water for reuse shall not be required beyond that required for sanitary drainage, waste and vent piping by Chapter 7.

1302.5 Filtration. Untreated water collected for reuse shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other *approved* method to provide indication when a filter requires servicing or replacement. Filters shall be installed with shutoff valves immediately upstream and downstream to allow for isolation during maintenance.

1302.6 Disinfection and Treatment. Where the intended application for nonpotable water collected on site for reuse requires disinfection or other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use. Nonpotable water collected on site containing untreated gray water shall be retained in collection reservoirs for a maximum of 24 hours.

1302.6.1 Gray Water Used for Fixture Flushing. Gray water used for flushing water closets and urinals shall be disinfected and treated by an on-site water reuse treatment system complying with NSF 350.

1302.7 Storage Tanks. Storage tanks utilized in on-site nonpotable water reuse systems shall comply with Sections 1301.9 and 1302.7.1 through 1302.7.3.

1302.7.1 Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table 1302.7.1.

**TABLE 1302.7.1
LOCATION OF NONPOTABLE WATER REUSE STORAGE TANKS**

| ELEMENT | MINIMUM HORIZONTAL DISTANCE FROM STORAGE TANK (feet) |
|---|---|
| <u>Critical root zone (CRZ) of protected trees</u> | <u>2</u> |
| <u>Lot line adjoining private lots</u> | <u>5</u> |
| <u>Seepage pits</u> | <u>5</u> |
| <u>Septic tanks</u> | <u>5</u> |
| <u>Water wells</u> | <u>50</u> |
| <u>Streams and lakes</u> | <u>50</u> |
| <u>Water service</u> | <u>5</u> |
| <u>Public water main</u> | <u>10</u> |

For SI: 1 foot = 304.8 mm.

1302.7.2 Design and Construction. Storage tanks shall be designed and constructed in accordance with Chapters 16 through 22 of the *International Building Code* and in accordance with the following standards, as appropriate for the material of the storage tank: AWWA D100, AWWA D115, AWWA D120, UL 58, UL 1746, UL 1316, UL 142, API 12F or API 12D.

1302.7.3 Outlets. Outlets shall be located not less than 4 inches (102 mm) above the bottom of the storage tank and shall not skim water from the surface.

1302.8 Valves. Valves shall be supplied on on-site nonpotable water reuse systems in accordance with Sections 1302.8.1 and 1302.8.2.

1302.8.1 Bypass Valve. One three-way diverter valve listed and labeled to NSF 50 or other approved device shall be installed on collection piping upstream of each storage tank, or drainfield, as applicable, to divert untreated on-site reuse sources to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be marked to indicate the direction of flow, connection and storage tank or drainfield connection. Bypass valves shall be installed in accessible locations. Two shutoff valves shall not be installed to serve as a bypass valve.

1302.8.2 Backwater Valve. One or more backwater valves shall be installed on each overflow and tank drain pipe. Backwater valves shall be in accordance with Section 715.

1302.9 Pumping and Control System. Mechanical equipment including pumps, valves and filters shall be easily accessible and removable in order to perform repair, maintenance and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be appropriate for the application and in accordance with Section 604.

1302.10 Water Pressure-Reducing Valve or Regulator. Where the water pressure supplied by the pumping system exceeds 80 psi (552 kPa) static, a pressure-reducing valve shall be installed to reduce the pressure in the nonpotable water distribution system piping to 80 psi (552 kPa) static or less. Pressure-reducing valves shall be specified and installed in accordance with Section 604.8.

1302.11 Distribution Pipe. Distribution piping utilized in on-site nonpotable water reuse systems shall comply with Sections 1302.11.1 through 1302.11.3.

Exception: Irrigation piping located outside of the building and downstream of a backflow preventer.

1302.11.1 Materials, Joints and Connections. Distribution piping shall conform to the standards and requirements specified in Section 605.

1302.11.2 Design. On-site nonpotable water reuse distribution piping systems shall be designed and sized in accordance with Section 604 for the intended application.

1302.11.3 Marking. On-site nonpotable water distribution piping labeling and marking shall comply with Section 608.8.

1302.12 Tests and Inspections. Tests and inspections shall be performed in accordance with Sections 1302.12.1 through 1302.12.6.

1302.12.1 Collection Pipe and Vent Test. Drain, waste and vent piping used for on-site water reuse systems shall be tested in accordance with Section 312.

1302.12.2 Storage Tank Test. Storage tanks shall be tested in accordance with Section 1301.9.11.

1302.12.3 Water Supply System Test. The testing of makeup water supply piping and distribution piping shall be conducted in accordance with Section 312.5.

1302.12.4 Inspection and Testing of Backflow Prevention Assemblies. Testing of a backflow preventer shall be conducted in accordance with Section 312.10.

1302.12.5 Inspection of Vermin and Insect Protection. Inlets and vents to the system shall be inspected to verify that each is protected to prevent the entrance of insects and vermin into the storage tank and piping systems in accordance with Section 1301.7.

1302.12.6 Water Quality Test. The quality of the water for the intended application shall be verified at the point of use in accordance with the requirements of the jurisdiction.

1302.13 Operation and Maintenance Manuals. Operation and maintenance materials shall be supplied with nonpotable on-site water reuse systems in accordance with Sections 1302.13.1 through 1302.13.4.

1302.13.1 Manual. A detailed operations and maintenance manual shall be supplied in hardcopy form with all systems.

1302.13.2 Schematics. The manual shall include a detailed system schematic, and the locations and a list of all system components, including manufacturer and model number.

1302.13.3 Maintenance Procedures. The manual shall provide a schedule and procedures for all system components requiring periodic maintenance. Consumable parts, including filters, shall be noted along with part numbers.

1302.13.4 Operations Procedures. The manual shall include system startup and shutdown procedures. The manual shall include detailed operating procedures for the system.

SECTION 1303

NONPOTABLE RAINWATER COLLECTION AND DISTRIBUTION SYSTEMS

1303.1 General. The provisions of Section 1303 shall govern the construction, installation, alteration and repair of rainwater collection and conveyance systems for the collection, storage, treatment and distribution of rainwater for nonpotable applications, as permitted by the jurisdiction.

1303.2 Collection Surface. Rainwater shall be collected only from above-ground impervious roofing surfaces constructed from *approved* materials. Collection of water from vehicular parking or pedestrian surfaces shall be prohibited except where the water is used exclusively for landscape irrigation. Overflow and bleed-off pipes from roof-mounted appliances including, but not limited to, evaporative coolers, water heaters, and solar water heaters shall not discharge onto rainwater collection surfaces.

1303.3 Debris Excluders. Downspouts and leaders shall be connected to a roof washer and shall be equipped with a debris excluder or equivalent device to prevent the contamination of collected rainwater with leaves, sticks, pine needles and similar material. Debris excluders and equivalent devices shall be self-cleaning.

1303.4 Roof Washer. A sufficient amount of rainwater shall be diverted at the beginning of each rain event, and not allowed to enter the storage tank, to wash accumulated debris from the collection surface. The amount of rainfall to be diverted shall be field adjustable as necessary to minimize storage tank water contamination. The roof washer shall not rely on manually operated valves or devices, and shall operate automatically. Diverted rainwater shall not be drained to the roof surface, and shall be discharged in a manner consistent with the storm water runoff requirements of the jurisdiction. Roof washers shall be accessible for maintenance and service.

1303.5 Roof Gutters and Downspouts. Gutters and downspouts shall be constructed of materials that are compatible with the collection surface and the rainwater quality for the desired end use. Joints shall be water tight.

1303.5.1 Slope. Roof gutters, leaders and rainwater collection piping shall slope continuously toward collection inlets. Gutters and downspouts shall have a slope of not less than $\frac{1}{8}$ inch per foot (10.4 mm/m) along their entire length, and shall not permit the collection or pooling of water at any point.

Exception: Siphonic drainage systems installed in accordance with the manufacturer's instructions shall not be required to have a slope.

1303.5.2 Size. Gutters and downspouts shall be installed and sized in accordance with Section 1106.6 and local rainfall rates.

1303.5.3 Cleanouts. Cleanouts shall be provided in the water conveyance system to allow access to all filters, flushes, pipes and downspouts.

1303.6 Drainage. Water drained from the roof washer or debris excluder shall not be drained to the sanitary sewer. Such water shall be diverted from the storage tank and discharge in a location that will not cause erosion or damage to property in accordance with the *International Building Code*. Roof washers and debris excluders shall be provided with an automatic means of self-draining between rain events, and shall not drain onto roof surfaces.

1303.7 Collection Pipe. Rainwater collection and conveyance systems shall utilize drainage piping approved for use within plumbing drainage systems to collect and convey captured rainwater. Vent piping approved for use within plumbing venting systems shall be utilized for vents within the rainwater system. Collection and vent piping materials shall comply with Section 702.

1303.7.1 Installation. Collection piping conveying captured rainwater shall be installed in accordance with Section 704.

1303.7.2 Joints. Collection piping conveying captured rainwater shall utilize joints approved for use with the distribution piping and appropriate for the intended applications as specified in Section 705.

1303.7.3 Size. Collection piping conveying captured rainwater shall be sized in accordance with drainage sizing requirements specified in Section 710.

1303.7.4 Marking. Additional marking of collection piping conveying captured rainwater for reuse shall not be required beyond that required for sanitary drainage, waste and vent piping by Chapter 7.

1303.8 Filtration. Collected rainwater shall be filtered as required for the intended end use. Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to provide indication when a filter requires servicing or replacement. Filters shall be installed with shutoff valves installed immediately upstream and downstream to allow for isolation during maintenance.

1303.9 Disinfection. Where the intended application for rainwater requires disinfection or other treatment or both, it shall be disinfected as needed to ensure that the required water quality is delivered at the point of use. Where chlorine is used for disinfection or treatment, water shall be tested for residual chlorine in accordance with ASTM D 1253. The levels of residual chlorine shall not exceed that allowed for the intended use in accordance with the requirements of the jurisdiction.

1303.10 Storage Tanks. Storage tanks utilized in nonpotable rainwater collection and conveyance systems shall comply with Sections 1301.9 and 1303.10.1 through 1303.10.3.

1303.10.1 Location. Storage tanks shall be located with a minimum horizontal distance between various elements as indicated in Table 1303.10.1.

**TABLE 1303.10.1
LOCATION OF RAINWATER STORAGE TANKS**

| ELEMENT | MINIMUM HORIZONTAL DISTANCE FROM STORAGE TANK (FEET) |
|--|---|
| <u>Critical root zone (CRZ) of protected trees</u> | <u>2</u> |
| <u>Lot line adjoining private lots</u> | <u>5</u> |
| <u>Seepage pits</u> | <u>5</u> |
| <u>Septic tanks</u> | <u>5</u> |

For SI: 1 foot = 304.8 mm.

1303.10.2 Inlets. Storage tank inlets shall be designed to introduce collected rainwater into the tank with minimum turbulence, and shall be located and designed to avoid agitating the contents of the storage tank.

1303.10.3 Outlets. Outlets shall be located at least 4 inches (102 mm) above the bottom of the storage tank and shall not skimwater from the surface.

1303.11 Valves. Valves shall be supplied on rainwater collection and conveyance systems in accordance with Section 1303.11.1.

1303.11.1 Backwater Valve. Backwater valves shall be installed on each overflow and tank drain pipe. Backwater valves shall be in accordance with Section 715.

1303.12 Pumping and Control System. Mechanical equipment including pumps, valves and filters shall be easily accessible and removable in order to perform repair, maintenance and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be appropriate for the application and in accordance with Section 604.

1303.13 Water Pressure-Reducing Valve or Regulator. Where the water pressure supplied by the pumping system exceeds 80 psi (552 kPa) static, a pressure-reducing valve shall be installed to reduce the pressure in the rainwater distribution system piping to 80 psi (552 kPa) static or less. Pressure-reducing valves shall be specified and installed in accordance with Section 604.8.

1303.14 Distribution Pipe. Distribution piping utilized in rainwater collection and conveyance systems shall comply with Sections 1303.14.1 through 1303.14.3.

Exception: Irrigation piping located outside of the building and downstream of a backflow preventer.

1303.14.1 Materials, Joints and Connections. Distribution piping shall conform to the standards and requirements specified in Section 605 for nonpotable water.

1303.14.2 Design. Distribution piping systems shall be designed and sized in accordance with Section 604 for the intended application.

1303.14.3 Marking. Nonpotable rainwater distribution piping labeling and marking shall comply with Section 608.8.

1303.15 Tests and Inspections. Tests and inspections shall be performed in accordance with Sections 1303.15.1 through 1303.15.8.

1303.15.1 Roof Gutter Inspection and Test. Roof gutters shall be inspected to verify that the installation and slope is in accordance with Section 1303.5.1. Gutters shall be tested by pouring not less than 1 gallon (3.8 l) of water into the end of the gutter opposite the collection point. The gutter being tested shall not leak and shall not retain standing water.

1303.15.2 Roofwasher Test. Roofwashers shall be tested by introducing water into the gutters. Proper diversion of the first quantity of water in accordance with the requirements of Section 1303.4 shall be verified.

1303.15.3 Collection Pipe and Vent Test. Drain, waste and vent piping used for rainwater collection and conveyance systems shall be tested in accordance with Section 312.

1303.15.4 Storage Tank Test. Storage tanks shall be tested in accordance with Section 1301.9.11.

1303.15.5 Water Supply System Test. The testing of makeup water supply piping and distribution piping shall be conducted in accordance with Section 312.5.

1303.15.6 Inspection and Testing of Backflow Prevention Assemblies. Testing of a backflow prevention assembly shall be conducted in accordance with Section 312.10.

1303.15.7 Inspection of Vermin and Insect Protection. Inlets and vents to the system shall be inspected to verify that each is protected to prevent the entrance of insects and vermin into the storage tank and piping systems in accordance with Section 1301.7.

1303.15.8 Water Quality Test. The quality of the water for the intended application shall be verified at the point of use in accordance with the requirements of the jurisdiction. Except where site conditions as specified in ASTM E 2727 affect the rainwater, collected rainwater shall be considered to have the parameters indicated in Table 1303.15.8.

**TABLE 1303.15.8
RAINWATER QUALITY**

| <u>PARAMETER</u> | <u>VALUE</u> |
|------------------------------|---|
| <u>pH</u> | <u>6.0-7.0</u> |
| <u>BOD</u> | <u>Not greater than 10 mg/L</u> |
| <u>NTU</u> | <u>Not greater than 2</u> |
| <u>Fecal coliform</u> | <u>No detectable fecal coli in 100 mL</u> |
| <u>Sodium</u> | <u>No detectable sodium in 100 mL</u> |
| <u>Chlorine</u> | <u>No detectable chlorine in 100 mL</u> |
| <u>Enteroviruses</u> | <u>No detectable enteroviruses in 100 mL</u> |

1303.16 Operation and Maintenance Manuals. Operation and maintenance manuals shall be supplied with rainwater collection and conveyance systems in accordance with Sections 1303.16.1 through 1303.16.4.

1303.16.1 Manual. A detailed operations and maintenance manual shall be supplied in hardcopy form with all systems.

1303.16.2 Schematics. The manual shall include a detailed system schematic, and locations and a list of all system components, including manufacturer and model number.

1303.16.3 Maintenance Procedures. The manual shall provide a maintenance schedule and procedures for all system components requiring periodic maintenance. Consumable parts, including filters, shall be noted along with part numbers.

1303.16.4 Operations Procedures. The manual shall include system startup and shutdown procedures, as well as detailed operating procedures.

**SECTION 1304
RECLAIMED WATER SYSTEMS**

1304.1 General. The provisions of this section shall govern the construction, installation, alteration and repair of systems supplying nonpotable reclaimed water.

1304.2 Water Pressure-Reducing Valve or Regulator. Where the reclaimed water pressure supplied to the building exceeds 80 psi (552 kPa) static, a pressure-reducing valve shall be installed to reduce the pressure in the reclaimed water distribution system piping to 80 psi (552 kPa) static or less. Pressure-reducing valves shall be specified and installed in accordance with Section 604.8.

1304.3 Reclaimed Water Systems. The design of the reclaimed water systems shall conform to ASTM E 2635 and accepted engineering practice.

1304.3.1 Distribution Pipe. Distribution piping shall comply with Sections 1304.3.1.1 through 1304.3.1.3.

Exception: Irrigation piping located outside of the building and downstream of a backflow preventer.

1304.3.1.1 Materials, Joints and Connections. Distribution piping conveying reclaimed water shall conform to standards and requirements specified in Section 605 for nonpotable water.

1304.3.1.2 Design. Distribution piping systems shall be designed and sized in accordance with Section 604 for the intended application.

1304.3.1.3 Labeling and Marking. Nonpotable rainwater distribution piping labeling and marking shall comply with Section 608.8.

1304.4 Tests and Inspections. Tests and inspections shall be performed in accordance with Sections 1304.4.1 and 1304.4.2.

1304.4.1 Water Supply System Test. The testing of makeup water supply piping and reclaimed water distribution piping shall be conducted in accordance with Section 312.5.

1304.4.2 Inspection and Testing of Backflow Prevention Assemblies. The testing of backflow preventers shall be conducted in accordance with Section 312.10.

CHAPTER AC-14 **REFERENCED STANDARDS**

This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date, and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in Section 102.8.

AHRI

**Air-Conditioning, Heating, & Refrigeration Institute
4100 North Fair Fax Drive, Suite 200
Arlington VA 22203**

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|-----------------------------------|
| 1010 – 02 | Self-contained, Mechanically Refrigerated Drinking-Water Coolers | 410.1 |

API

American Petroleum Institute
1220 L Street NW
Washington, DC 20005-4070

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|-----------------------------------|
| <u>12D-2008</u> | <u>Specification for Field Welded Tanks for Storage of Production Liquids, effective April 1, 2009</u> | <u>1302.7.2</u> |
| <u>12F-2008</u> | <u>Specification for Shop Welded Tanks for Storage of Production Liquids, effective April 1 2009</u> | <u>1302.7.2</u> |

ANSI

American National Standards Institute
25 West 43rd Street, Fourth Floor
New York, NY 10036

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|-----------------------------------|
| A118.10 – 99 | Specification for Load Bearing, Bonded, Waterproof Membranes for Thin Set Ceramic Tile and Dimension Stone Installation | 417.5.2.5 |
| Z4.3 – 95 | Minimum Requirements for Nonsewered Waste-disposal Systems | 311.1 |
| Z21.22 – 99 (R2003) | Relief Valves for Hot Water Supply Systems with Addenda Z21.22a-2000 (R2003) and Z21.22b-2001 (R2003) | 504.2, 504.4 |
| Z124.1 – 95 | Plastic Bathtub Units | 407.1 |
| Z124.2 – 95 | Plastic Shower Receptors and Shower Stalls | 417.1 |
| Z124.3 – 95 | Plastic Lavatories | 416.1, 416.2, 417.1 |
| Z124.4 – 96 | Plastic Water Closet Bowls and Tanks | 420.1 |
| Z124.6 – 97 | Plastic Sinks | 415.1, 418.1 |
| Z124.9 – 94 | Plastic Urinal Fixtures | 419.1 |

ASME

American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016-5990

| Standard reference number | Title | Referenced in code section number |
|------------------------------------|------------------------------|-----------------------------------|
| A112.1.2 – 2004 | Air Gaps in Plumbing Systems | Table 608.1, 608.13.1 |
| A112.1.3 – 2000 Reaffirmed 2005 | | |

| Standard reference number | Title | Referenced in code section number |
|--|---|--|
| | Air Gap Fittings for Use with Plumbing Fixtures, Appliances, and Appurtenances | Table 608.1, 608.13.1 |
| A112.3.1 – 2007 | Stainless Steel Drainage Systems for Sanitary, DWV, Storm, and Vacuum Appliances Above and Below Ground | 412.1, Table 702.1, Table 702.2, Table 702.3, Table 702.4, 708.2, Table 1102.4, Table 1102.5, 1102.6, Table 1102.7 |
| A112.3.4 – 2000 (Reaffirmed 2004) | Macerating Toilet Systems and Related Components | 712.4.1 |
| <u>A112.4 -14.6 – 2010</u> | <u>FOG (Fats, Oils and Greases) Disposal Systems</u> | <u>1003.3.6</u> |
| A112.4.1 – 1993 (R2002) | Water Heater Relief Valve Drain Tubes | 504.6 |
| <u>A112.4.2 - 2009</u> | <u>Water Closet Personal Hygiene Devices</u> | <u>424.9</u> |
| A112.4.3 – 1999 (Reaffirmed 2004) | Plastic Fittings for Connecting Water Closets to the Drainage System | 405.4 |
| A112.6.1M – 1997 (R2002) | Floor-affixed Supports for Off-the-floor Plumbing Fixtures for Public Use | 405.4.3 |
| A112.6.2 – 2000 (Reaffirmed 2004) | Framing-affixed Supports for Off-the-floor Water Closets with Concealed Tanks | 405.4.3 |
| A112.6.3 – 2001 (Reaffirmed 2007) | 2001 Floor and Trench Drains | 412.1 |
| A112.6.7 – 2001 (Reaffirmed 2007) | Enameled and Epoxy-coated Cast-iron and PVC Plastic Sanitary Floor Sinks | 427.1 |
| A112.14.1 – 2003 | Backwater Valves | 715.2 |
| A112.14.3 – 2000 | Grease Interceptors | 1003.3.4 |
| <u>A112.14.3 - 2000</u> | <u>Grease Interceptors</u> | <u>1003.3.4</u> |
| A112.14.4 – 2001 (Reaffirmed 2007) | Grease Removal Devices | 1003.3.4 |
| <u>A112.14.4 – 2001</u> | <u>Grease Removal Devices</u> | <u>1003.3.4</u> |
| A112.18.1 – 2005/ CSA B125.1 - 2005 | Plumbing Supply Fittings | 424.1, 424.2, 424.3, 607.4, 608.2 |
| A112.18.2 – 2005/ CSA B125.2 – 2005 | Plumbing Waste Fittings | 424.1.2 |

| Standard reference number | Title | Referenced in code section number |
|---|--|--|
| A112.18.3 – 2002 | Performance Requirements for Backflow Protection Devices and Systems in Plumbing Fixture Fittings | 424.2, 424.6 |
| A112.18.6 – 2003 | Flexible Water Connectors | 605.6 |
| A112.18.7 – 1999 (Reaffirmed 2004) | Deck-mounted Bath/Shower Transfer Valves with Integral Backflow Protection | 424.8 |
| <u>A112.18.9 – 2011</u> | <u>Protectors/Insulators for Exposed Waste and Supplies on Accessible Fixtures</u> | <u>404.3</u> |
| A112.19.1M – 2004 (Reaffirmed 2004) | Enameled Cast Iron Plumbing Fixtures | 407.1, 410.1, 415.1, 416.1, 418.1 |
| A112.19.2 – 2003 | Vitreous China Plumbing Fixtures and Hydraulic Requirements for Water Closets and Urinals | 401.2, 405.9, 408.1, 410.1, 416.1, 418.1, 419.1, 420.1 |
| <u>A112.19.3 – 2008</u> | <u>Stainless Steel Plumbing Fixtures</u> | <u>405.9, 407.1, 415.1, 416.1, 418.1, 420.1</u> |
| A112.19.3M – 2000 (Reaffirmed 2007) | Stainless Steel Plumbing Fixtures (Designed for Residential Use) | 405.9, 415.1, 416.1, 418.1 |
| <u>A112.19.14 – 2006 (R2011)</u> | <u>Six-Liter Water Closets Equipped with a Dual Flushing Device</u> | <u>420.1</u> |
| A112.19.4M – 1994 (Reaffirmed 2004) | Porcelain Enameled Formed Steel Plumbing Fixtures | 407.1, 416.1, 418.1 |
| A112.19.5 – 2005 | Trim for Water-closet Bowls, Tanks, and Urinals | 425.4 |
| A112.19.6 – 1995 | Hydraulic Performance Requirements for Water Closets and Urinals | 419.1, 420.1 |
| A112.19.7M – 2006 | Hydromassage Bathtub Appliances | 421.1 |
| A112.19.8M – 2007 | Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs | 421.1 |
| A112.19.9M – 1991 (R2002) | Nonvitreous ceramic Plumbing Fixtures with 2002 Supplement | 407.1, 408.1, 410.1, 415.1, 416.1, 417.1, 418.1, 420.1 |
| A112.19.12-2006 | Wall Mounted and Pedestal Mounted, Adjustable, Elevating, Tilting and Pivoting Lavatory, Sink and Shampoo Bowl Carrier Systems and Drain Systems | 416.4, 418.3 |
| A112.19.13—200 (Reaffirmed 2007) | Electrohydraulic Water Closets | 420.1 |

| Standard reference number | Title | Referenced in code section number |
|--|---|---|
| A112.19.15-2005 | Bathtub/Whirlpool Bathtubs with Pressure Sealed Doors | 407.4, 421.5 |
| A112.19.19—2006 | Vitreous China Nonwater Urinals | 419.1 |
| A112.21.2M—1983 | Roof Drains | 1102.6 |
| <u>A112.21.3 – 1985 (R2007)</u> | <u>Hydrants for Utility and Maintenance Use</u> | <u>Table 608.1, 608.13.6</u> |
| A112.36.2M-1991(R2002) | Cleanouts | 708.2 |
| <u>A112.1016</u> | <u>Performance Requirements for Individual Thermostatic, Pressure Balancing and Combination Control Valves for Individual Fixture Fittings</u> | <u>424.3, 424.4, 607.4</u> |
| B1.20.1—1983(R2006) | Pipe Threads, General Purpose (inch) | 605.10.3, 605.12.3, 605.14.4, 605.16.3, 605.18.1, 705.2.3, 705.4.3, 705.9.4, 705.12.1, 705.14.3 |
| B16.3—2006 | Malleable Iron Threaded Fittings Classes 150 and 300 | Table 605.5, Table 702.4, Table 1102.7 |
| B16.4-2006 | Gray Iron Threaded Fittings Classes 125 and 250 | Table 605.5, Table 702.4, Table 1102.7 |
| B16.9-2003 | Factory-made Wrought Steel Buttwelding Fittings | Table 605.5, Table 702.4, Table 1102.7 |
| <u>B 16.29 – 2012</u> | <u>Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings (DWV)</u> | <u>Table 702.4, Table 1102.7</u> |
| B16.11-2005 | Forged Fittings, Socket-welding and Threaded | Table 605.5, Table 702.4, Table 1102.7 |
| B16.12—1998 (Reaffirmed 2006) | Cast-iron Threaded Drainage Fittings | Table 605.5, Table 702.4, Table 1102.7 |
| B16.15—2006 | Cast Bronze Threaded Fittings | Table 605.5, Table 702.4, Table 1102.7 |
| B16.18—2001 (Reaffirmed 2005) | Cast Copper Alloy Solder Joint Pressure Fittings | Table 605.5, Table 702.4, Table 1102.7 |
| B16.22—2001 (Reaffirmed 2005) | Wrought Copper and Copper Alloy Solder Joint Pressure Fittings | Table 605.5, Table 702.4, Table 1102.7 |
| B16.23—2002 (Reaffirmed 2006) | Cast Copper Alloy Solder Joint Drainage Fittings DWV | Table 605.5, Table 702.4, Table 1102.7 |
| B16.26—2006 | Cast Copper Alloy Fittings for Flared Copper Tubes. | Table 605.5, Table 702.4, Table 1102.7 |
| B16.28—1994 | Wrought Steel Buttwelding Short Radius Elbows and Returns | Table 605.5, Table 702.4, Table 1102.7 |
| B16.29—2001 | Wrought Copper and Wrought Copper Alloy | |

ASME

American Society of Mechanical Engineers
Three Park Avenue
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| Standard reference number | Title | Referenced in code section number |
|-----------------------------|---|--|
| | Solder Joint Drainage Fittings (DWV) | Table 605.5, Table 702.4, Table 1102.7 |
| <u>B16.51 – 2011</u> | <u>Copper and Copper Alloy Press-Connect Pressure Fittings</u> | <u>Table 605.5</u> |

ASSE

American Society of Sanitary Engineering
901 Canterbury Road, Suite A
Westlake, OH 44145

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|--|
| 1001-02 | Performance Requirements for Atmospheric Type Vacuum Breakers | 425.2, Table 608.1, 608.13.6, 608.16.4.1 |
| 1002-99 | Performance Requirements for Antisiphon Fill Valves (Ballcocks) for Gravity Water Closet Flush Tanks | 425 3.1, Table 608.1 |
| 1003-01 | Performance Requirements for Water Pressure Reducing Valves | 604.8 |
| 1004-90 | Performance Requirements for Backflow Prevention Requirements for Commercial Dishwashing Machines | 409.1 |
| 1005-99 | Performance Requirements for Water Heater Drain Valves | 501.3 |
| 1006-89 | Performance Requirements for Residential Use Dishwashers | 409.1 |
| 1007-92 | Performance Requirements for Home Laundry Equipment Performance Requirements for Home Laundry Equipment | 406.1, 406.2 |
| 1008-89 | Performance Requirements for Home Laundry Equipment | 413.1 |
| 1009-90 | Performance Requirements for Commercial Food Waste Grinder Units | 413.1 |
| 1010-04 | Performance Requirements for Water Hammer Arresters | 604.9 |
| 1011-04 | Performance Requirements for Hose Connection Vacuum Breakers | Table 608.1, 608.13.6 |
| 1012-02 | Performance Requirements for Backflow Preventers with Intermediate Atmospheric Vent | Table 608.1, 608 13.3, 608.16.2 |
| 1013-05 | Performance Requirements for Reduced Pressure Principle Backflow Preventers and Reduced Pressure Fire Protection Principle Backflow Preventers | Table 608.1, 608 13.3, 608.16.2 |

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|-----------------------------------|
| 1015-05 | Performance Requirements for Double Check Backflow Prevention Assemblies and Double Check Fire Protection Backflow Prevention Assemblies | Table 608.1, 608.13.7 |
| 1016-96 | Performance Requirements for Individual Thermostatic, Pressure Balancing and Combination Control Valves for Individual Fixture Fittings | 424.3, 424.4, 607.4, |
| 1017-03 | Performance Requirements for Temperature Actuated Mixing Valves for Hot Water Distribution Systems | 501.2, 613.1 |
| 1018-01 | Performance Requirements for Trap Seal Primer Valves; Potable Water Supplied | 1002.4 |
| 1019-04 | Performance Requirements for Vacuum Breaker Wall Hydrants, Freeze Resistant, Automatic Draining Type | Table 608.1, 608.13.6 |
| 1020-04 | Performance Requirements for Pressure Vacuum Breaker Assembly | Table 608.1, 608.13.5 |
| 1022-03 | Performance Requirements for Backflow Preventer for Beverage Dispensing Equipment | Table 608.1, 608.16.1, 608.16.10 |
| 1024-04 | Performance Requirements for Dual Check Valve Type Backflow Preventers (for Residential Supply Service or Individual Outlets) | 605.3.1, Table 608.1 |
| 1035-02 | Performance Requirements for Laboratory Faucet Backflow Preventers | Table 608.1, 608.13.6 |
| 1037-90 | Performance Requirements for Pressurized Flushing Devices for Plumbing Fixtures | 452.2 |
| 1044-01 | Performance Requirements for Trap Seal Primer Devices Drainage Types and Electronic Design Types | 1002.4 |
| 1047-05 | Performance Requirements for Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies | Table 608.1, 608.13.2 |
| 1048-05 | Performance Requirements for Double Check Detector Fire Protection Backflow Prevention Assemblies | Table 608.1, 608.13.7 |
| 1050-02 | Performance Requirements for Stack Air Admittance Valves for Sanitary Drainage Systems | 917.1 |
| 1051-02 | Performance Requirements for Individual and Branch Type Air Admittance Valves for Sanitary Drainage Systems-fixture and Branch Devices | 917.1 |
| 1052-04 | Performance Requirements for Hose Connection Backflow Preventers | Table 608.1, 608.13.6 |

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|--|
| 1055-97 | Performance Requirements for Chemical Dispensing Systems | 608.13.9 |
| 1056-01 | Performance Requirements for Spill Resistant Vacuum Breaker | Table 608.1, 608.13.5, 608.13.8 |
| 1060-96 | Performance Requirements for Outdoor Enclosures for Backflow Prevention Assemblies | 608.14.1 |
| 1061-06 | Performance Requirements for Removable and Nonremovable Push Fit Fittings | Table 605.5 |
| 1062-97 | Performance Requirements for Temperature Actuated, Flow Reduction Valves to Individual Fixture Fittings | 424.7 |
| 1066-97 | Performance Requirements for Individual Pressure Balancing In-line Valves for Individual Fixture Fittings | 604.11 |
| 1069-05 | Performance Requirements for Automatic Temperature Control Mixing Valves | 424.4 |
| 1070-04 | Performance Requirements for Water-temperature Limiting Devices | 408.3, 416.5, 424.5, 607.1 |
| 1079-2005 | Dielectric Pipe Unions | 605.24.1, 605.24.3 |
| 5013-98 | Performance Requirements for Testing Reduced Pressure Principle Backflow Prevention Assembly (RPA) and Reduced Pressure Fire Protection Principle Backflow Preventers (RFP) | 312.10.2 |
| 5015-98 | Performance Requirements for Testing Double Check Valve Backflow Prevention Assembly (DCVA) | 312.10.2 |
| 5020-98 | Performance Requirements for Testing Pressure Vacuum Breaker Assembly (PVBA) | 312.10.2 |
| 5047-98 | Performance Requirements for Testing Reduced Pressure Detector Fire Protection Backflow Prevention Assemblies (RPDA) | 312.10.2 |
| 5048-98 | Performance Requirements for Testing Double Check Valve Detector Assembly (DCDA) | 312.10.2 |
| 5052-98 | Performance Requirements for Testing Hose Connection Backflow Preventers | 312.10.2 |
| 5056-98 | Performance Requirements for Testing Spill Resistant Vacuum Breaker | 312.10.2 |
| A53/A53M-06a | Specification for Pipe, Steel, Black and Hot-dipped, Zinc-coated Welded and Seamless | Table 605.3, Table 605.4, Table 702.1 |
| A74-06 | Specification for Cast-iron Soil Pipe and Fittings | Table 702.1, Table 702.2, Table 702.3, Table 702.4, 708.2, 708.7, Table 1102.4, Table 1102.5, Table 1102.7 |
| A312-A312M-06 | Specification for Seamless and Welded | |

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|---|
| | Austenitic Stainless Steel Pipes | Table 605.3, Table 605.4, Table 605.5, 605.23.2 |
| A733-03 | Specification for Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples | Table 605.8 |
| A778-01 | Specification for Welded Unannealed Austenitic Stainless Steel Tubular Products | Table 605.3, Table 605.4, Table 605.5 |
| A888-07a | Specification for Hubless Cast-iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Application | Table 702.1, Table 702.2, Table 702.3, Table 702.4, 708.7, Table 1102.4, Table 1102.5, Table 1102.7 |
| B32-04 | Specification for Solder Metal | 605.14.3, 605.15.4, 705.9.3, 705.10.3 |
| B42-02e01 | Specification for Seamless Copper Pipe, Standard Sizes | Table 605.3, Table 605.4, Table 702.1 |
| B43-98(2004) | Specification for Seamless Red Brass Pipe, Standard Sizes | Table 605.3, Table 605.4, Table 702.1 |
| B75-02 | Specification for Seamless Copper Tube | Table 605.3, Table 605.4, Table 702.1, Table 702.2, Table 702.3, Table 1102.4 |
| B88-03 | Specification for Seamless Copper Water Tube | Table 605.3, Table 605.4, Table 702.1, Table 702.2, Table 702.3, Table 1102.4 |
| B152/B 152M-06a | Specification for Copper Sheet, Strip Plate and Rolled Bar | 402.3, 417.5.2.4, 425.3.3, 902.2 |
| B251-02e01 | Specification for General Requirements for Wrought Seamless Copper and Copper-alloy Tube | Table 605.3, Table 605.4, Table 702.1, Table 702.2, Table 702.3, Table 1102.4 |
| B302-02 | Specification for Threadless Copper Pipe, Standard Sizes | Table 605.3, Table 605.4, Table 702.1 |
| B306-02 | Specification for Copper Drainage Tube (DWV) | Table 702.1, Table 702.2, Table 1102.4 |
| B447-07 | Specification for Welded Copper Tube | Table 605.3, Table 605.4 |
| B687-99 (2005)e01 | Specification for Brass, Copper and Chromium-plated Pipe Nipples | Table 605.8 |
| B813-00e01 | Specification for Liquid and Paste Fluxes for Soldering of Copper and Copper Alloy Tube | 605.14.3, 605.15.4, 705.9.3, 705.10.3 |
| B828-02 | Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube | |

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|--|
| | and Fittings | 605.14.3, 605.15.4, 705.9.3, 705.10.3 |
| C4-04e01 | Specification for Clay Drain Tile and Perforated Clay Drain Tile | Table 702.3, Table 1102.4, Table 1102.5 |
| C14-07 | Specification for Nonreinforced Concrete Sewer, Storm Drain and Culvert Pipe | Table 702.3, Table 1102.4 |
| C76-07 | Specification for Reinforced Concrete Culvert, Storm Drain and Sewer Pipe | Table 702.3, Table 1102.4 |
| C296-(2004)e01 | Specification for Asbestos-cement Pressure Pipe | Table 605.3 |
| C425-04 | Specification for Compression Joints for Vitrified Clay Pipe and Fittings | 705.15, 705.19 |
| C428-97(2006) | Specification for Asbestos-cement Nonpressure Sewer Pipe | Table 702.2, Table 702.3, Table 702.4, Table 1102.4 |
| C443-05a | Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets | 705.6, 705.19 |
| C508-00(2004) | Specification for Asbestos-cement Underdrain Pipe | Table 1102.5 |
| C564-04a | Specification for Rubber Gaskets for Cast-iron Soil Pipe and Fittings | 705.5.2, 705.5.3, 705.19, Table 1102.4 |
| C700-07 | Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated | Table 702.3, 702.4, Table 1102.4, Table 1102.5 |
| C1053-00(2005) | Specification for Borosilicate Glass Pipe and Fittings for Drain, Waste, and Vent (DWV) Applications | Table 702.1, Table 702.4 |
| C1173-06 | Specification for Flexible Transition Couplings for Underground Piping System | 705.2.1, 705.7.1, 705.14.1, 705.15, 705.16.1, 705.19 |
| C1277-06 | Specification for Shielded Coupling Joining Hubless Cast-iron Soil Pipe and Fittings | 705.5.3 |
| C1440-03 | Specification for Thermoplastic Elastomeric (TPE) Gasket Materials for Drain, Waste, and Vent (DWV), Sewer, Sanitary and Storm Plumbing Systems | 705.19 |
| C1460-04 | Specification for Shielded Transition Couplings for Use with Dissimilar DWV Pipe and Fittings Above Ground | 705.19 |
| C1461-06 | Specification for Mechanical Couplings Using Thermoplastic Elastomeric (TPE) Gaskets for Joining Drain, Waste and Vent (DWV) Sewer, Sanitary and Storm Plumbing Systems for Above and Below Ground Use | 705.19 |
| C1540-04 | Specification for Heavy Duty Shielded Couplings Joining Hubless Cast-iron Soil Pipe and Fittings | 705.5.53 |

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|--|
| C1563-04 | Standard Test Method for Gaskets for Use in Connection with Hub and Spigot Cast Iron Soil Pipe and Fittings for Sanitary Drain, Waste, Vent and Storm Piping Applications | 705.5.2 |
| D1527-99(2005) | Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe, Schedules 40 and 80 | Table 605.3 |
| D1785-06 | Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80 and 120 | Table 605.3 |
| D1869-95(2005) | Specification for Rubber Rings for Asbestos-cement Pipe | Table 605.3 |
| D2235-04 | Specification for Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings | Table 605.3 |
| D2239-03 | Specification for Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter | 605.11, 605.24, 705.3, 705.19 |
| D2241-05 | Specification for Poly (Vinyl Chloride) (PVC) Pressure-rated Pipe (SDR-Series) | 605.10.2, 705.2.2, 705.7.2 |
| D2282-(2005)99e01 | Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe (SDR-PR) | Table 605.3 |
| D2464-06 | Specification for Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80 | Table 605.3 |
| D2466-06 | Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40 | Table 605.3 |
| D2467-06 | Specification for Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80 | Table 605.5, Table 1102.7 |
| D2468-96a | Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe Fittings, Schedule 40 | Table 605.5, Table 1102.7 |
| D2564-04e01 | Specification for Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems | Table 605.5, Table 1102.7 |
| D2609-02 | Specification for Plastic Insert Fittings for Polyethylene (PE) Plastic Pipe | 605.21.2, 705.8.2, 705.14.1 |
| D2657-07 | Practice for Heat Fusion-joining of Polyolefin Pipe and Fitting | Table 605.5, Table 1102.7 |
| D2661-06 | Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe and Fittings | 605.19.2, 705.16.1 |
| D2665-07 | Specification for Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings | Table 702.1, Table 702.2, Table 702.3, Table 702.4, 705.2.2, 705.7.2, Table 1102.4, Table 1102.7 |
| D2672-96a(2003) | Specification for Joints for IPS PVC Pipe Using Solvent Cement | Table 605.3 |

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|--|
| D2683-04 | Standard Specification for Socket-type Polyethylene fittings for Outside Diameter-controlled Polyethylene Pipe and Tubing | Table 605.5 |
| D2729-04e01 | Specification for Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings | Table 1102.5 |
| D2737-03 | Specification for Polyethylene (PE) Plastic Tubing | Table 605.3 |
| D2751-05 | Specification for Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe and Fittings | Table 702.3, Table 702.4, Table 1102.7 |
| D2846-D2846M-066 | Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Hot and Cold Water Distribution Systems | Table 605.3, Table 605.4, Table 605.5, 605.16.2 |
| D2855-96(2002) | Standard Practice for Making Solvent-cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings | 605.22.2, 705.8.2, 705.14.2 |
| D2949-01ae01 | Specification for 3.25-in Outside Diameter Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings | Table 702.1, Table 702.2, Table 702.3, Table 702.4 |
| D3034-06 | Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings | Table 702.3, Table 702.4, Table 1102.7, Table 1102.4 |
| D3035-03 | Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter | Table 605.3 |
| D3139-98(2005) | Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals | 605.10.1, 605.22.1 |
| D3212-96a(2003)e01 | Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals | 705.2.1, 705.8.1, 705.14.1, 705.16.2 |
| D3261-03 | Standard Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing | Table 605. |
| D3311-06a | Specification for Drain, Waste and Vent (DWV) Plastic Fittings Patterns | Table 1102.7 |
| D4068-01 | Specification for Chlorinated Polyethylene (CPE) Sheeting for Concealed Water-containment Membrane | 417.5.2.2 |
| D4551-96(2001) | Specification for Poly (Vinyl Chloride) (PVC) Plastic Flexible Concealed Water-containment Membrane | 417.5.2.1 |
| F405-05 | Specification for Corrugated Polyethylene (PE) Tubing and Fittings | Table 1102.5 |
| F409-02 | Specification for Thermoplastic Accessible and Replaceable Plastic Tube and Tubular Fittings | 424.1.2, Table 1102.7 |

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|--|
| F437-06 | Specification for Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80 | Table 605.5 |
| F438-04 | Specification for Socket-type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40 | Table 605.5 |
| F439-06 | Standard Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80 | Table 605.5 |
| F441/F441M-02 | Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80 | Table 605.3, Table 605.4 |
| F442/F442M-99(2005) | Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR) | Table 605.3, Table 605.4 |
| F447-07 | Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe | 605.24, 705.19 |
| F493-04 | Specification for Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings | 605.16.2 |
| F628-06e01 | Specification for Acrylonitrile-Butadiene-Styrene (ABS) Schedule 40 Plastic Drain, Waste, and Vent Pipe with a Cellular Core | Table 702.1, Table 702.2, Table 702.3, Table 702.4, 705.2.2, 705.7.2, Table 1102.4, Table 1102.7 |
| F656-02 | Specification for Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings | 605.22.2, 705.8.2, 705.14.2 |
| F714-06a | Specification for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter | Table 702.3 |
| F876-06 | Specification for Cross-linked Polyethylene (PEX) Tubing | Table 605.3, Table 605.4 |
| F877-07 | Specification for Cross-linked Polyethylene (PEX) Plastic Hot and Cold Water Distribution Systems | Table 605.3, Table 605.4, Table 605.5 |
| F891-04 | Specification for Coextruded Poly (Vinyl Chloride) (PVC) Plastic Pipe with a Cellular Core | Table 702.1, Table 702.2, Table 702.3, Table 1102.4, Table 1102.5, Table 1102.7 |
| F1055-98(2006) | Standard Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene Pipe and Tubing | Table 605.5 |
| F1281-07 | Specification for Cross-linked Polyethylene/Aluminum/ Cross-linked Polyethylene (PEX-AL-PEX) Pressure Pipe | Table 605.3, Table 605.4, Table 605.5, 605.21.1 |
| F1282-06 | Specification for | |

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|--|
| | Polyethylene/Aluminum/Polyethylene (PE-AL-PE) Composite Pressure Pipe | Table 605.3, Table 605.4, Table 605.5, 605.21.1 |
| F1412-01e01 | Specification for Polyolefin Pipe and Fittings for Corrosive Waste Drainage | Table 702.1, Table 702.2, Table 702.4, 705.17.1 |
| F1488-03 | Specification for Coextruded Composite Pipe | Table 702.1, Table 702.2, Table 702.3 |
| F1673-04 | Polyvinylidene Fluoride (PVDF) Corrosive Waste Drainage Systems | Table 702.1, Table 702.2, Table 702.3, Table 702.4, 705.18.1 |
| F1807-07 | Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing | Table 605.5 |
| F1866-07 | Specification for Poly (Vinyl Chloride) (PVC) Plastic Schedule 40 Drainage and DWV Fabricated Fittings | Table 702.4, Table 1102.7 |
| F1960-07 | Specification for Cold Expansion Fittings with PEX Reinforcing Rings for Use with Cross-linked Polyethylene (PEX) Tubing | Table 605.5 |
| F1974-04 | Specification for Metal Insert Fittings for Polyethylene/Aluminum/Polyethylene and Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene Composite Pressure Pipe | Table 605.5, 605.21.1 |
| F1986-01(2006) | Specification for Multilayer Pipe, Type 2, Compression Fittings and Compression Joints for Hot and Cold Drinking Water Systems | Table 605.3, Table 605.4, Table 605.5 |
| F2080-05 | Specifications for Cold-expansion Fittings with Metal Compression-sleeves for Cross-linked Polyethylene (PEX) Pipe | Table 605.5 |
| F2098-04e01 | Standard specification for Stainless Steel Clamps for Securing SDR9 Cross-linked Polyethylene (PEX) Tubing to Metal Insert Fittings | Table 605.5 |
| F2159-05 | Specification for Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing | Table 605.5 |
| F2262-05 | Specification for Cross-linked Polyethylene/Aluminum/Cross-linked Polyethylene Tubing OD Controlled SDR9 | Table 605.3, Table 605.4 |
| F2306/F2306M-05 | 12" to 60" Annular Corrugated Profile-wall Polyethylene (PE) Pipe and Fittings for Gravity Flow Storm Sewer and Subsurface Drainage Applications | Table 1102.4, Table 1102.7 |

ASSE

American Society of Sanitary Engineering
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Westlake, OH 44145

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|---|
| F2389-06 | Specification for Pressure-rated Polypropylene (PP) Piping Systems | Table 605.3, Table 605.4, Table 605.5, 605.20.1 |
| F2434-05 | Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Cross-linked Polyethylene/ Aluminum/Cross-linked Polyethylene (PEX AL-PEX) Tubing | Table 605.5 |

ASTM

ASTM International
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West Conshohocken, PA 19428 – 2959

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|-----------------------------------|
| <u>D 1253 – 08</u> | <u>Standard Test Method for Residual Chlorine in Water</u> | <u>1301.2.1, 1303.9</u> |
| <u>E 2727 – 10</u> | <u>Standard Practice for the Assessment of Rainwater Quality</u> | <u>1302.8.1</u> |
| <u>F 1476 – 07</u> | <u>Standard Specification for Performance of Gasketed Mechanical Couplings for Use in Piping Applications</u> | <u>Table 605.5, 605.23.3</u> |
| <u>F 1548 – 01 (2006)</u> | <u>Standard Specification for the Performance of Fittings for Use with Gasketed Mechanical Couplings Used in Piping Applications</u> | <u>Table 605.5</u> |
| <u>F 2735 – 09</u> | <u>Standard Specification for Plastic Insert Fittings for SDR9 Cross-linked Polyethylene (PEX) and Polyethylene of Raised Temperature (PE-RT) Tubing</u> | <u>Table 605.5</u> |
| <u>F 2855 – 11</u> | <u>Specification Poly (Vinyl Chloride)/Aluminum/Poly (Vinyl Chloride) (CPVC/AL/CPVC) Composite Pressure Tubing</u> | <u>Table 605.3, Table 605.4</u> |

AWS

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Miami, FL 33126

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|--|
| A5.8-04 | Specifications for Filler Metals for Brazing and Braze Welding | 605.12.1, 605.14.1, 605.15.1, 705.4.1, 705.9.1, 705.10.1 |

AWWA

American Water Works Association
6666 West Quincy Avenue
Denver, CO 80235

| Standard reference number | Title | Referenced in code section number |
|-------------------------------|---|--|
| C104-98 | Standard for Cement-mortar Lining for Ductile-iron Pipe and Fittings for Water | 605.3, 605.5 |
| <u>C104/A21.4 – 08</u> | <u>Cement-mortar Lining for Ductile-iron Pipe and Fittings for Water</u> | <u>605.3, 605.5</u> |
| C110-A21.10-03 | Standard for Ductile-iron and Gray-iron Fittings, 3 Inches through 48 Inches, for Water | Table 605.5, Table 702.4, Table 1102.7 |
| C111-00 | Standard for Rubber-gasket Joints for Ductile-iron Pressure Pipe and Fittings | 605.13 |
| C115/A21.15-99 | Standard for Flanged Ductile-iron Pipe with Ductile-iron or Gray-iron Threaded Flanges | Table 605.3, Table 605.4 |
| C151/A21.51-02 | Standard for Ductile-iron Pipe, Centrifugally Cast for Water | Table 605.3, Table 605.4 |
| C153-00/A21.53-00 | Standard for Ductile-iron Compact Fittings for Water Service | Table 605.5 |
| C510-00 | Double Check Valve Backflow Prevention Assembly | Table 608.1, 608.13.7 |
| C511-00 | Reduced-pressure Principle Backflow Prevention Assembly | Table 608.1, 608.13.2, 608.16.2 |
| C651-99 | Disinfecting Water Mains | 610.1 |
| C652-02 | Disinfection of Water-storage Facilities | 610.1 |
| <u>C901 – 08</u> | <u>Polyethylene (PE) Pressure Pipe and Tubing ½ inch (13 mm) Through 3 inch (76 mm) for Water Service</u> | <u>Table 605</u> |
| <u>C904 – 08</u> | <u>Cross-linked Polyethylene (PEX) Pressure Pipe ½ inch (13 mm) Through 3 inch (76 mm) for Water Service</u> | <u>Table 605.3</u> |
| <u>D100 – 05</u> | <u>Standard for Welded Carbon Steel Tanks for Water Storage</u> | <u>1302.7.2</u> |
| <u>D115 – 06</u> | <u>Standard for Tendon Prestressed-Concrete Water Tanks</u> | <u>1302.7.2</u> |
| <u>D 120 – 09</u> | <u>Standard for Thermosetting Fiberglass-Reinforced Plastic Tanks</u> | <u>1302.7.2</u> |

CISPI

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Chattanooga, TN 37421

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|---|
| 301-04a | Specification for Hubless Cast-iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications | Table 702.1, Table 702.2, Table 702.3, Table 702.4, 708.7, Table 1102.4, Table 1102.5, Table 1102.7 |
| 310-04 | Specification for Coupling for Use in Connection with Hubless Cast-iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste and Vent Piping Applications | 705.5.3 |

CSA

Canadian Standards Association
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Mississauga, Canada L4W 5N6

| Standard reference number | Title | Referenced in code section number |
|-------------------------------|---|---|
| B45.1-02 | Ceramic Plumbing Fixtures | 408.1, 416.1, 418.1, 419.1, 420.1 |
| B45.2-02 | Enameled Cast-iron Plumbing Fixtures | 407.1, 415.1, 416.1, 418.1 |
| B45.3-02 | Porcelain Enameled Steel Plumbing Fixtures | 407.1, 416.1, 418.1 |
| B45.4-02 | Stainless-steel Plumbing Fixtures | 415.1, 416.1, 418.1, 420.1 |
| B45.5-02 | Plastic Plumbing Fixtures | 407.1, 416.2, 417.1, 419.1, 420.1, 421.1 |
| B45.9-99 | Macerating Systems and Related Components | 712.4.1 |
| <u>B 45.15 – 2011</u> | <u>Flush Valves and Spuds for Water Closets, Urinals and Tanks</u> | <u>425.4</u> |
| <u>B 45.5 – 11</u> | <u>Plastic Plumbing Fixtures</u> | <u>407.1, 415.1, 416.1, 416.2, 417.1, 419.1, 420.1</u> |
| <u>B 125.16 – 2011</u> | <u>Performance Requirements for Individual Thermostatic, Pressure Balancing and Combination Control Valves for Individual Fixture Fittings</u> | <u>424.3, 424.4, 607.4</u> |
| <u>B 64.1 – 11</u> | <u>Vacuum Breakers, Atmospheric Type (AVB)</u> | <u>425.2, Table 608.1, 608.13.6, 608.16.4.1</u> |
| B64.1.2-01 | Vacuum Breakers, Pressure Type (PVB) | Table 608.1, 608.13.5 |
| <u>B 64.1.2 – 11</u> | <u>Pressure Vacuum Breakers, (PVB)</u> | <u>Table 608.1, 608.13.5</u> |
| B64.2.1-01 | Vacuum Breakers, Hose Connection Type (HCVB) with Manual Draining Feature | Table 608.1, 608.13.6 |
| <u>B 64.2.1 – 11</u> | <u>Vacuum Breakers, Hose Connection Type</u> | <u>Table 608.1, 608.13</u> |

| Standard reference number | Title | Referenced in code section number |
|-----------------------------|--|---|
| | <u>(HCVB)</u> | |
| B64.2.1.1-01 | Vacuum Breakers, Hose Connection Dual Check Type (HCDVB) | Table 608.1, 608.13.6 |
| <u>B 64.2.2 – 11</u> | <u>Vacuum Breakers, Hose Connection Type (HCVB) with Automatic Draining Feature</u> | <u>Table 608.1, 608.13.6</u> |
| <u>B 64.3 – 11</u> | <u>Backflow Preventers, Dual Check Valve Type with Atmospheric Port (DCAP)</u> | <u>Table 608.1, 608.13.3, 608.16.2</u> |
| <u>B 64.4 – 11</u> | <u>Backflow Preventers, Reduced Pressure Principle Type (RP)</u> | <u>Table 608.1, 608.13.2, 608.16.2</u> |
| B64.4.1-01 | Backflow Preventers, Reduced Pressure Principle Type for Fire Sprinklers (RPF) | Table 608.1, 608.13.2 |
| B64.5-01 | Backflow Preventers, Double Check Type (DCVA) | Table 608.1, 608.13.7 |
| B64.5.1-01 | Backflow Preventers, Double Check Type for Fire Systems (DCVAF) | Table 608.1, 608.13.7 |
| B64.6-01 | Backflow Preventers, Dual Check Valve Type (DuC) | 605.3.1, Table 608.1 |
| B64.7-94 | Vacuum Breakers, Laboratory Faucet Type (LFVB) | Table 608.1, 608.13.6 |
| B64.10/B64.10.1-01 | Manual for the Selection and Installation of Backflow Prevention Devices/Manual for the Maintenance and Field Testing of Backflow Prevention Devices | 312.10.2 |
| B7994(2000) | Floor, Area and Shower Drains, and Cleanouts for Residential Construction | 412.1 |
| B125-01 | Plumbing Fixtures | 424.4, 424.6, 425.4 |
| B125.1/ASME A112.18.1-05 | Plumbing Supply Fittings | 424.1, 424.2, 424.3, 607.4, 608.2 |
| B125.2/ASME A112.18.2-05 | Plumbing Waste Fittings | 424.1.2 |
| B125.3-2005 | Plumbing Fittings | 416.5, 424.5, 425.3.1, Table 608.1 |
| B137.1-02 | Polyethylene Pipe, Tubing and Fittings for Cold Water Pressure Services | Table 605.3 |
| B137.2-02 | PVC Injection-moulded Gasketed Fittings for Pressure Applications | Table 605.5, Table 1102.7 |
| B137.3-02 | Rigid Poly (Vinyl Chloride) (PVC) Pipe for Pressure Applications | Table 605.3, Table 605.4, Table 605.5, 605.22.2, 705.82, 705.14.2 |
| B137.5-02 | Cross-linked Polyethylene (PEX) Tubing Systems for Pressure Applications— with Revisions through September 1992 | Table 605.3, Table 605.4, Table 605.5 |
| B137.6-02 | CPVC Pipe, Tubing and Fittings for Hot and Cold Water Distribution Systems— with Revisions through May 1986 | Table 605.3, Table 605.4 |
| <u>B 137.9 – 13</u> | <u>Polyethylene/ Aluminum/ Polyethylene Composite Pressure Pipe Systems</u> | <u>Table 605.3, Table 605.5, 605.21.1</u> |
| <u>B 137.10 – 11</u> | <u>Cross-linked Polyethylene/Aluminum/ Polyethylene Composite Pressure Pipe Systems</u> | |

| Standard reference number | Title | Referenced in code section number |
|----------------------------|---|---|
| | | <u>Table 605.3, Table 605.4, Table 605.5, 605.21</u> |
| B137.11-02 | Polypropylene (PP-R) Pipe and Fittings for Pressure Applications | Table 605.3, Table 605.4, Table 605.5 |
| B181.1-02 | ABS Drain, Waste and Vent Pipe and Pipe Fittings | Table 702.1, Table 702.2, Table 702.3, Table 702.4, 705.2.2, 705.7.2, 715.2, Table 1102.4, Table 1102.7 |
| B181.2-02 | PVC Drain, Waste, and Vent Pipe and Pipe Fittings— with Revisions through December 1993 | Table 702.1, Table 702.2, 705.8.2, 705.14.2, 715.2 |
| <u>B 181.3 – 11</u> | <u>Polyolefin and Polyvinylidene Fluoride (PVDF) Laboratory Drainage Systems</u> | <u>Table 702.1, Table 702.2, Table 702.3, Table 702.4</u> |
| B182.1-02 | Plastic Drain and Sewer Pipe and Pipe Fittings | 705.8.2, 705.14.2, Table 1102.4 |
| B182.4-02 | PVC Sewer Pipe and Fittings (PSM Type) | Table 702.3, Table 1102.4, Table 1102.5 |
| B182.6-02 | Profile PVC Sewer Pipe and Fittings | Table 702.3, Table 1102.4, Table 1102.5 |
| B182.8-02 | Profile Polyethylene Sewer Pipe and Fittings for Leak-proof Sewer Applications | Table 1102.5 |
| <u>B 182.8 – 11</u> | <u>Profile Polyethylene (PE) Storm Sewer and Drainage Pipe and Fittings</u> | <u>Table 1102.5</u> |
| <u>B 483.1</u> | <u>Drinking Water Treatment Units</u> | <u>611.1, 611.2</u> |
| <u>B 481.1 – 12</u> | <u>Testing and Rating of Grease Interceptors Using Lard</u> | <u>1003.3.4</u> |
| <u>B 481.3 – 12</u> | <u>Sizing, Selection, Location and Installation of Grease Interceptors</u> | <u>1003.3.4</u> |
| CAN/CSA-A257.1M-92 | Profile Polyethylene Storm Sewer and Drainage Pipe and Fittings | Table 1102.5 |
| CAN/CSA-A257.2M-92 | Circular Concrete Culvert, Storm Drain, Sewer Pipe and Fittings | Table 702.3, Table 1102.4 |
| CAN/CSA-A257.3M-92 | Reinforced Circular Concrete Culvert, Storm Drain, Sewer Pipe and Fittings | Table 702.3, Table 1102.4 |
| CAN/CSA-B64.1.1/01 | Joints for Circular Concrete Sewer and Culvert Pipe, Manhole Sections and Fittings Using Rubber Gaskets | 705.6, 705.19 |
| CAN/CSA-B64.2-01 | Vacuum Breakers, Atmospheric Type (AVB) | 425.5, Table 608.1, 608.13.6 |
| CAN/CSA-B64.2.2-01 | Vacuum Breakers, Hose Connection Type (HCVB) with Automatic Draining Feature | Table 608.1, 608.13.6 |
| CAN/CSA-B64.3-01 | Backflow Preventers, Dual Check Valve Type with Atmospheric Port (DCAP) | Table 608.1, 608.13.3, 608.16.2 |
| CAN/CSA-B64.4-01 | Backflow Preventers, Reduced Pressure Principle Type (RP) | Table 608.1, 608.13.2, 608.16.2 |
| CAN/CSA-B64.10-01 | Manual for the Selection, Installation, Maintenance and Field Testing of Backflow Prevention Devices | 312.10.2 |

CSA

Canadian Standards Association
5060 Spectrum Way
Mississauga, Canada L4W 5N6

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|--|
| CAN/CSA-B137.9-02 | Polyethylene/Aluminum/Polyethylene Composite Pressure Pipe Systems | Table 605.3, Table 605.5, 605.21.1 |
| CAN/CSA-B137.10M-02 | Cross-linked Polyethylene/Aluminum/Polyethylene Composite Pressure Pipe Systems | Table 605.3, Table 605.4, Table 605.5, 605.21.1 |
| CAN/CSA-B181.3-02 | Polyolefin Laboratory Drainage Systems | Table 702.1, Table 702.2, Table 702.4, 705.17.1 |
| CAN/CSA-B182.4-02 | Profile PVC Sewer Pipe and Fittings | Table 702.3, Table 1102.4, Table 1102.5 |
| CAN/CSA-B602-02 | Mechanical Couplings for Drain, Waste and Vent Pipe and Sewer Pipe | 705.2.1, 705.5.3, 705.6, 705.7.1, 705.14.1, 705.15, 705.16.2, 705.19 |

IAPMO

IAPMO Group
4755 E. Philadelphia
Ontario, CA 91761

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|--|
| <u>Z 1001 – 2007</u> | <u>Prefabricated Gravity Grease Interceptors</u> | <u>1003.3.6</u> |
| <u>Z124 – 2011</u> | <u>Plastic Plumbing Fixtures</u> | <u>407.1, 415.1, 416.1, 416.2, 417.1, 419.1, 420.1</u> |

ICC

International Code Council
500 New Jersey Ave, NW
6th Floor
Washington, DC 2001

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|--|
| IBC-09 | International Building Code® | 201.3, 305.4, 307.1, 307.2, 307.3, 308.2, 309.1, 310.1, 310.3, 403.1, Table 403.1, 404.1, 407.3, 417.6, 502.6, 606.5.2, 1106.5 |
| IEBC-09 | International Existing Building Code® | 101.2 |
| IECC-09 | International Energy Conservation Code® | 313.1, 607.2, 607.2.1 |
| IFC-09 | International Fire Code® | 201.3, 1201.1 |
| IFGC-09 | International Fuel Gas Code® | 101.2, 201.3, 502.1 |

ICC

**International Code Council
500 New Jersey Ave, NW
6th Floor
Washington, DC 2001**

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|--|
| IMC-09 | International Mechanical Code® | 201.3, 307.6, 310.1, 422.9, 502.1, 612.1, 1202.1 |
| IPSDC-09 | International Private Sewage Disposal Code® | 701.2 |
| IRC-09 | International Residential Code® | 101.2 |

ISEA

**International Safety Equipment Association
1901 N. Moore Street, Suite 808
Arlington, VA 22209**

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|-----------------------------------|
| Z358.1-98 | Emergency Eyewash and Shower Equipment | 411.1 |

NFPA

**National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169-7471**

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|-----------------------------------|
| 50-01 | Bulk Oxygen Systems at Consumer Sites | 1203.1 |
| 51-07 | Design and Installation of Oxygen-fuel Gas Systems for Welding, Cutting and Allied Processes | 1203.1 |
| <u>55 – 13</u> | <u>Compressed Gases and Cryogenic Fluids Code</u> | <u>1203.1</u> |
| 70-08 | National Electric Code | 502.1, 504.3, 1113.1.3 |
| 99C-05 | Gas and Vacuum Systems | 1202.1 |

NSF

**NSF International
789 Dixboro Road
Ann Arbor, MI 48105**

| Standard reference number | Title | Referenced in code section number |
|---------------------------|----------------------------------|-----------------------------------|
| 3-2007 | Commercial Warewashing Equipment | 409.1 |

NSF

NSF International
789 Dixboro Road
Ann Arbor, MI 48105

| Standard reference number | Title | Referenced in code section number |
|---------------------------|--|--|
| 14-2007 | Plastic Piping System Components and Related Materials | 303.3, 611.3 |
| 18-2007 | Manual Food and Beverage Dispensing Equipment | 426.1 |
| 42-2007e | Drinking Water Treatment Units—Aesthetic Effects | 611.1, 611.3 |
| 44-2004 | Residential Cation Exchange Water Softeners | 611.1, 611.3 |
| <u>50 – 2012</u> | <u>Equipment for Swimming Pools, Spas, Hot Tubs and other Recreational Facilities</u> | <u>1302.8.1</u> |
| 53-2007 | Drinking Water Treatment Units—Health Effects | 611.1, 611.3 |
| 58-2006 | Reverse Osmosis Drinking Water Treatment Systems | 611.2 |
| 61-2007a | Drinking Water System Components—Health Effects | 410.1, 424.1, 605.3, 605.4, 605.5, 605.7, 611.3, 611.3 |
| 62-2004 | Drinking Water Distillation Systems | 611.1 |
| <u>350 – 2011</u> | <u>Onsite Residential and Commercial Water Reuse Treatment Systems</u> | <u>1302.6.1</u> |

PDI

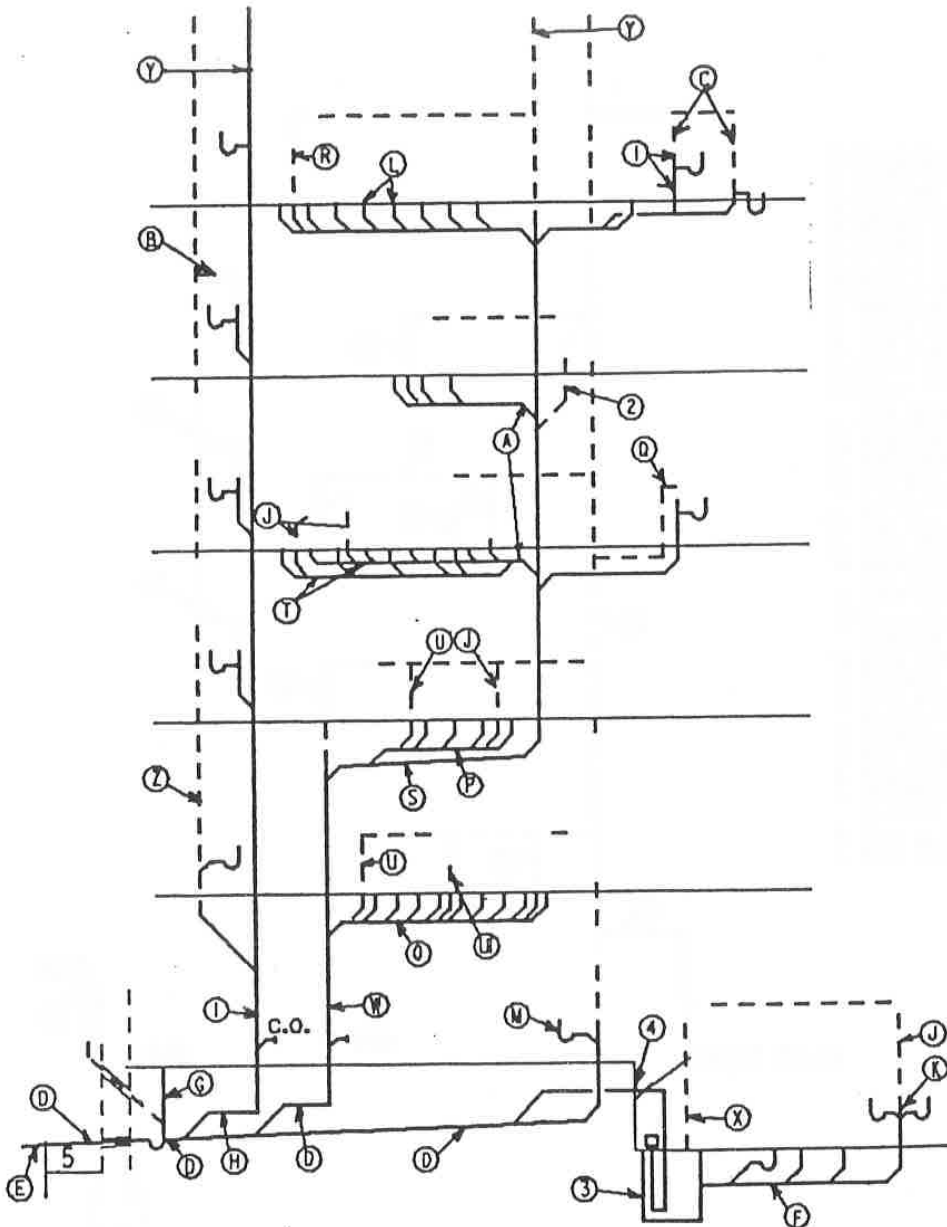
Plumbing and Drainage Institute
8000 Turnpike Street, Suite 300
North Andover, MA 01845

| Standard reference number | Title | Referenced in code section number |
|-------------------------------|--|-----------------------------------|
| G101(2003) | Testing and Rating Procedure for Grease Interceptors with Appendix of Sizing and Installation | 1103.3.4 |
| <u>PDI G101 (2012)</u> | <u>Testing and Rating Procedure for Grease Interceptors with Appendix of Sizing and Installation Data</u> | <u>1003.3.4</u> |
| <u>PDI G102 (2009)</u> | <u>Testing and Certification for Grease Interceptors with Fog Sensing and Alarm Devices</u> | <u>1003.3.4</u> |

UL**Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096**

| Standard reference number | Title | Referenced in code section number |
|---------------------------|---|-----------------------------------|
| <u>58 – 1996</u> | <u>Steel Underground Tanks for Flammable and Combustible Liquids with revisions through July 27, 1998</u> | <u>1302.7.2</u> |
| <u>142 – 2006</u> | <u>Steel Aboveground Tanks for Flammable and Combustible Liquids with revisions through February 12, 2010</u> | <u>1302.7</u> |
| <u>430 – 2009</u> | <u>Waste Disposers-with revisions through March 23, 2011</u> | <u>413.1</u> |
| 508-99 | Industrial Control Equipment—with Revision through July 2005 | 314.2.3 |
| <u>1316 – 1994</u> | <u>Glass-Fiber Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols and Alcohol Gasoline Mixtures with revisions through May 12, 2006</u> | <u>1302.7.2</u> |
| <u>1746 – 2007</u> | <u>External Corrosion Protection Systems for Steel Underground Storage Tanks</u> | <u>1302.7</u> |

APPENDIX AC-H ILLUSTRATION



- A. Branch Interval
- B. Branch Vent
- C. Back Vent
- D. Building Drain
- E. Building Sewer
- F. Building Sub-drain
- G. Building (house) trap
- H. Branches of Bldg. Drain
- I. **Continuous Waste & Vent**
- J. **Circuit Vent**
- K. **Dual or Common Vent**
- L. Fixture Drain
- M. Fixture Drain at base of main or vent stack
- N. Fresh Air Inlet
- O. Horizontal Branch
- P. Isolated Soil or Waste Branch
- Q. Loop Vent Arrangement for Island Type Fixtures
- R. Loop Vent (Regular)
- S. Offset in Soil Stack
- T. Parallel Soil Branches for back to back fixtures
- U. Relief Vents
- U¹ Intermediate Relief Vent for more than 8 WC's on one branch
- V. Relief Vent for Offset
- W. Soil Stack
- X. Sump Vent Sized as a Branch Circuit or Loop Vent
- Y. Stack Vent
- Z. Vent Stack
- 1. Waste Stack
- 2. Yoke Vent – used when more than 10 Branch Interval
- 3. Sump or Ejector Cast Iron
- 4. Sump Discharge

March 25, 2021

To whom it may concern:

I, Martin O'Toole, would like to resign from the Allegheny County Plumbing Advisory Board effective immediately. I retired from my position as Business Manager of Plumbers Local Union #27 on January 1, 2021.

Thank you for the opportunity to serve on the Board. I would like to recommend Edward Bigley, the new Business Manager of Plumbers Local Union #27, be my successor on the Board.

Sincerely,



Martin O'Toole

Edward J. Bigley

*434 Judith Drive
Pittsburgh, PA 15236*

412-616-1925

OBJECTIVE

I would like the opportunity to use my experience and education in the plumbing industry to serve on the Allegheny County Health Department Plumbing Advisory Board.

PROFESSIONAL

- ❖ Completed a five-year Apprenticeship at Plumbers Local Union No. 27
- ❖ Graduate of Robert Morris University
- ❖ Licensed Allegheny County Journeyman Plumber
- ❖ Current Business Manager of Pittsburgh Plumbers Local Union No. 27 and Chairman of Plumbers Local 27 Apprenticeship Committee
- ❖ Serve as a Vice President on the Allegheny County Labor Council and Pittsburgh Building Trades Council

Proposed change to Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control ---

Portions of Article XXI Related to Advertising Notice of Permit Comment Periods and Hearings and Permit Petition Requirements

EXECUTIVE SUMMARY

The Clean Air Act (CAA) requires stationary sources of air pollution to obtain permits and authorizes the EPA to administer and oversee the permitting of such sources. To implement the CAA, the EPA promulgated permitting regulations for construction and operation of major and certain other sources. This included requirements for public notice and availability of supporting information to allow for informed public participation in permit actions.

Newspaper advertisement was the most commonly accepted method for providing notice to the public of permit actions. Over the years, however, the availability of and access to the Internet and other forms of electronic media have increased significantly. One effect of this development is that circulation of newspapers and other print media has declined, making printed newspaper notice less effective in providing widespread public notice of permit actions in many cases.

Given these developments, the EPA now allows that permitting authorities have the option to adopt either e-notice or retain the newspaper noticing method, so long as they are consistent in the method used and indicate the consistent noticing method selected in their permitting rules. EPA also requires that, when a permitting authority adopts e-notice, it also must provide e-access, meaning that the permitting authority must make the draft permit available electronically on its public Web site for the duration of the public comment period.

The ACHD proposed changes to Article XXI in this SIP revision meet these EPA provisions. Under this proposed rule change, ACHD will provide for notice on the ACHD's air permitting website as the consistent noticing method. Additionally, Article XXI will specifically provide for an "interested persons distribution list." The public notice for permitting activity will be provided to the interested persons on that distribution list.

Besides the permit noticing changes, the ACHD is revising Article XXI to address new EPA permit petition requirements, to consolidate the sections that incorporate PA DEP noticing requirements, and to make several nomenclature changes.

Finally, the proposed Article changes will be submitted as a revision to the Allegheny County portion of the Pennsylvania State Implementation Plan.

For Board of Health review at their September 1, 2021 meeting.
The Department seeks approval to take the proposed regulation revision to public comment.

Proposed Revision to:

**ALLEGHENY COUNTY'S portion of
the PENNSYLVANIA STATE IMPLEMENTATION PLAN**

**For the
Attainment and Maintenance of the National Ambient Air Quality Standards
(Revision Tracking No. 95)**

**Allegheny County Health Department Rules and Regulations
Article XXI, Air Pollution Control**

**Portions of Article XXI Related to
Advertising Notice of Permit Comment Periods and Hearings
and Permit Petition Requirements:**

§2101.20, Definitions

§2102.03, Permits Generally

§2102.04, Installation Permits

§2102.05, Installation Permits for New and Modified Major Sources

§2103.11, Operating Permits (All Major and Minor Permits) Applications

§2103.14, All Major and Minor Permits -- Revisions, Amendments,
Modifications

§2103.21, Additional Requirements for Major Permits -Applications

§2103.22 Issuance, Standard Conditions

§2103.24, Additional Requirements for Major Permits - Revisions, Amendments,
Modifications

§2105.31, Waste-Derived Liquid Fuel

Table of Contents

1. Proposed changes to Article XXI Rules and Regulations
 - §2101.20, Definitions
 - §2102.03, Permits Generally
 - §2102.04, Installation Permits
 - §2102.05, Installation Permits for New and Modified Major Sources
 - §2103.11, Operating Permits (All Major and Minor Permits) Applications
 - §2103.14, All Major and Minor Permits -- Revisions, Amendments, Modifications
 - §2103.21, Additional Requirements for Major Permits -Applications
 - §2103.22 Issuance, Standard Conditions
 - §2103.24, Additional Requirements for Major Permits - Revisions, Amendments, Modifications
 - §2105.31, Waste-Derived Liquid Fuel
2. Technical Support Document
3. Documentation of Public Hearing and Certifications (all “Later”)
 - a. Public hearing notice
 - b. Transmittals of hearing notice to EPA & PA DEP
 - c. Proof of publication of notice of hearing
 - d. Certification of hearing
 - e. Summary of Comments and responses
 - f. Certifications of approval and adoption

1. Proposed Revision

LEGEND:

Deletions are shown with strikethroughs.

Additions are shown in **larger font, bolded, and underlined.**

§2101.20 **Definitions** {unless specifically indicated, all definitions effective October 20, 1995}

...

"**Bulk gasoline terminal**" means a gasoline storage and distribution facility with a daily throughput of 20,000 gallons (76,000 liters) or more of gasoline.

"**Bureau**" means the Allegheny County Health Department Bureau of Environmental Quality **Health**.

"**Can coating**" means exterior coating and interior spray coating in two-piece can lines, interior and exterior coating in sheet coating lines for three-piece cans, side seam spray coating and interior spray coating in can fabricating lines for three-piece cans, and sealing compound application and sheet coating in end coating lines.

...

"**Encasement**" means any process or application that involves the direct application of any liquid or solid material onto, and in direct contact with, ACM, including but not limited to the application of multi-port self-curing resin systems, in order to totally confine or seal such ACM for purposes of abatement of the potential release of asbestos fibers.

"EQB" means Pennsylvania's Environmental Quality Board as described in Section 5 of the Pennsylvania Air Pollution Control Act.

"**EPA**" means the Administrator of the United States Environmental Protection Agency or his designee.

...

...

§2102.03 PERMITS GENERALLY

{Paragraph a.1 & d.2 & Subsections i & j amended, and k & l added September 6, 1995, effective October 20, 1995. Subsections b, j, and l amended, and m added mm/dd/2021, effective mm/dd/2021.}

...

- b. **Issuance.** Unless otherwise specifically provided under Part C, all permits issued pursuant to this Part or Part C of this Article shall be in written form, signed and issued by the Director, the Deputy Director, Bureau of Environmental ~~Quality~~ **Health**, the head of the Division of Air Quality, or the head of the Engineering Section, Bureau of Environmental ~~Quality~~ **Health** Division of Air Quality. **As soon as is practicable, the Department shall post a public notice of all permits issued in accordance with Paragraph m.2.**

...

j. **General Permits.**

- 1. Except as otherwise provided under this Subsection, the General Plan Approvals and Operating Permits requirements promulgated by the Pa. Environmental Quality Board and Dept. of Environmental Protection (DEP) under the Pa. Air Pollution Control Act at 25 Pa. Code §§127.611 through 127.622 are hereby incorporated, by reference, into this Article. Additions, revisions, and deletions to such requirements adopted by the EQB and the DEP are incorporated into this Article and are effective on the date established by the state regulations, unless otherwise established by regulation under this Article.
- 2. For purposes of this Article:
 - A. 25 Pa. Code §127.612(a), **shall be met by the requirements of Paragraph m.2 of this Section.** ~~shall only require the publication of the required notice in the Pennsylvania Bulletin and one newspaper of general circulation in the County;~~

...

- 3. Under the regulations incorporated by reference under this Subsection:
 - A. “Plan approval” shall mean Installation Permit;
 - B. “Department” shall mean Department as defined under this Article;

and

- ~~C. “Pennsylvania Bulletin” shall mean Pennsylvania Bulletin or a newspaper of general circulation in the County; and~~

DC. “Facility” shall mean Source.

...

1. **Temporary Sources at Multiple Locations.**

1. Except as otherwise provided under this Subsection, the requirements for Plan Approvals and Operating Permits for Sources Operating at Multiple Temporary Locations promulgated by the Pa. Environmental Quality Board and Dept. of Environmental Protection (DEP) under the Pa. Air Pollution Control Act at 25 Pa. Code §§127.631 through 127.642 are hereby incorporated, by reference, into this Article. Additions, revisions, and deletions to such requirements adopted by the EQB and the DEP are incorporated into this Article and are effective on the date established by the state regulations, unless otherwise established by regulation under this Article.

2. For purposes of this Article:

A. 25 Pa. Code §127.632(a), **shall be met by the requirements of Paragraph m.2 of this Section.** ~~shall only require the publication of the required notice in the Pennsylvania Bulletin and one newspaper of general circulation in the County;~~

...

3. Under the regulations incorporated by reference under this Subsection:

A. “Plan approval” shall mean Installation Permit;

B. “Department” shall mean Department as defined under this Article;

and

~~C. “Pennsylvania Bulletin” shall mean Pennsylvania Bulletin or a newspaper of general circulation in the County; and~~

DC. “Facility” shall mean Source.

...

m. Public Notice. Except as specifically otherwise provided under this Article, the requirements promulgated by the Pa. Environmental Quality Board and Dept. of Environmental Protection (DEP) under the Pa. Air Pollution Control Act at:

25 Pa. Code §§127.44, 127.45, & 127.51, as they relate to installation permits; 25 Pa. Code §§127.424, 127.425, & 127.431, as they relate to operating permits; 25 Pa. Code §§127.612, as it relates to General Permits; and 25 Pa. Code §632, as it relates to Temporary Sources at Multiple Locations; and the related definitions at 25 Pa. Code §121.1, are hereby incorporated, by reference, into this Article. Additions, revisions, and deletions to such requirements adopted by the EQB and the DEP are incorporated into this Article and are effective on the date established by the state regulations, unless otherwise established by regulation under this Article.

1. Under the regulations incorporated by reference under this Subsection:

- A. "Plan approval" shall mean Installation Permit;**
- B. "Department" shall mean Department as defined under this Article;**
- C. "Pennsylvania Bulletin" shall mean the Department's air permitting website; and**
- D. "Facility" shall mean Source.**

2. Public notice shall be posted on the Department's air permitting website for a minimum of thirty (30) days or the duration of any public comment period. The Department will also provide notice using e-mail or regular U.S. postal service mailing to persons on a distribution list developed by the Department as provided under Paragraph 3.

3. Distribution list. The Department shall develop and maintain a subscription distribution list for the purpose of notification of permitting activity.

§2102.04 INSTALLATION PERMITS

{Paragraph a.5 deleted, Paragraphs b.11 & h.2 and Subsection j added, and Subparagraph a.1.B & Subsections g, h, & i amended September 6, 1995, effective October 20, 1995. Subparagraphs a.1.C and new paragraph a.5 added December 12, 2000, effective January 12, 2001. Subsection k added effective April 28, 2004. Subsection g amended March 23, 2012, effective April 3, 2012. Subsection i amended and Subsection j added mm/dd/2021, effective mm/dd/2021.}

...

i. Advance Notice.

In addition to all other notice requirements under this Part, the Department shall ~~cause to be published~~ **post** a public notice **in accordance with Paragraph 2102.03.m.2** of all permit applications received as soon as is practicable after such applications have been deemed to be complete. At the time of ~~publication~~ **the posting** of such notice, the applicant shall cause a copy of such notice to be sent to all municipalities in which the source for which the application has been submitted is located as required by Section 1905-A of the Pa. Administrative Code of 1929 (71 PS §510-5).

j. Public Notice of Draft Installation Permit.

The following procedures apply for public notice for draft permits, permit revisions, and permit modifications including offering an opportunity for public comment and an opportunity for a hearing on the draft permit:

- 1. Notice shall be posted in accordance with Paragraph 2102.03.m.2. The Department may use other means to provide adequate notice to the affected public.**
- 2. The notice shall identify the source and its location; the name and address of the permittee; the name and address of the County Health Department Bureau of Environmental Health; the activity or activities involved in the permit action; the emissions changes involved in any permit modification; the means through which interested persons may obtain additional information from the Department, including copies of the draft permit, the application, all relevant supporting materials, and all other materials available to the Department that are relevant to the permit decision; a brief description of the comment procedures under this Subsection; and the time and place of any hearing that may be held. If no public hearing is scheduled,**

the notice shall include a statement of procedures to request a hearing;

3. The Department shall provide at least 30 days for public comment and shall give notice of any public hearing at least 30 days in advance of the hearing, except for minor modification applications which shall only require a 21 day public comment period; and

4. For at least two years following final action on an application, the Department shall keep a record of the commenters and also of the issues raised during the public participation process, and such records shall be available to the public.

j. ~~Miscellaneous Notice Requirements.~~

~~Except as specifically otherwise provided under this Article, the requirements promulgated by the Pa. Environmental Quality Board and Dept. of Environmental Protection (DEP) under the Pa. Air Pollution Control Act at 25 Pa. Code §§127.44, 127.45, & 127.51, and the related definitions at 25 Pa. Code §121.1, are hereby incorporated, by reference, into this Article. Additions, revisions, and deletions to such requirements adopted by the EQB and the DEP are incorporated into this Article and are effective on the date established by the state regulations, unless otherwise established by regulation under this Article.~~

k. ~~Restrictions on Sources with Violations.~~

...

§2102.05 INSTALLATION PERMITS FOR NEW AND MODIFIED MAJOR SOURCES

{Subsections c amended mm/dd/2021, effective mm/dd/2021.}

...

c. **Public Notice and Hearing.** Upon a determination that an Installation Permit application for a new or modified major source meets the requirements of this Article, the Department shall prepare a notice of its ~~proposed approval of the application~~ draft installation permit and of a public hearing on such ~~proposed approval~~ draft installation permit to ~~be~~ held no sooner than 30 days following ~~publication~~ the posting of such notice in accordance with this Subsection. Such notice shall include at a minimum the name of the owner or operator, the type and size of the source, the proposed location, a concise

summary of the manner in which the requirements of this Part have been met, an identification of at least one location within the County where all information submitted in support of the application may be examined by the public, an ~~employee of~~ **a point of contact at** the Department to ~~whom~~ **which** public comments may be sent no later than ten (10) days following the public hearing and to ~~whom~~ **which** requests to testify at the public hearing may be sent within 30 days of the ~~publication~~ **posting** of the notice, and the date, time, and location of the public hearing. The Department shall then:

1. Cause such notice to be ~~published by prominent advertisement in either, at the discretion of the Department, at least two newspapers of general circulation in the County, or at least one newspaper of general circulation in the County and at least one local newspaper of general circulation in the municipality of the proposed location, for at least one day in each newspaper~~ **posted in accordance with Paragraph 2102.03.m.2.** The applicant shall pay for the cost of all publications and certifications under this Paragraph;
2. Cause copies of the notice to be mailed to the Regional Administrator of the EPA, the Chairman of the Allegheny County Air Pollution Control Advisory Committee, the Chairman of the Allegheny County Board of Health, the appropriate agencies or departments of affected states, such other regional and local government units as specified by the Department, and to persons on a **distribution** list ~~developed by the Department~~ **as provided under Subsection 2102.03.m of this Article;** ~~including residents of the County who specifically request in writing to be on the list;~~
3. Retain all information submitted in support of the permit application in at least one location in the County and make all such information available for public inspection;
4. Provide copies of the Department's notice to any person who requests it; and
5. Obtain facilities for a public hearing to be held by the Department, at a place, date, and time determined in advance by the Department, and cause such hearing to be stenographically transcribed and a copy thereof to be furnished to the Department. The applicant shall pay for the cost of all public hearings and transcripts under this Paragraph.

§2103.11 APPLICATIONS

{Paragraph a.2 & Subsections b, d, e, f, & g amended & h added September 6, 1995, effective October 20, 1995. Subsections e, & f amended mm/dd/2021, effective mm/dd/2021.}

...

g. Advance Notice.

In addition to all other notice requirements under this Part, the Department shall ~~cause to be published~~ **post** a public notice **in accordance with Paragraph 2102.03.m.2** of all permit applications received as soon as is practicable after such applications have been deemed to be complete. At the time of ~~publication~~ **the posting** of such notice, the applicant shall cause a copy of such notice to be sent to all municipalities in which the source for which the application has been submitted is located as required by Section 1905-A of the Pa. Administrative Code of 1929 (71 PS §510-5).

f. ~~Public Notice of Preliminary Approval~~ **Draft Operating Permit**. All permit proceedings under this Subpart, including initial permit issuance, modifications, and renewals, shall include the following procedures for public notice including offering an opportunity for public comment and an opportunity for a hearing on the draft permit:

1. Notice shall be given: ~~by publication in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice; and by other means if deemed necessary by the Department to assure adequate notice to the affected public~~ **by posting the public notice in accordance with Paragraph 2102.03.m.2. The Department may use other means to provide adequate notice to the affected public;**
2. The notice shall identify the source and its location; the name and address of the permittee; the name and address of the County Health Department Bureau of Environmental ~~Quality~~ **Health**; the activity or activities involved in the permit action; the emissions changes involved in any permit modification; the ~~name, address, and telephone number of a Department representative from whom~~ **means through which** interested persons may obtain additional information **from the Department**, including copies of the draft permit, **the statement required by Paragraph 2103.21.c.3 of this Article for the draft permit**, the application, the compliance plan, monitoring and compliance certifications, all relevant supporting materials, and all other materials available to the Department **(except for publicly-available materials and publications)** that are relevant to the permit decision;

a brief description of the comment procedures under this Subsection; **and the time and place of any hearing that may be held.** ~~and~~ **If no public hearing is scheduled, the notice shall include** a statement of procedures to request a hearing;

3. The Department shall provide at least 30 days for public comment and shall give notice of any public hearing at least 30 days in advance of the hearing, except for minor modification applications which shall only require a 21 day public comment period; and
4. For at least two years following final action on an application, the Department shall keep a record of the commenters and also of the issues raised during the public participation process, and such records shall be available to the public.

fg. **Final Action.**

Unless otherwise specifically provided under this Part, **the Department shall take final action** within 18 months of the date of a submittal of a complete application, including all applicable fees, for an Operating Permit under this Subpart, including applications for permit modifications and renewals. ~~the Department shall take final action on such application, except that for~~ **For** initial permit applications submitted under **the historical requirements of** Section 2103.01, **“Transition,”** of this Part, the Department shall take final action on such application within 18 months of a complete submittal of an application or within the specific applicable deadline set forth under Section 2103.01, whichever is later. A failure by the Department to take action in accordance with this Subsection constitutes a final action by the Department for the sole purpose of being appealable. The Court of Common Pleas may require that the Department take action on an application without further delay.

[Subsection 2103.11.g (“Advance Notice”) was moved to subsection 2103.11.e, above]

~~h. —~~ **Miscellaneous Notice Requirements.**

~~— Except as specifically otherwise provided under this Article, the requirements promulgated by the Pa. Environmental Quality Board and Dept. of Environmental Protection (DEP) under the Pa. Air Pollution Control Act at 25 Pa. Code §§127.424, 127.425, & 127.431, and the related definitions at 25 Pa. Code §121.1, are hereby incorporated, by reference, into this Article. Additions, revisions, and deletions to such requirements adopted by the EQB and the DEP are incorporated into this Article and are effective on the date established by the state regulations, unless otherwise established by regulation under this Article.~~

§2103.14 REVISIONS, AMENDMENTS, MODIFICATIONS

{Subparagraphs a.1.A, B, & D, b.1.D & E, Paragraphs b.2 & 4, and Subsection c amended, Subparagraph b.1.F deleted, & Paragraphs b.6 & 7 and Subsection e added September 6, 1995, effective October 20, 1995. Paragraphs c.1, 3, 4 & 6 and e.5 amended December 12, 2000, effective January 12, 2001. Subsections b, c, & e amended mm/dd/2021, effective mm/dd/2021.}

...

- b. **Administrative Permit Amendment Procedures.** An administrative permit amendment may be made by the Department consistent with the following:

...

- 6. The Department will take final action on the administrative amendment and ~~publish~~ **will post** public notice of the final action **in accordance with Paragraph 2102.03.m.2.**

...

- c. **Minor Permit Modification Procedures.**

...

- 3. At the time of submission of the application for a minor permit modification, the owner or operator shall notify the municipality where the source is located under Section 1905-A of the Pa. Administrative Code of 1929 (71 PS §510-5), and shall also ~~publish~~ **submit to the Department** a notice ~~in a local newspaper of general circulation~~ briefly describing the change including a change in actual emissions, of any air contaminant that would occur as a result of the change. **The Department will post the notice in accordance with Paragraph 2102.03.m.2.**

...

- 8. The Department will take final action on the proposed change within 60 days of receipt of the complete application for the minor permit modification and, after taking final action, will ~~publish~~ **post** public notice of the action **in accordance with Paragraph 2102.03.m.2.**

...

e. **De minimis Emission Increases.**

...

9. The Department will maintain a list of de minimis increases authorized by this Subsection in the permit file for the source and shall ~~publish~~ **post, in accordance with Paragraph 2102.03.m.2, for a minimum of thirty (30) days** a public list of the de minimis increases within 60 days of the receipt of notice for the source.

§2103.21 APPLICATIONS

{Subsection b amended and Subsection e added September 6, 1995, effective October 20, 1995. Paragraph c.2, and Subsection e amended August 29, 2013, effective September 23, 2013. Subsection a, c & e amended mm/dd/2021, effective mm/dd/2021.}

- a. Generally.
 1. If required by federal regulation or a federally approved provision under this Article, within 30 days after receipt of a complete application, with the appropriate fee, for an Operating Permit under this Subpart, including any **significant or minor** permit modification, the Department shall provide a copy of such submission to the Administrator.
- ...
- c. **Public Notice of Preliminary Approval Draft Operating Permit.** Except for administrative permit amendments, all permit proceedings under this Subpart, including initial permit issuance, modifications, and renewals, shall include the following procedures for public notice including offering an opportunity for public comment and an opportunity for a hearing on the draft permit:
 1. Notice shall be given by the Department: ~~by publication in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice~~ **by posting the public notice and each draft permit in accordance with Paragraph 2102.03.m.2**; ~~to persons on a mailing list developed by the Department, including residents of the County who specifically request in writing to be on the list;~~ to all affected States; to the Administrator; and by other means if deemed necessary by the Department to assure adequate notice to the affected public. Such public notice shall indicate that such notice is also being made to the Administrator. Notices to the Administrator and affected states shall be issued on or before the date of ~~publication~~ **the posting** of the required public notice;
 2. Unless exempted by federal regulation or a federally approved provision under this Article, or resubmittal requirements of Subsection 2103.21.e, the Department shall also provide to the Administrator a copy of the draft permit, and such draft permit shall constitute a proposed permit for purposes of commencing the Administrator's 45 day review period;
 3. The Department shall provide a statement that sets forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions. The Department shall send a copy of this statement to EPA and to any other person who submits to the Department in writing an express request for a copy of such statement for a specific permit;

4. The Department shall keep a record of the commenters and also of the issues raised during the public participation process, **as well as records of the written comments submitted during that process,** to determine whether a citizen petition may be granted, and such records shall be available to the public.

5. The Department must respond in writing to all significant comments raised during the public participation process, including any such written comments submitted during the public comment period and any such comments raised during any public hearing on the permit. The Department shall provide to the Administrator the written response to comments and an explanation of how those public comments and the permitting authority's responses are available to the public.

...

e. Resubmittal to EPA. The Department shall resubmit to the Administrator any ~~proposed~~ **draft** permit to which **the Department receives significant comment during the public participation process** ^{substantive} ~~comments~~ or material substantive changes have been made as a result of comments received by the Department. **The Department shall also include with the resubmitted draft permit the statement required by Paragraph c.3 of this Section and the written response to comments and supporting materials required under Paragraph c.5 of this Section.** This resubmittal shall commence ~~T~~the Administrator's 45 day review period **for this proposed permit will not begin until such materials have been received by the EPA.**

§2103.22 ISSUANCE, STANDARD CONDITIONS

{Paragraph c.1 & Subsection j amended & Subsection k added September 6, 1995, effective October 20, 1995. Subsection l added January 22, 1998, effective March 31, 1998. Subsections b & c amended mm/dd/2021, effective mm/dd/2021.}

- b. **EPA Objection.** If the Administrator objects in writing to issuance of the permit within 45 days of receipt of the proposed permit and all necessary supporting information **required under Subsection 2103.21.c of this Article**, in accordance with 40 CFR §70.8(c), the Department shall, within 90 days after the date of such an objection, propose a revised permit in response to the objection in accordance with the requirements for proposal of such a permit under this Part.

...

c. **Public Petitions to the Administrator.**

1. If the Administrator does not object to the issuance of a permit in writing under Subsection b of this Section, any person may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection, except that any such petition shall be based only on objections to the permit that were raised by the petitioner with reasonable specificity during the public comment period provided for under this Part, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. **The petitioner shall provide a copy of such petition to the Department and the applicant.**
2. If the Administrator objects to a permit as a result of a petition filed under this Subsection, the Department shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the Department has issued a permit prior to receipt of an EPA objection under this paragraph, the Department shall thereafter issue only a revised permit that satisfies EPA's objection, but the source shall not be in violation of the requirement to have submitted a timely and complete application.

§2103.24 REVISIONS, AMENDMENTS, MODIFICATIONS

{Subsection c deleted September 6, 1995, effective October 20, 1995. New subsection c added December 12, 2000, effective January 12, 2001. Subsection c amended mm/dd/2021, effective mm/dd/2021.}

...

c. Minor Permit Modification Procedures

Sources subject to this subpart may make minor permit modifications on an expedited basis under this Subsection.

...

- 2. Within 5 working days of receipt of a complete permit modification application, the owner or operator shall notify the municipality where the source is located under Section 1905-A of the Pa. Administrative Code of 1929 (71 PS §510-5), all affected states, and the EPA of the requested permit modification. At the time of submission of the application for a minor permit modification, the owner or operator shall also ~~publish~~ **submit to the Department** a notice ~~in a local newspaper of general circulation~~ briefly describing the change, including a change in actual emissions of any air contaminant that would occur as a result of the change. **The Department will post the notice in accordance with Paragraph 2102.03.m.2.** Such notice shall clearly indicate that a person may comment to the Department and the source concerning the proposed change within 21 days from the date of ~~submission of the proposed minor permit modification to the Department~~ **the posting of the notice.**

...

- 7. The Department, after taking final action, will ~~publish~~ **post on the Department’s air permitting website for a minimum of thirty (30) days** public notice of the action **in accordance with Paragraph 2102.03.m.2.**

§2105.31 WASTE-DERIVED LIQUID FUEL

{Paragraphs b.7 & e.6 restored May 7, 1998, effective May 15, 1998. Subsection e amended mm/dd/2021, effective mm/dd/2021.}

...

e. **Alternative Standards and Procedures.**

...

3. Should the Department preliminarily approve a request under this Subsection, the Department shall give public notice of the request for and preliminary approval of the alternative standard or procedure with:

A. Such notice to include:

- i. The name and address of the owner or operator;
- ii. A description of the equipment;
- iii. The address of the location of the equipment;
- iv. A summary of the reason for the request and justification for the alternative standard or procedure;
- v. The address of the Department;
- vi. The date, 30 days from the date of the ~~publication~~ **posting** of this notice, until which the Department will receive public comments concerning the preliminary approval of the alternative standard or procedure; and

B. Such notice to be ~~published in a newspaper of general circulation in Allegheny County, Pennsylvania,~~ **posted in accordance with Paragraph 2102.03.m.2** ~~for one~~ no later than ten (10) days after the preliminary approval is made by the Department.

4. After any public comment period required by Paragraph 3. of this Subsection, the Department may determine, at its sole discretion, that a public hearing is required before approving or denying a request under this Subsection, and if such a hearing is determined to be required, the Department shall give public notice of such hearing in such manner as is deemed appropriate by the Department.

End of Regulation Changes

2. Technical Support Document

The Clean Air Act (CAA) requires stationary sources of air pollution to obtain permits and authorizes the EPA to administer and oversee the permitting of such sources. To implement the CAA, the EPA promulgated permitting regulations for construction of sources pursuant to the NSR program under title I of the CAA, and for operation of major and certain other sources of air pollutants under title V of the CAA. These regulations are contained in 40 Code of Federal Regulations (CFR) parts 51, 70, and 71, and cover the requirements for federal permit actions (*i.e.*, when the EPA or a delegated air agency is the permitting authority) and the minimum requirements for EPA approval of state implementation plans (SIPs) and title V permitting programs. These rules contain, among other things, requirements for public notice and availability of supporting information to allow for informed public participation in permit actions.

While the CAA requires permitting authorities to offer the opportunity for public participation in the processing of air permits and other actions, it does not specify the best or preferred method for providing notice to the public. *See, e.g.*, CAA sections 165(a)(2) and 502(b)(6). In the late 1970s and early 1980s, when the EPA first developed air permitting regulations to provide public notice for the major NSR program, newspaper advertisement was the most commonly accepted method for providing notice to the public of permit actions under those programs and other agency actions. Over the years, however, the availability of and access to the Internet and other forms of electronic media have increased significantly in the United States. One effect of this development is that circulation of newspapers and other print media has declined, making printed newspaper notice less effective in providing widespread public notice of permit actions in many cases. Many permitting authorities electronically post permit notices on their agency Web sites. For example, many state title V programs regularly provide electronic postings to assure adequate public notice. 40 CFR 70.7(h)(1). Such electronic notice mechanisms provide an effective, convenient and cost-efficient way to communicate permitting-related information to the majority of the public.

Given these developments, the EPA has recognized that newspaper notice is no longer the only, or in many cases the most effective, method of communicating permitting actions to the public and has issued rules allowing alternate methods of communication.

The EPA issued revised rules which removed the mandatory requirement that draft permits for sources subject to the major NSR, or title V programs and certain other actions be noticed in a newspaper of general circulation and instead allow (or in some cases require) the use of Internet postings to provide notice (*i.e.*, e-notice). 81 FR 71613 (Oct. 18, 2016). For permits issued by agencies that implement an approved program meeting the requirements of 40 CFR parts 51 or 70, EPA allowed that those permitting authorities would have the option to adopt either e-notice or retain the newspaper noticing method. These permitting authorities must, however, select either e-notice or newspaper notice as their consistent noticing method. In addition, for all their draft permits, they must provide notice to the public through the noticing method selected and

must indicate the consistent noticing method selected in their permitting rules. EPA also required that, when a permitting authority adopts e-notice, it also must provide e-access. In the context of this rule, e-access means that the permitting authority must make the draft permit available electronically (*i.e.*, on the agency's public Web site or on a public Web site identified by the permitting authority) for the duration of the public comment period.

The ACHD is proposing changes to Article XXI in this SIP revision to provide for notice on the ACHD's air permitting website as the consistent noticing method. For major operating permits subject to 40 CFR part 70, the ACHD is revising the Article XXI regulations to comply with the EPA's e-notice requirements under 40 CFR § 70.7. For all other permitting activity, the ACHD will provide notice for a minimum period of 30 days on the ACHD's air permitting website. The ACHD is also revising Article XXI to specifically provide for an "interested persons distribution list." The public notice for permitting activity will be provided to the interested persons on this distribution list. Related to the distribution list, and regarding methodology for signing up on the ACHD website to be on the distribution list described in 2102.03.m, ACHD intends to discuss this with its IT department how that will be accomplished.

Finally, the ACHD is proposing changes to Article XXI in this SIP revision to address the latest changes to 40 CFR §70.7 "Permit issuance, renewal, reopenings, and revisions," and 70.8 "Permit review by EPA and affected states," especially with regard to permit petition requirements.

The Sections will be submitted as a change to the Allegheny County portion of the Pennsylvania State Implementation Plan (SIP) as follows:

§2101.20, Definitions

§2102.03, Permits Generally, al, including new Subsection "m", but not Subsection "l".

§2102.04, Installation Permits, all except the Subsection previously identified as "k" which is now renumbered to "l".

§2102.05, Installation Permits for New and Modified Major Sources, all.

§2103.11, Operating Permits (All Major and Minor Permits) Applications, all.

§2103.14, All Major and Minor Permits -- Revisions, Amendments, Modifications, all.

§2103.21, Additional Requirements for Major Permits -Applications – none, since 2103.21 is not currently in the SIP.

§2103.22 Issuance, Standard Conditions – none, since 2103.22 is not currently in the SIP.

§2103.24, Additional Requirements for Major Permits - Revisions, Amendments, Modifications- none, since 2103.24 is not currently in the SIP

§2105.31, Waste-Derived Liquid Fuel - none, since 2105.31 is not currently in the SIP.

Portions of this change may also be required to be submitted as changes to the Title V program. That will be determined in future discussion with EPA.

3. Documentation of Public Hearing and Certifications (all “Later”)

- a. Public hearing notice
- b. Transmittals of hearing notice to EPA & PA DEP
- c. Proof of publication of notice of hearing
- d. Certification of hearing
- e. Summary of Comments and responses
- f. Certifications of approval and adoption