

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

AGENDA
ALLEGHENY COUNTY BOARD OF HEALTH
September 7, 2022

AGENDA ITEM	ACTION	PRESIDER/PRESENTER(S)
1. CALL TO ORDER		Dr. Lee Harrison
2. APPROVAL OF MINUTES from July 13, 2022 BOH	Vote	Dr. Lee Harrison
3. PUBLIC COMMENTS ON AGENDA ITEMS A. Summary of written comments B. In Person speakers	Information	Patrick Dowd Dr. Lee Harrison
4. DIRECTOR’S REPORT A. Director’s Report		Dr. Debra L. Bogen
5. NEW BUSINESS – ACTION ITEMS <u>For Final Approval</u> A. Revisions Article XXI: Air Pollution Control – RACT III B. Revisions Article XXI: Air Pollution Control – Coke Oven Regulations C. Revisions Article XXI: Air Pollution Control – PART G, “Methods” and Related Sections D. Revisions Article XV: Plumbing & Building Drainage-incorporating revisions on the 2018 International Plumbing Code as adopted by the Commonwealth of Pennsylvania E. Fee Schedules <ul style="list-style-type: none"> • Plumbing Program • Wastewater & Solid Management Program • Air Quality’s Asbestos Permits • Housing & Community Environment Program 	VOTE VOTE VOTE VOTE VOTE	JoAnn Truchan Dean DeLuca Dean DeLuca Geoffrey Rabinowitz Kim Joyce
6. PUBLIC COMMENT ON NON-AGENDA ITEMS A. Summary of written comments B. In person speakers (3 minutes per speaker)	Informationa	Patrick Dowd Dr. Lee Harrison
7. ADJOURNMENT	VOTE	Dr. Lee Harrison



DEBRA L. BOGEN, MD, DIRECTOR
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COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

**Meeting of the Allegheny County Board of Health
Public
September 7, 2022**

1. Call to Order
2. Approval of Minutes for the meeting of July 13, 2022
3. Public Comments on Agenda Items
4. Director's Report
5. New Business Action Items

For Final Approval

- Revisions Article XXI: Air Pollution Control – RACT III
 - Revisions Article XXI: Air Pollution Control – Coke Oven Regulations
 - Revisions Article XXI: Air Pollution Control – PART G, “Methods” and Related Sections
 - Revisions Article XV: Plumbing & Building Drainage – 2018 International Plumbing Code as adopted by the Commonwealth of Pennsylvania
 - Fee Schedules
 - Plumbing Program
 - Wastewater & Solid Management Program
 - Air Quality's Asbestos Permits
 - Housing & Community Environment Program
6. Old Business
 7. Public Comment on Non-Agenda Items
 8. Adjournment



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Allegheny County Board of Health
July 13, 2022
Minutes

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

Absent: Dr. Kotayya Kondaveeti

1. Call to Order

Board Chair Dr. Lee Harrison welcomed everyone to the meeting of the Allegheny County Board of Health.

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

2. Approval of Minutes from the meeting of May 4, 2022

Dr. Harrison asked for a motion to approve the minutes.

Anthony Ferraro raised a question regarding the discussion of cold chain custody at the prior meeting. The staff agreed to provide the information he asked about regarding why the ACHD could not be more stringent than the Commonwealth.

Action: Anthony Ferraro moved to approve the minutes and William Youngblood seconded the motion. **The members approved the motion unanimously.**

3. Public Comments on Agenda Items

There were no public comments.

4. Director's Report

Dr. Bogen began her report to the Board with an update on COVID-19. Reviewing the ACHD dashboards, since the beginning of the pandemic Allegheny County had a little under 300,000 infections identified, almost 1 million people were tested, and over 14,000 hospitalizations and 3,346 deaths.

The CDC website shows that Allegheny County is at a low level of community spread the data indicates a slight uptick in cases due to the BA.4 and BA.5 omicron subvariants. Weekly hospitalizations rates per 100,000 and monthly death rates per 100,000 are down from the beginning of year. Dr. Bogen reviewed the new Hospitalization and Deaths by Vaccine Status dashboard. The data indicate clearly that people without a vaccination remain at much greater risk for hospitalizations and deaths. Lastly, she reviewed the COVID-19 Wastewater Surveillance dashboard, which, because of the prevalence of home testing, has become a good indicator of community spread.

Turning to Monkeypox, Dr. Bogen explained that the virus can spread through direct physical contact, respiratory secretions during prolonged face to face contact, and touching objects that were previously in contact with the monkeypox rash. Additionally, the virus can spread to the fetus during pregnancy. She briefly reviewed the clinical information (symptoms, diagnosis, treatment and vaccination) about the virus. Dr. Bogen explained that the ACHD Bureaus of Clinical Services and Data, Reporting and Disease Control are working together to mitigate the spread. Case investigators or working with infected patients and clinical staff are providing guidance on supportive care and antiviral medication.

Turning ACHD updates, Dr. Bogen introduced Geoff Rabinowitz, Deputy Director of Environmental Health and Dannai Wilson, Deputy Director of Community and Family Health.

The ACHD opioid dashboard has been updated with 2021 data and the school immunization report is up to date with the 2021-22 data. To assist with the infant formula shortage, the Bureau of Community & Family Health partnered with UPMC Children's Hospital of Pittsburgh to reach out to parents and organizations sharing information on substitutes. The Air Quality Program has opened public comment on several Title V operating permits, including for the USS Edgar Thomson. The ACHD hosted students from Pitt Public Health for summer internships across numerous programs.

In addition to providing important updates on work of the various bureaus and highlighted the ACHD's participation in community events, Dr. Bogen reminded the Board that the ACHD continues to prepare for its application for reaccreditation. The team is just finalizing the Community Health Assessment for which the ACHD had held nine listening sessions received nearly 400 surveys. The team will be reviewing data and drafting key metrics, goals, and strategies and in August will begin drafting the Community Health Improvement Plan.

Dr. Bogen introduced Otis Pitts, Deputy Director for Food, Housing and Health Policy, who provided a presentation on ACHD's work to reduce overdose prevention in Allegheny County.

Mr. Pitts began by acknowledging the lives lost in the opioid crisis and their potential for families and communities.

This crisis continues to impact all residents regardless of race, ethnicity or community – but increasingly is impacting black residents. In fact, the number of deaths due to overdose has continued to rise each year. Between 2008 and 2017, the total annual number of deaths from overdoses peaked in 2017 at 835 deaths. After a sharp decrease in 2018 the total number of deaths from overdose in 2021 was 719 deaths. Factors that may have contributed to the rise include COVID-19, social isolation and economic hardship.

Looking more closely at the data, Mr. Pitts compared overdose rates by jurisdiction. In 2016 and 2017, Allegheny County had one of the highest fatal overdose rates in the nation at 54 and 61 deaths per 100,000, respectively. Unfortunately, the overdose death rate is on the rise and in 2021 stood at 58 per 100,000.

The one factor in this crisis is the unpredictable nature of the illicit drug supply in Allegheny County and nationwide. Fentanyl and Fentanyl analogs are stronger and deadlier than more traditional opioids such as street heroin. One reason is that fentanyl is spreading into new drug markets some people who consider themselves to not be opioid users are being exposed to this substance without knowledge without tolerance and harm reduction tools such as naloxone.

Racial disparities also persist in this crisis. Graphs were shown comparing overdose deaths by race from 2008-2021. Death rate for black and whites in Allegheny County were similar until 2018 and in 2019 the rate of death by overdose began to increase significantly among black males.

The ACHD Overdose Prevention Program continues to distribute naloxone at pop-up events as well as formal overdose prevention program training. The team has given out almost 10,000 Narcan kits with 60% of those going to individuals and groups in high-risk areas.

Our Narcan supply comes with our partnership with the US Health and Human Services Substance Abuse and Mental Health Services Administration and the Pennsylvania Commission Crime Delinquency (PCCD). For 2022, the ACHD anticipates receiving 14,000 kits of naloxone which it will then distribute to the most at-risk communities and individuals.

In addition to naloxone distribution, the ACHD is working with a range of partners creating pathways for medication assistance treatment when appropriate. Mr. Otis provided the Board with a summary report of partnerships. Over the past 18 months, ACHD and its Overdose Data 2 Action (OD2A) partners, which include over 100 staff members combined, successfully made 300 referrals for connections to treatment.

In addition to the work funded through the CDC grant, ACHD works directly with many grass roots organizations that are already serving high risk populations and linking those groups to health care systems, street medicine and case management to share treatment options. Plus, through a NAACHO grant, the ACHD works with family-based treatment centers which do screening for substance use disorder and create pathways for referrals to treatment. Two partners primarily serve the county's Spanish speaking population.

The ACHD will soon launch communication campaign designed to reduce stigma associated with substance use disorder and treatment and promoting safety through harm reduction tools.

Members of the Board thanked Mr. Pitts for his report and the efforts to reduce overdose fatalities and the racial disparities. Members asked for clarifications regarding some of the numbers provided. They encouraged continued interpretation the data, including examining law enforcement data.

5. New Business – Action Items:

A. For Public Comment

Incorporation for the 2018 International Plumbing Code revisions into Article XV: Plumbing & Building Drainage

Kim Joyce, Deputy Director for the Bureau of Administration, introduced the proposed revisions to Article XV: Plumbing and Building Drainage. Earlier in 2022, the Commonwealth adopted a 2018 version of the International Plumbing Code (IPC). She reviewed the proposed revisions and compared them to the existing regulations and has prepared the revisions for consideration. The Plumbing Advisory Board unanimously recommended sending the proposed revisions to the public for comment. On behalf of the ACHD, Kim Joyce asked the members to authorize sending the proposed revisions to the public for comment.

Action: William Youngblood moved to send the proposed revisions to Article XV to the public for comment and Anthony Ferrero seconded the motion. **The Board unanimously approved the motion.**

Article XXI: Air Pollution Control – RACT III Regulations

JoAnn Truchan, Air Quality Program Manager for Permitting, presented proposed revisions to Article XXI: Air Quality Regulations incorporating by reference the Commonwealth's RACT III provisions. According to the Commonwealth's new regulations, which are still in draft form, permit holders in Allegheny County that are major sources of ozone would need to meet the RACT III requirements. Ms. Truchan asked the Board to approve sending the proposed revisions to the public for comment.

Action: Edie Shapiro moved to send the proposed revisions to the public for comment. Ellen Stewart seconded the motion. **Motion Passed unanimously.**

A. For Final Approval

Environmental Health Fund Request

Ms. Joyce asked the Board to give final approval to a request for funding from the Environment Health Fund for \$15,000. The funds will be used to purchase new iPads and field cases for the plumbers to support their work.

Action: Anthony Ferraro moved to approve the request for Environmental Health Funds. William Youngblood seconded the motion. **The Board approved the motion unanimously.**

6. Public Comments on Non-Agenda Items

Dr. Harrison opened the meeting to public comment on non-agenda items. He explained the process of public comments and to remember the three-minute time frame. The following individuals registered and provided public comment.

Kurt Barshick spoke on the Clairton Plan Update, Richard Lattanzi spoke about US Steel, Debbie Smit spoke about U.S. Steel Clairton Coke Works, Jay Walker spoke on Air Quality and Angelo Tarantino spoke on Metalico/Neville Recycling on Neville Island.

7. Adjournment

Dr. Harrison adjourned the meeting at approximately 2:50 pm.

For Board of Health review September 7, 2022.

The Air Program is requesting that the Board of Health grant final approval of this document.

(The Air Advisory Committee recommended such approval at their August 8, 2022 meeting pending the receipt of no adverse comment during the public comment period ending August 18, 2022. No such public comments were received.)

Proposed Final

Revision to

Allegheny County Health Department

Rules and Regulations

Article XXI, Air Pollution Control

§2105.08

Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds For the 2015 Ozone NAAQS

and

**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. 98)

(Document date: August 18, 2022)

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1. Changes to Article XXI Rules and Regulations:
 - §2105.08, Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds for the 2015 Ozone NAAQS
2. Technical Support Document
3. Attachment for Information Only - “RACT 3 MS FRN DRAFT Annex A AQTAC 4-7-2022” Pennsylvania DEP Draft Final Form Annex
4. Documentation of Public Hearing and Certifications
(Required for SIP change.)
 - Public hearing notice
 - Transmittals of hearing notice to EPA & PA DEP
 - News Release
 - Proof of publication of notice of hearing
 - Certification of hearing
 - Summary of Comments and responses
 - Certification of approval and adoption (later)

1. Proposed Regulation Revision

Article XXI, §2105.08 is new and printed in regular type.

§2105.08 Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds for the 2015 Ozone NAAQS *{Added mm/dd/yyyy, effective mm/dd/yyyy.}*

- a. Except as otherwise provided under this Section, the additional RACT requirements for major sources of nitrogen oxides and volatile organic compounds promulgated by the Pa. Environmental Quality Board and Dept. of Environmental Protection (DEP) under the Pa. Air Pollution Control Act at 25 Pa. Code §129.111 to §129.115, 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.

- b. Under the regulations incorporated by reference under this Section and for purposes of this Article:
1. "Combustion unit" shall mean 'Fuel burning and combustion equipment,' as defined in this Article;
 2. "Plan approval" shall mean Installation permit;
 3. The terms "Department" and "approved local air pollution control agency" shall mean Department as defined under this Article;
 4. "Facility" shall mean Source as defined under this Article;
 5. With respect to the requirements of 25 Pa. Code §129.111 to §129.115, the sections of 25 Pa. Code Chapter 129 cited there shall mean the corresponding Article XXI sections listed in the following table. Where there is no corresponding Article XXI section as indicated by "None" in the table, follow the requirements of the Pennsylvania Code.

25 Pa. Code	Article XXI		25 Pa. Code	Article XXI
§129.51	§2105.01		§129.71	§2105.19
§129.52	§2105.10 incl. Table 2105.10		§129.72	None*
§129.52a	§2105.77		§129.73	§2105.74
§129.52b	§2105.79		§129.75	§2105.75
§129.52c	§2105.78		§129.77	§2105.85
§129.52d	§2105.83		§129.91, §§129.93-95	§2105.06 applicable subsections
§129.52e	§2105.84		§129.92	§2105.06.a-c and §129.92
§129.54	§2105.04		§§129.96-100	None*
§129.55	§2105.70		§129.101	§2105.76
§129.56	§2105.12		§129.102	§2105.76
§129.57	§2105.12		§129.103	§2105.76
§129.58	§2105.70		§129.104	§2105.76
§129.59	§2105.13		§129.105	§2105.76
§129.60	§2105.13		§129.105	§2105.76

§129.61	§2105.13		§129.106	§2105.76
§129.62	§2105.13		§129.107	§2105.76
§129.63	§2105.15		§129.301	§2105.101
§129.63a	§2105.82		§129.302	§2105.101
§129.64	§2105.16		§129.303	§2105.101
§129.65	§2105.17		§129.304	§2105.101
§129.66	None*		§129.305	§2105.101
§129.67	§2105.11		§129.306	§2105.101
§129.67a	§2105.81		§129.307	§2105.101
§129.67b	§2105.80		§129.308	§2105.101
§129.68	§2105.71		§129.309	§2105.101
§129.69	§2105.72		§129.310	§2105.101

*25 Pa. Code §129.66, §129.72, and §§129.96-100 have no corresponding Article XXI sections. Additional Notes on Corresponding Regulations: 25 Pa. Code §129.201-205 apply to certain sources only in Bucks, Chester, Delaware, Montgomery or Philadelphia County. 25 Pa. Code §145.111-113 are part of the NOx SIP call and not regulated by Allegheny County. 25 Pa. Code §145.141-145, Cement Manufacturing – no Allegheny Count Sources.

6. Regarding 25 Pa. Code §129.112(e)(1), and with respect to a municipal solid waste landfill constructed, reconstructed or modified on or before July 17, 2014, §2105.73 of this Article applies, and "§122.3" shall mean Subsection §2105.05 of this Article;
7. Regarding 25 Pa. Code §129.112(e)(2), and with respect to a municipal solid waste landfill constructed after July 18, 2014, "§122.3" shall mean Subsections §2105.05 of this Article;
8. Regarding 25 Pa. Code §129.112(l) and RACT permits issued to the owner or operator of an air contamination source:
 - A. 25 Pa. Code §§129.91 – 129.95, shall mean Section 2105.06 of this Article;
 - B. “stationary” sources shall mean “major” sources.
9. Regarding 25 Pa. Code §129.112(m) and any other portions of §§129.111-115:
 - A. 25 Pa. Code §§129.201 - 205, do not apply to Allegheny County; {Editor’s Note: They apply to the counties around Philadelphia.}
 - B. 25 Pa. Code §§129.301 - 310, shall mean Section 2105.101 of this Article;
 - C. 25 Pa. Code §§145.111 - 113, there are no corresponding Article XXI regulations; {Editor’s Note: 25 Pa. Code §§145.111 – 113 are part of the NOx SIP Call regulations, for which DEP prohibits ACHD from enacting regulations.}
 - D. 25 Pa. Code §§145.141 - 146, do not apply to Allegheny County. {Editor’s Note: There are no Portland cement plants in Allegheny County.}
10. Regarding 25 Pa. Code §129.114(d)(1), and (d)(3), “25 Pa. Code §129.92(a)(1)-(5), (7)-(10) and (b)” shall mean that and Article XXI §2105.06.a, b, and c.
11. Regarding 25 Pa. Code §129.114(f) and (j), “25 Pa. Code Chapter 127” shall mean Article XXI Parts Band C.
12. Regarding 25 Pa. Code §129.114(j)(2), the Department shall publish notice in accordance with Article XXI §2102.03.m.2.

13. Regarding 25 Pa. Code §129.115(b)(1), (3), (4) and (5), monitoring and testing shall be in accordance with “Chapter 139, Subchapter C” as incorporated by Article XXI, §2108.02.g.
14. Regarding 25 Pa. Code §129.115(b)(6) and (e)(2), monitoring and testing shall be in accordance with “Chapter 139, Subchapter A” as incorporated by Article XXI, §2107.01.b.
15. Regarding 25 Pa. Code §129.115(f), “25 Pa. Code, Part 1, Subpart C, Article III” shall mean Article XXI.

End of Regulation Changes

2. Technical Support Document

Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds For the 2015 Ozone NAAQS

The ACHD Air Quality Program is proposing to add regulations regarding Reasonably Available Control Technology (RACT) for major sources of nitrogen oxides and volatile organic compounds (VOCs) by “incorporating by reference” regulations being added by the state of Pennsylvania at 25 Pa. Code §129.111 through §129.115, and related definitions at §129.121.

Addition of Article XXI, §2105.08, “Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds for the 2015 Ozone NAAQS.”

The ACHD Air Program is amending Article XXI relating to source emission and operating standards in order to satisfy Federal Clean Air Act (CAA) obligations for reasonably available control technology (RACT) requirements for the National Ambient Air Quality Standards (NAAQS) for ozone. The amendment adds new §2105.08 relating to additional RACT requirements for major sources of NO_x and VOCs for the 2015 Ozone NAAQS, which establishes RACT requirements for the owner and operator of certain types of stationary air contamination sources located at any major NO_x emitting facility or any major VOC emitting facility that was in existence in Allegheny County on or before August 3, 2018. (Note: For this regulation revision, it is not necessary to make any changes to §2101.20, Definitions, to correspond to changes made by the state to the definitions at 25 Pa. Code §121.)

Purpose of the Regulation Revision

The regulation revision is mandated by Federal law or regulation. Section 109(b) of the CAA provides that the Administrator of the U.S. Environmental Protection Agency (EPA) must establish NAAQS for criteria air pollutants at requisite levels that protect public health and public welfare. The EPA set the ground-level ozone NAAQS in July 1997 at 0.08 part per million (ppm) averaged over 8 hours and lowered it in March 2008 to 0.075 ppm. On October 26, 2015, the EPA lowered the standard once again, this time to 0.070 ppm.

The EPA made designations for the 2015 8-hour ozone standards on June 4, 2018, with an effective date of August 3, 2018. The EPA designated areas around Philadelphia as “marginal” nonattainment, with the rest of the Commonwealth designated attainment/unclassifiable.

For RACT implementation purposes, the entire Commonwealth is treated as a “moderate” ozone nonattainment area, because this Commonwealth is included in the Ozone Transport Region (OTR) established by operation of law under sections 176A and 184 of the CAA. Section 184(b) of the CAA addresses provisions for the SIP of a state included in the OTR. Section 184(b)(1)(B) of the CAA requires that states in the OTR, including this Commonwealth, submit a SIP revision requiring implementation of RACT for all major stationary sources of NO_x and VOC emissions in the state and not just for those sources that are located in designated nonattainment areas of the state. The proposed RACT requirements would apply to all major facilities or sources in this Commonwealth that emit or have a potential to emit equal to or greater than 100 TPY of NO_x or 50 TPY of VOCs, as

required under section 184 of the CAA for states in the OTR. Consequently, the Commonwealth's SIP must include RACT regulations applicable Statewide to affected major stationary sources of NO_x and VOC emissions.

Because Allegheny County, as part of Pennsylvania, is located in the Ozone Transport Region, the County is thus required to implement RACT requirements for major stationary sources of nitrogen oxides (NO_x) and volatile organic compounds (VOCs) as part of a Federally approvable State Implementation Plan (SIP) for the 2015 8-hour ozone NAAQS.

States in the OTR are required to submit SIP revisions addressing the RACT requirements of Section 184 of the CAA not later than two years after the effective date of the designations. The RACT SIP submittal for the 2015 8-hour ozone standard was due to the EPA August 3, 2020, two years after the effective date (August 3, 2018) of the 8-hour ozone designations. Sources subject to this set of RACT requirements must comply by January 1, 2023.

The regulation revision amends Article XXI to establish presumptive RACT requirements and emission limitations for the owners and operators of certain major stationary sources of NO_x and VOC emissions. The source categories include combustion units, boilers, process heaters, turbines, engines, municipal solid waste landfills, municipal waste combustors, cement kilns and other NO_x and VOC emission sources not regulated by RACT requirements elsewhere in Article XXI.

The final rulemaking also includes provisions establishing a petition process for approval of an alternative compliance schedule by the Department, a facility-wide or system wide NO_x emissions averaging plan provision, an alternative RACT proposal petition process, and compliance demonstration and recordkeeping requirements.

This regulation revision will be submitted to the EPA as a revision to the Allegheny County portion of the Pennsylvania SIP.

3. Attachment – For Information Only
“03_7-561_RACT III_Final_Annex”
Pennsylvania DEP Final Form Annex

The document below contains the Pennsylvania DEP’s “final form” RACT III regulation.

ACHD would not be submitting the DEP regulation as a part of its SIP submittal. It is attached to this ACHD document only to illustrate what the ACHD is “incorporating by reference” into its Article XXI.



03_7-561_RACT
III_Final_Annex.pdf

At the time of this writing, the PA DEP RACT III regulation has been the subject of a public comment period and public hearings, and the resultant draft final form regulation has been approved by the Environmental Quality Board at the August 9, 2022 meeting. It still needs IRRC and AG approval and to be published in the Pa. Bulletin.

4.

Documentation of Public Hearing and Certifications

Notice of Public Hearing

Transmittals of hearing notice to EPA & PA DEP

Proof of publication of notice of hearing

Certification of hearing

Summary of Comments and responses

Certification of approval and adoption (later)

NOTICE OF PUBLIC HEARING AND PUBLIC COMMENT PERIOD
FOR PROPOSED AMENDMENTS TO
ALLEGHENY COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS
ARTICLE XXI, AIR POLLUTION CONTROL

The Allegheny County Board of Health will hold a public hearing on Thursday, August 18, 2022, at **10:00** AM in the First Floor Conference Room at Building #7 of the Clack Health Center, 301 39th Street, Pittsburgh, PA 15201 to take testimony on the proposed addition of Section 2105.08, “**Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds for the 2015 Ozone NAAQS**” to Allegheny County Health Department Article XXI, and corresponding County Ordinance 16782.

The addition of §2105.08 will be submitted as a revision to Allegheny County’s portion of the Pennsylvania State Implementation Plan (SIP) for the ozone National Ambient Air Quality Standard (NAAQS).

The proposed SIP revisions are available on the Allegheny County Health Department (ACHD) Air Quality web site at www.alleghenycounty.us/regs-sips. Written copies may be obtained by calling 412-578-8103.

- Persons wishing to present testimony at the hearing must register by going to the ACHD’s Air Quality website at www.alleghenycounty.us/regs-sips. Persons who do not have access to the internet may register by calling 412-578-8103.
- You must register to present testimony no less than 24 hours in advance of the hearing.
- Testimony is limited to 3 minutes. Witnesses are requested to submit written copies of the testimony by email to aqcomments@alleghenycounty.us.

The Board will also accept written comments, beginning on Monday, July 18, 2022, and concluding at 4:00 PM on Thursday, August 18, by mail to ACHD Air Program, 301 39th Street, Bldg. 7, Pittsburgh, PA 15201-1811, or by email to aqcomments@alleghenycounty.us.

Please call 412-578-8103, if you have any questions or if you have any difficulty registering for the hearing.

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

July 15, 2022

Mr. Mark Hammond, Director
Bureau of Air Quality
Department of Environmental Protection
Rachel Carson Building
400 Market Street
P O Box 8468
Harrisburg, PA 17105-8468

Dear Mr. Hammond:

Attached is a Notice of Public Hearing for a proposed revision to the Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control and County Ordinance Number 16782, regarding the addition of §2105.08, “**Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds for the 2015 Ozone NAAQS.**” The proposed new section of Article XXI will incorporate by reference the Pennsylvania Department of Environment Protection’s proposed RACT III rules being added as 25 Pa. Code §129.111 through §129.115 and the related definitions at 25 Pa. Code §121.1.

This revision will also be submitted as a change to Allegheny County’s portion of the Pennsylvania State Implementation Plan under our Revision Tracking Number 98.

Information regarding the proposed SIP change may also be found on the ACHD website at: [Regulations and SIPs | Air Quality | Health Department | Allegheny County](#)

The public comment period begins July 18, 2022 and concludes August 18, 2022 at 4:00 pm. The public hearing will be held August 18, 2022. Your comments are welcome.

Sincerely,

Dean DeLuca, electronically signed

Dean DeLuca, Manager
Air Quality Planning & Data Analysis Program

cc: Kirit Dalal
Steve Hepler

ACHD SIP98 Hearing Notice Letter
July 15, 2022
Page 2

Email Attachments

- Public Hearing Notice



Public_Hearing_Notice_RACT III Regulations

- Proposed Article XXI/SIP Revision 98



Proposed RACT III Regulation.To Public C

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

July 15, 2022

Ms. Christina Fernandez, Director
Air Protection Division
Region III (3AP00)
U.S. Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Ms. Fernandez:

Attached is a Notice of Public Hearing for a proposed revision to the Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control and County Ordinance Number 16782, regarding the addition of §2105.08, “**Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds for the 2015 Ozone NAAQS.**” The proposed new section of Article XXI will incorporate by reference the Pennsylvania Department of Environment Protection’s proposed RACT III rules being added as 25 Pa. Code §129.111 through §129.115 and the related definitions at 25 Pa. Code §121.1.

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The public comment period begins July 18, 2022 and concludes August 18, 2022 at 4:00 pm. The public hearing will be held August 18, 2022. Your comments are welcome.

Sincerely,

Dean DeLuca, electronically signed

Dean DeLuca, Manager
Air Quality Planning & Data Analysis Program

ACHD SIP98 Hearing Notice Letter
July 15, 2022
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Email Attachments

- Public Hearing Notice



Public_Hearing_Notice_RACT III Regulations

- Proposed Article XXI/SIP Revision 98



Proposed RACT III Regulation.To Public C

No. _____ Term, _____

Proof of Publication of Notice in Pittsburgh Post-Gazette

Under Act No 587, Approved May 16, 1929, PL 1784, as last amended by Act No 409 of September 29, 1951

Commonwealth of Pennsylvania, County of Allegheny, ss L. Weber, being duly sworn, deposes and says that the Pittsburgh Post-Gazette, a newspaper of general circulation published in the City of Pittsburgh, County and Commonwealth aforesaid, was established in 1993 by the merging of the Pittsburgh Post-Gazette and Sun-Telegraph and The Pittsburgh Press and the Pittsburgh Post-Gazette and Sun-Telegraph was established in 1960 and the Pittsburgh Post-Gazette was established in 1927 by the merging of the Pittsburgh Gazette established in 1786 and the Pittsburgh Post, established in 1842, since which date the said Pittsburgh Post-Gazette has been regularly issued in said County and that a copy of said printed notice or publication is attached hereto exactly as the same was printed and published in the regular editions and issues of the said Pittsburgh Post-Gazette a newspaper of general circulation on the following dates, viz:

17 of July, 2022

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PG Publishing Company

Sworn to and subscribed before me this day of:
July 18, 2022



Karen F. Faherty

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Allegheny County
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**COPY OF NOTICE
OR PUBLICATION**

**NOTICE OF PUBLIC
HEARING AND PUBLIC
COMMENT PERIOD**

FOR PROPOSED
AMENDMENTS TO
ALLEGHENY COUNTY HEALTH
DEPARTMENT RULES AND
REGULATIONS
ARTICLE XXI, AIR POLLUTION
CONTROL

The Allegheny County Board of Health will hold a public hearing on Thursday, August 18, 2022, at 10:00 AM in the First Floor Conference Room at Building #7 of the Clark Health Center, 301 39th Street, Pittsburgh, PA 15201 to take testimony on the proposed addition of Section 2105.08, "Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds for the 2015 Ozone NAAQS" to Allegheny County Health Department Article XXI, and corresponding County Ordinance 16782. The addition of §2105.08 will be submitted as a revision to Allegheny County's portion of the Pennsylvania State Implementation Plan (SIP) for the ozone National Ambient Air Quality Standard (NAAQS). The proposed SIP revisions are available on the Allegheny County Health Department (ACHD) Air Quality web site at www.alleghenycountyusregs-sips. Written copies may be obtained by calling 412-578-8103.

• Persons wishing to present testimony at the hearing must register by going to the ACHD's Air Quality website at www.alleghenycountyusregs-sips. Persons who do not have access to the internet may register by calling 412-578-8103.

• You must register to present testimony no less than 24 hours in advance of the hearing.

• Testimony is limited to 3 minutes. Witnesses are requested to submit written copies of the testimony by email to accomments@alleghenycountypa.us.

The Board will also accept written comments, beginning on Monday, July 18, 2022, and concluding at 4:00 PM on Thursday, August 18, by mail to ACHD Air Program, 301 39th Street, Bldg. 7, Pittsburgh, PA 15201-1811, or by email to accomments@alleghenycountypa.us. Please call 412-578-8103, if you have any difficulty registering for the hearing.

Revision 98

Article XXI

Section 2105.08, "Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds For the 2015 Ozone NAAQS"

Certification of Hearing

Tom Lattner deposes and says that he is an Air Pollution Control Engineer in the Air Quality Program of the Allegheny County Health Department and hereby certifies that a Public Hearing was held on August 18, 2022 on the proposed revisions to Article XXI, "Rules and Regulations of the Allegheny County Health Department for Air Pollution Control," and County Ordinance No. 16782 adding §2105.08, "Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds For the 2015 Ozone NAAQS;"

that the addition of §2105.08 is to be incorporated as a change to Allegheny County's Portion of the Pennsylvania State Implementation Plan for the Attainment and Maintenance of National Ambient Air Quality Standards;

that the opportunity for written comments was given in accordance with the requirements of 40 CFR 51.102; that notice of such hearing was given by publication in a newspaper of general circulation on July 17, 2022; and to the best of his knowledge, belief and understanding, such proceedings were in full compliance with all applicable State and Federal laws, regulations, and other requirements.

Tom Lattner 8-18-2022

Tom Lattner,
Air Pollution Control Engineer
Air Quality Program
Allegheny County Health Department

Date

SUMMARY OF COMMENTS AND RESPONSES

for

Proposed SIP Revision 98

Article XXI, §2105.08, “Additional RACT Requirements for Major Sources of Nitrogen Oxides and Volatile Organic Compounds For the 2015 Ozone NAAQS.”

Public Comment Period: July 18 to August 18, 2022

Public Hearing: August 18, 2022

No comments were received during the public comment period.

For Board of Health review September 7, 2022.

The Air Program is requesting that the Board of Health grant final approval of this document.

(The Air Advisory Committee recommended such approval at their August 8, 2022 meeting.)

Proposed Final

Revision to

**ALLEGHENY COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS
ARTICLE XXI, AIR POLLUTION CONTROL**

§2105.21 Coke Ovens and Coke Oven Gas

with

Related §2101.20 Definitions

and

§2109.01 Inspections

and

**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. 87)

(Document date: July 21, 2022)

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1.A

Proposed Coke Ovens and Coke Oven Gas Regulation Revision

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

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

...

“**Charging emissions**” means any emissions occurring during the introduction of coal into the coke oven from the time that the gate(s) on the larry car coal hopper is opened or mechanical feeders start the flow of coal into the oven until the last charging port seal is replaced. Charging emissions include any air contaminant emitted from one or more charging ports, spaces between the charging port rings and the oven refractory, drop sleeves, larry car hoppers, **open standpipes of the oven being charged** and any associated air pollution control equipment, but shall not include emissions occurring during the temporary removal of a charging port seal for the purpose of sweeping excess coal spillage into the oven just charged, after such seal has been firmly seated over the charging port following the removal of the larry car. *{effective Feb. 1, 1994. Amended mm/dd/2022, effective mm/dd/2022.}*

“**Pushing emissions**” means **an air contaminant emitted into the outdoor atmosphere which is generated by or results from the pushing operation.** *{Added mm/dd/2022, effective mm/dd/2022.}*

“**Pushing operation**” means the operation by which coke is removed from a coke oven and transported to a quench station, ~~beginning, for the coke oven batteries designated 13, 14, 15, 20, and B at the USX Corporation Clairton Works, at the time the coke mass starts to move and ending at the time the coke transfer car enters the coke quenching system, and for all other coke oven batteries,~~ beginning when the coke side door is first removed from a coke oven and continuing until the quenching operation is commenced. *{effective February 1, 1994. Amended mm/dd/2022, effective mm/dd/2022.}*

“**Soaking emissions from a standpipe cap**” means uncombusted emissions from an open standpipe which has been dampered off in preparation of pushing the coke mass out of the oven and shall end when pushing begins, ~~i.e., when the coke side door is removed.~~ *{Added by August 29, 2013 amendment, effective September 23, 2013. Amended mm/dd/2022, effective mm/dd/2022.}*

§2105.21 COKE OVENS AND COKE OVEN GAS

{portions effective August 15, 1997, the remainder effective February 1, 1994; Paragraph e.6 added June 22, 1995, effective July 11, 1995 and amended May 14, 2010 effective May 24, 2010; §2105.21.b, e, and h amended effective August 15, 1997; Subsection f amended February 12, 2007 effective April 1, 2007. Subsection i added August 29, 2013, effective September 23, 2013. Paragraph e.6 amended November 13, 2014, effective January 1, 2015. Subsections a through i amended and Subsection j added mm/dd/2022, effective mm/dd/2022.}

a. **Charging.** No person shall operate, or allow to be operated:

1. Any battery of coke ovens installed, replaced, or reconstructed, or at which a major modification was made on or after January 1, 1978, in such manner that the aggregate of visible charging emissions exceeds a total of 55 seconds during any five (5) **or fewer** consecutive **valid** charges on such battery; or
2. Any other battery of coke ovens in such manner that the aggregate of visible charging emissions exceeds a total of 75 seconds during any four (4) **or fewer** consecutive **valid** charges on such battery.

3. Inspection Procedures. The following inspection technique shall be utilized for determining compliance with the coke oven charging standard as defined in this Subsection:

- A. Observations of visible charging emissions shall be made from any point or points on the topside of a coke oven battery from which an observer can view the majority of any charging emissions which may be created during charging (typically at, but in no way limited to, a distance between 5 to 12 ovens);**
- B. Any U-tube system is part of the charging operation when it is connected during the charging of that oven, while any other offtakes are not included;**
- C. The observer will determine and record the total number of seconds that charging emissions are visibly being emitted. For each charge, the observer shall record the identification number of the oven charged and the approximate beginning time of the charge;**
- D. The observer will time the visible charging emissions with a timepiece (to the nearest half second) while observing the charging operation. Simultaneous emissions from more than one emission point shall be timed and recorded as one emission and shall not be added separately when calculating the total time. Upon observing any visible charging emissions being emitted from any part of the charging system, start the timepiece. Stop the timepiece when visible emissions are no longer being emitted. Restart the timepiece when or if visible emissions reoccur; start and stop the timepiece as often as needed during the same charging period;**

- E. Open visible charging emissions shall not include any emissions observed after all the charging port seals have been replaced (i.e., the charging port lid is firmly seated) following the removal of the larry car, such as emissions occurring when a charging port lid is temporarily removed to allow the sweep-in of spilled coal. In addition, visible charging emissions from the coke oven doors or the leveling bar shall not be included, or visible charging emissions which were previously counted;
- F. The total number of seconds of visible charging emissions observed, clock time for the initiation and completion of the charging operation for each oven, battery identification and oven number for each charge shall be recorded by the observer;
- G. In the event that observations of emissions from a charge are interrupted, the data from that charge may be invalidated. If the charge is invalidated, the observer shall note on their observation sheet the reason for invalidating the data and the observer may then resume observation of the next charge or charges;
- H. Compliance is determined by adding the number of seconds of charging emissions observed during a set of charges of either four or five charges, depending on whether the coke oven charging standards set forth in Paragraphs a.1 or a.2 of this Section apply;
- I. An observer may stop the observation when the number of seconds of charging emissions observed exceeds the coke oven charging standard set forth in Paragraphs a.1. and a.2. of this Section even if a full set of four or five charges have not been observed. A subsequent inspection may be conducted starting with the next set of charges; however, if the observer stops an observation, the observer cannot resume observing charging observations until after the original set of ovens are all charged; and
- J. These procedures include some, but not all, aspects of EPA Method 303. In order to ensure a full understanding of the inspection procedures set forth in this Subsection, the observer shall also maintain current certification for Method 303 observations.

b. **Door Areas.** No person shall operate, or allow to be operated, any battery of coke ovens in such manner that:

1. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley Works Clairton Plant, at any time, there are visible emissions from more than three percent (3.0%) of the door areas of the operating coke ovens in such battery, excluding the two door areas of the last oven charged and any door areas obstructed from view as calculated in Subparagraph 8.B of this Subsection;

2. For any batteries installed, replaced, or reconstructed, or at which a major

modification was made ~~on or after~~ **between the dates of** January 1, 1978, **and October 31, 2012,** at any time, there are visible emissions from more than five percent (5.0%) of the door areas of the operating coke ovens in such battery, excluding the two door areas of the last oven charged and any door areas obstructed from view;

2. ~~For any other batteries, other than those subject to Paragraph b.3 of this Section, at any time, there are visible emissions from more than ten percent (10%) of the door areas of the operating coke ovens in such battery, excluding the two door areas of the last oven charged and any door areas obstructed from view;~~
3. For any of the following batteries, at any time, there are visible emissions from more than eight percent (8.0%) of the door areas of the operating coke ovens in such battery, excluding the two door areas of the last oven charged and any door areas obstructed from view:

SPECIFIC COKE OVEN BATTERIES

	<u>Source Name</u>	<u>Location</u>
A.	Coke Battery #1	<u>U. S. Steel</u> USX Corp. Clairton, PA
B.	Coke Battery #2	<u>U. S. Steel</u> USX Corp. Clairton, PA
C.	Coke Battery #3	<u>U. S. Steel</u> USX Corp. Clairton, PA
D.	Coke Battery #7	USX Corp. Clairton, PA
E.	Coke Battery #8	USX Corp. Clairton, PA
F.	Coke Battery #9	USX Corp. Clairton, PA
<u>D G.</u>	Coke Battery #19	<u>U. S. Steel</u> USX Corp. Clairton, PA; or

4. **For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley Works Clairton Plant, emissions from the door areas of any coke oven exceed an opacity of 30% at any time 15 or more minutes after such oven has been charged;**
5. **Any batteries installed, replaced, or reconstructed, or at which a major modification was made on or after the effective date of this paragraph shall be subject to the applicable requirements under either Section 2102.06 (relating to installation permits for major sources locating in or impacting a nonattainment area) or Section 2102.07 (relating to installation permits for major sources locating in an attainment or unclassified area) of this Article;**
6. **For any batteries, other than those subject to Paragraphs b.4 or b.5 of this Section,** ~~E~~missions from the door areas of any coke oven exceed an opacity of 40% at any time 15 or more minutes after such oven has been charged.

57. Unless for any of the following batteries at the U. S. Steel USX Corporation Mon Valley Clairton Coke Works Clairton Plant, Clairton, Pennsylvania, there is installed big plug doors, **or better**, on the coke side of each oven by January 1, 2000. Any replacement doors on these batteries, replaced after January 1, 2000, will also be big plug doors. A big plug door is a door that, when installed, contains a plug with minimum dimensions as listed below:

SPECIFIC COKE OVEN BATTERIES

	<u>Source Name</u>	<u>Minimum Width</u>	<u>Minimum Depth</u>
A.	Coke Battery #1	18 1/4"	14 1/2"
B.	Coke Battery #2	18 1/4"	14 1/2"
C.	Coke Battery #3	18 1/4"	14 1/2"
D.	Coke Battery #7	17"	16 3/16"
E.	Coke Battery #8	17"	16 3/16"
F.	Coke Battery #9	17"	16 3/16"
<u>D. G.</u>	Coke Battery #19	17"	16 1/4"
<u>E. H.</u>	Coke Battery #20	17"	16 1/4"

8. Inspection Procedures.

- A. Compliance with the high opacity limitation as defined in Paragraphs b.4 through b.6 of this Section or source permit for a single door area is determined in accordance with the following method:**
- i. The observer shall place themselves no less than 25 feet from the face of the door in a location where their view of the door area is unobstructed;**
 - ii. The observer's position for high opacity door areas must meet the sun angle requirements of 40 C.F.R. Part 60, Appendix A, Method 9;**
 - iii. The observer shall record the maximum observed opacity of emissions emanating from a point above the top, or at the top of the door, but below the battery top, or at the top of any local door area emission control hood;**
 - iv. For determining compliance with Paragraphs b.4 and b.6, a 15 minute exclusion from the opacity limitation shall be allowed after such oven has been charged. The operator shall provide the observer with the time when the charging period ends on such oven. If the operator does not provide the time the charging period ends, the observer may presume that the 15 minute exclusion has expired at the start of the inspection of such oven;**

- v. The observer shall have a current certification as a qualified observer for EPA Method 9;
- vi. The observer shall, as much as possible, make observations from a position such that their line of vision is approximately perpendicular to the plume direction and a position which provides a clear view of emissions as long as the observation position complies with Section 2.1 of Method 9; and
- vii. Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Once the observer notices a potential high opacity door emission, the observer shall momentarily look away from the door emissions before conducting a high opacity door reading. The observer shall look no longer than a few continuous seconds at the plume. If more than a few seconds are needed, the observer shall momentarily look away to recalibrate their eyes before observing the plume again.

B. Compliance with the percent door area leakage standard as defined in Paragraphs b.1 through b.3 of this Section is determined in accordance with the following method:

- i. The intent of this procedure is to determine visible emissions from door areas by carefully observing the door area from a standard distance while walking at a normal pace;
- ii. The observer shall walk the length of the battery at a steady, normal walking pace sufficient to allow the inspector to observe any emissions from the door and differentiate any emissions from steam. The observer shall record the actual traverse time for the battery with a timepiece;
- iii. Each door area should be observed in sequence;
- iv. The observer shall place themselves no less than 25 feet from the face of the door unless readings are being conducted from the bench area in front of the doors;
- v. For purposes of determining compliance with this Subsection, “operating oven” means any oven which is not out of operation for purposes of a rebuild or attributable to maintenance sufficiently extensive so as to require the oven be skipped in the charging sequence;
- vi. Visible emissions from hot coke that has been spilled on the bench as a result of pushing shall not be recorded as a door area visible

emission;

- vii. If the observer’s view of a door area(s) is more than momentarily obstructed by, for example, door machinery, pushing machinery, coke guide, or opaque steam plumes, the observer shall record the oven number (s) or door area (s) obstructed and the nature of the obstruction and continue the observations with the next door area in sequence which is not obstructed;

- viii. The observer shall continue as per Subparagraphs B.i. through B.vii. above along the entire length of the battery for any battery side and shall record the battery identification, battery side, and oven door identification number of each door area exhibiting visible emissions. Before completing the traverse or immediately thereafter the observer shall attempt to re-observe the obstructed doors;

- ix. The Department shall determine the last oven charged based on the times provided by the operator. If the operator does not provide the times of the ovens charged, the observer shall indicate a “0” for the “number of door areas with visible emissions from the last oven charged” and a “1” for the “number of door areas from the last oven charged” for each inspected battery side for the formula in Subparagraph B.x or B.xi;

- x. For batteries that have sheds on the coke side that are used to control emissions during pushing or if it is unsafe to observe from the yard, the inspection should be conducted from the bench area in front of the doors. A bench correction factor shall be applied to the number of leaks observed from the bench areas to calculate a yard equivalent reading. The following formula shall be used to calculate the yard equivalent reading:

$$\text{Yard equivalent reading} = \left(\begin{array}{c} \text{Number of door areas} \\ \text{on operating ovens} \\ \text{with visible emissions} \\ \text{observed from the bench} - \\ \text{Number of door areas} \\ \text{with visible emissions} \\ \text{from the last oven charged} \end{array} \right) - \left(\left(\begin{array}{c} \text{Total number of} \\ \text{door areas observed} \\ \text{from the bench} - \\ \text{Number of door} \\ \text{areas from the} \\ \text{last oven charged} \end{array} \right) \times 0.06 \right)$$

- xi. Compliance shall be calculated by application of the following formula rounded to the nearest tenth of one percent. If a bench correction factor was applied under Subparagraph B.x, above, the yard-equivalent reading shall be included in the “number of door areas with visible emissions” in the formula below:

$$\text{Percent leaking} = \frac{\left(\begin{array}{l} \text{number of door areas with visible emissions} \\ \text{on operating ovens} - \text{number of obstructed} \\ \text{door areas with visible emissions} - \\ \text{number of door areas with visible emissions} \\ \text{from the last oven charged} \end{array} \right)}{\left(\begin{array}{l} \text{number of door areas on operating ovens} - \\ \text{number of obstructed door areas} - \\ \text{number of door areas from the last oven charged} \end{array} \right)} \times 100$$

xii. These procedures include some, but not all, aspects of EPA Method 303. In order to ensure a full understanding of the inspection procedures set forth in this Subsection, the observer shall also maintain current certification for Method 303 observations.

c. **Charging Ports.** No person shall operate, or allow to be operated:

1. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley Works Clairton Plant, in such manner that, at any time, there are visible emissions from more than 0.6% of the charging ports or charging port seals on the operating coke ovens of such battery, excluding any charging ports obstructed from view; or

~~2.~~ Any battery of coke ovens installed, replaced, or reconstructed, or at which a major modification was made ~~on or after~~ between the dates of January 1, 1978, and October 31, 2012, in such manner that, at any time, there are visible emissions from more than one percent (1,0%) of the charging ports or charging port seals on the operating coke ovens of such battery, excluding any charging ports obstructed from view; or

3. Any batteries installed, replaced, or reconstructed, or at which a major modification after the effective date of this paragraph shall be subject to the applicable requirements under either Section 2102.06 (relating to installation permits for major sources locating in or impacting a nonattainment area) or Section 2102.07 (relating to installation permits for major sources locating in an attainment or unclassified area) of this Article.

~~4.~~ Any ~~other~~ battery of coke ovens, other than those subject to Paragraphs c.1, c.2 or c.3 of this Section, in such manner that, at any time, there are visible emissions from more than two percent (2,0%) of the charging ports or charging port seals on the operating coke ovens of such battery, excluding any charging ports obstructed from view.

5. Inspection Procedures. The following inspection technique shall be utilized for determining compliance with the percent charging port leakage standard as defined in this Subsection:

- A. Observations of any visible emissions from charging ports or charging port seals, other than charging or pushing emissions, shall be made and recorded during the time an observer walks the topside of a battery from one end to the other, walking near the center of the battery but may deviate from this path to avoid visual interferences, safety hazards, and any other obstacles;**
- B. Each oven shall be observed in sequence during each of the traverses. The observer shall walk the length of the battery at a steady, normal walking pace sufficient to allow the inspector to observe any emissions from the charging ports or charging port seals and differentiate any emissions from steam and shall record the actual traverse time with an appropriate timepiece (note that charging ports from the last oven charged may be in the process of being sealed);**
- C. The observer shall record the battery and lid identification, the oven number, and whether an oven was dampered off or obstructed from view. The number of charging ports from dampered off ovens (not to exceed three ovens) will be excluded as described in the formula in Subparagraph F below;**
- D. For purposes of determining compliance with this Subsection, “operating oven” means any oven which is not out of operation for purposes of a rebuild or attributable to maintenance sufficiently extensive so as to require the oven be skipped in the charging sequences;**
- E. The observer shall not count the following as charging port or charging port seal visible emissions:**
- i. Visible emissions from between the brickwork and oven lid casing or visible emissions from cracks in the oven brickwork. The observer shall make an appropriate notation under “Comments”;**
 - ii. Visible emissions from charging ports involved in a charging operation. The observer shall record the oven number, and make an appropriate notation (e.g., not observed because ports open for charging) under “Comments”;**
 - iii. Charging ports having maintenance work done. The observer shall record the oven number and make an appropriate notation under “Comments”;**
 - iv. Condensing water from wet-sealing material; and**
 - v. Visible emissions from the flue inspection ports and caps.**
- F. Compliance is determined by application of the following formula rounded to the nearest tenth of one percent; and**

$$\text{Percent leaking} = \frac{\left(\begin{array}{l} \text{number of charging ports with visible} \\ \text{emissions on operating ovens} - \\ \text{number of charging ports with visible emissions} \\ \text{from charging ports obstructed from view} - \\ \text{number of charging ports with visible emissions on} \\ \text{dampered off ovens, not to exceed three ovens} \end{array} \right)}{\left(\begin{array}{l} \text{number of charging ports on operating ovens} - \\ \text{number of charging ports obstructed from view} - \\ \text{number of charging ports on dampered off} \\ \text{ovens, not to exceed three ovens} \end{array} \right)} \times 100$$

G. These procedures include some, but not all, aspects of EPA Method 303. In order to ensure a full understanding of the inspection procedures set forth in this Subsection, the observer shall also maintain current certification for Method 303 observations.

d. **Offtake Piping.** No person shall operate, or allow to be operated:

1. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley Works Clairton Plant, in such manner that, at any time, there are visible emissions from more than three percent (3.0%) of the offtake piping on the operating coke ovens of such battery, excluding any offtake piping obstructed from view;

~~2.~~ Any battery of coke ovens installed, replaced, or reconstructed, or at which a major modification was made ~~on or after~~ **between the dates of** January 1, 1978, **and October 31, 2012,** in such manner that, at any time, there are visible emissions from more than four percent (4.0%) of the offtake piping on the operating coke ovens of such battery, **excluding any offtake piping obstructed from view;**

3. Any batteries installed, replaced, or reconstructed, or at which a major modification was made on or after the effective date of this paragraph shall be subject to the applicable requirements under either Section 2102.06 (relating to installation permits for major sources locating in or impacting a nonattainment area) or Section 2102.07 (relating to installation permits for major sources locating in an attainment or unclassified area) of this Article; or

~~4.~~ Any ~~other~~ battery of coke ovens, **other than those subject to Paragraphs d.1, d.2 or d.3 of this Section,** in such manner that, at any time, there are visible emissions from more than five percent (5.0%) of the offtake piping on the operating coke ovens of such battery, **excluding any offtake piping obstructed from view.**

5. Inspection Procedures. The following inspection technique shall be utilized for determining compliance with the percent offtake piping leakage standard as defined in this Subsection:

A. Observations of any visible emissions from the offtake piping shall be made by traversing the topside of the battery near the center of the

battery, but may deviate from this path to avoid visual interferences, safety hazards, and any other obstacles;

- B. During the traverse, the observer may deviate from near the center of the battery and walk as close, or far as possible to the offtake piping to determine whether an observed emission is emanating from the offtake piping. In addition to items specifically listed in the definition for offtake piping in §2101.20 of this Article, the damper used for isolating the oven from the collecting main is also part of the offtake piping;
- C. The observer shall traverse the battery once per each collector main. Therefore, to observe a battery with two collector mains, one observer may traverse the battery in one direction for one offtake system and traverse the battery in one direction for the second offtake system or two observers can traverse the battery in one direction;
- D. Each oven should be observed in sequence. The observer shall walk the length of the battery at a steady, normal walking pace sufficient to allow the inspector to observe any emissions from the offtake piping and differentiate any emissions from steam and shall record the actual traverse time with an appropriate timepiece;
- E. The observer shall record the battery identification, side of the oven, the oven number for all offtake piping visible emissions and whether an oven was dampered off or obstructed from view. The number of offtake piping from dampered off ovens (not to exceed three ovens) will be excluded as described in the formula in Subparagraph I below;
- F. If any part or parts of offtake piping has or have visible emissions, the observer shall count it as one emitting offtake piping;
- G. Offtake piping with open standpipes for decarbonization or closed and sealed standpipes on such oven being charged would be counted as offtake piping obstructed from view in the formula in Subparagraph I below. Offtake piping with open standpipes on such oven being charged would count as charging emissions. All visible emissions from closed standpipe caps, excluding such oven being charged, count as offtake piping leaks;
- H. For purposes of determining compliance with this Subsection, “operating oven” means any oven which is not out of operation for purposes of a rebuild or attributable to maintenance sufficiently extensive so as to require the oven be skipped in the charging sequence;
- I. Compliance is determined by application of the following formula rounded to the nearest tenth of one percent; and

$$\text{Percent leaking} = \frac{\text{number of offtake piping with visible emissions on operating ovens} - \text{number of offtake piping with visible emissions from offtake piping obstructed from view} - \text{number of offtake piping with visible emissions on dampered off ovens, not to exceed three ovens}}{\left(\text{number of offtake piping on operating ovens} - \text{number of offtake piping obstructed from view} - \text{number of offtake piping on dampered off ovens, not to exceed three ovens} \right)} \times 100$$

J. These procedures include some, but not all, aspects of EPA Method 303. In order to ensure a full understanding of the inspection procedures set forth in this Subsection, the observer shall also maintain current certification for Method 303 observations.

- e. **Pushing.** No person shall operate, or allow to be operated, any battery of coke ovens unless there is installed on such battery a pushing emission control device which is designed to reduce fugitive emissions from pushing to the minimum attainable through the use of BACT, ~~nor shall any person operate, or allow to be operated any battery of coke ovens in such manner that:~~

No person may permit the pushing of coke from a coke oven unless the pushing operation is enclosed during the removal of coke from a coke oven and pushing emissions are contained, except for the fugitive pushing emissions, that are allowed by Paragraphs 4 and 5 of this Subsection nor shall any person operate, or allow to be operated any battery of coke ovens in such manner that:

1. At any time, the particulate mass emission rate from the pushing emission control device, for any battery other than those subject to Paragraph e.2 or e.3 of this Section, exceeds a rate determined by an outlet concentration of 0.020 grains per dry standard cubic foot, or the rate determined by the following formula, whichever is greater:

$A = 0.76W^{0.42}$ where A = allowable mass emission rate in pounds per hour per battery, and
W = actual coke pushing rate in tons of coke per hour per battery;

2. At any time, the particulate mass emission rate from the pushing emission control device, for any of the following batteries, exceeds a rate determined by an outlet concentration of 0.010 grains per dry standard cubic foot:

SPECIFIC COKE OVEN BATTERIES

<u>Source Name</u>	<u>Location</u>
A. Coke Battery #1	<u>U. S. Steel</u> USX Corp. Clairton, PA
B. Coke Battery #2	<u>U. S. Steel</u> USX Corp. Clairton, PA
C. Coke Battery #3	<u>U. S. Steel</u> USX Corp. Clairton, PA
D. Coke Battery #7	USX Corp. Clairton, PA
E. Coke Battery #8	USX Corp. Clairton, PA
F. Coke Battery #9	USX Corp. Clairton, PA
<u>D. G.</u> Coke Battery #19	<u>U. S. Steel</u> USX Corp. Clairton, PA
H. Coke Battery #1	Shenango Inc Neville PA

3. At any time, the particulate mass emission rate from the pushing emission control device, for any of the following batteries Coke Oven Battery B at the U. S. Steel Corporation Mon Valley Works Clairton Plant, exceeds a rate determined by an outlet concentration of 0.040 pounds per ton of coke:

SPECIFIC COKE OVEN BATTERIES

<u>Source Name</u>	<u>Location</u>
A. Coke Battery #13	USX Corp. Clairton, PA
B. Coke Battery #14	USX Corp. Clairton, PA
C. Coke Battery #15	USX Corp. Clairton, PA
D. Coke Battery #20	USX Corp. Clairton, PA
E. Coke Battery B	USX Corp. Clairton, PA

4. Fugitive pushing emissions or emissions from the pushing emission control device outlet equal or exceed an opacity of 20% at any time, except if the Department determines in writing, upon written application from the person responsible for the coke ovens setting forth all information needed to make such determination, that such emissions are of only minor significance with respect to causing air pollution and do not prevent or interfere with the attainment or maintenance of any ambient air

quality standard (any such determination shall be submitted as a proposed revision to Allegheny County's portion of the SIP);

5. Visible emissions from the transport of hot coke in the open atmosphere exceed ten percent (10%) opacity at any time; or
6. For any of the following batteries, at any time, the hot coke fails to be held under the hood of the pushing emission control (PEC) device for at least 67 seconds immediately after the pusher ram begins to move and the damper to the PEC device is opened or for at least 15 seconds immediately following the fall of the last of the coke into the hot car, whichever is longer:

SPECIFIC COKE OVEN BATTERIES

<u>Source Name</u>	<u>Location</u>
A. Coke Battery #1	<u>U. S. Steel</u> USX Corp. Clairton, PA
B. Coke Battery #2	<u>U. S. Steel</u> USX Corp. Clairton, PA
C. Coke Battery #3	<u>U. S. Steel</u> USX Corp. Clairton, PA
D. Coke Battery #7	USX Corp. Clairton, PA
E. Coke Battery #8	USX Corp. Clairton, PA
F. Coke Battery #9	USX Corp. Clairton, PA
<u>D. G.</u> Coke Battery #13	<u>U. S. Steel</u> USX Corp. Clairton, PA
<u>E. H.</u> Coke Battery #14	<u>U. S. Steel</u> USX Corp. Clairton, PA
<u>F. I.</u> Coke Battery #15	<u>U. S. Steel</u> USX Corp. Clairton, PA
<u>G. J.</u> Coke Battery #19	<u>U. S. Steel</u> USX Corp. Clairton, PA
<u>H. K.</u> Coke Battery #20	<u>U. S. Steel</u> USX Corp. Clairton, PA

except that this Paragraph shall only be effective during the period from 30 days following the issuance of a written notice by the Department to the owner or operator of such battery that EPA has required the implementation of the contingency measures under the portion of the PM-10 SIP for the Liberty Borough/Clairton area, until issuance of a written notice by the Department that such measures are no longer required.

7. Inspection Procedures. Compliance with the visible emission standards for pushing under this Subsection shall be determined in accordance with the following methods:

- A. Visible emission observers shall be certified in accordance with the procedures specified in 40 C.F.R. Part 60, Appendix A, Method 9;**
- B. In making pushing observations the observer shall be positioned in accordance with the provisions of Section 2.1 of Method 9;**
- C. The provisions of Section 2.2 of Method 9 shall apply based on the**

observer's initial position and the pushing emissions field data sheets shall include all of the items in Section 2.2 of Method 9;

D. The provisions of Section 2.3 of Method 9 do not apply in that observers are not required to take readings at fifteen second intervals. The observer shall look no longer than a few continuous seconds at the plume. If more than a few seconds is needed, the observer shall momentarily look away to recalibrate their eyes before observing the plume again;

E. The provisions of Sections 2.4 and 2.5 of Method 9 do not apply except that opacity observations shall be recorded to the nearest 5 percent;

F. In viewing the pushing operation, the observer shall stand on the coke side of the battery where a clear view of the push can be obtained. This generally should be a location on the ground, in the coke side yard, outside the hot car tracks approximately perpendicular to the observed oven. However, the observer is not restricted to the ground level, but may make observation from an elevated level as long as the observation position complies with Section 2.1 of Method 9. The reader may change locations during a single oven reading but shall not take readings while in transit;

G. During the pushing operation, the reader shall observe all the pushing emissions. Pushing operation, as defined in §2101.20 of this Article, begins when the coke side door is first removed from a coke oven and continuing until the quenching operation is commenced. Pushing emissions include all fugitive emissions leaving an oven during a push, emissions from the pushing emission control device outlet and, evaluated separately, emissions from open quench cars during the transport of hot coke in the open atmosphere;

H. Except as provided in Subparagraph I below, compliance is determined by observing any visible emissions with opacity equal to or greater than the opacity limit defined in §2105.21.e.4 or applicable source permit, as determined against any contrasting background. The reader shall independently observe emissions from the pushing emission control device gas cleaning outlet and fugitive emissions from the pushing operation; and

I. Pushing emissions during the transport of hot coke in the open atmosphere to the quench tower shall be evaluated separately. In this case, the reader shall be positioned in accordance with Subparagraphs B and F above using the opacity limit defined in §2105.21.e.5 or applicable source permit.

f. **Combustion Stacks.** No person shall operate, or allow to be operated, any battery of coke ovens in such manner that, at any time, emissions from the combustion stack serving such

battery:

- 1. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley Works Clairton Plant, exceed a total particulate concentration of 0.010 grains per dry standard cubic foot;**
- ~~2.~~ For any battery of coke ovens installed, replaced, or reconstructed, or at which a major modification was ~~on or after~~ **between the dates of** January 1, 1978, **and October 31, 2012,** exceed a **total** particulate concentration of 0.015 grains per dry standard cubic foot;
- 3. Any batteries installed, replaced, or reconstructed, or at which a major modification was made on or after the effective date of this paragraph shall be subject to the applicable requirements under either Section 2102.06 (relating to installation permits for major sources locating in or impacting a nonattainment area) or Section 2102.07 (relating to installation permits for major sources locating in an attainment or unclassified area) of this Article.**
- ~~24.~~ For any battery other than those subject to Paragraphs f.1, f.2 or f.3 of this Section, exceed a particulate concentration of 0.030 grains per dry standard cubic foot;
- ~~35.~~ Equal or exceed an opacity of 20% for a period or periods aggregating in excess of three (3) minutes in any 60 minute period; or
- ~~46.~~ Equal or exceed an opacity of 60% at any time.
- 7. Measurements of opacity **visible emissions** shall be performed according to the methods for visible emissions established by §2107.11 of this Article. **in either of the following two ways:****
 - A. Using any continuous opacity monitoring system (COMS) required by regulation, permit, consent agreement, consent decree, or enforcement order. Chapter 2 of the Allegheny County Source Testing Manual, entitled “Continuous Emission Monitoring,” provides requirements for certification and ongoing verification of continuous opacity monitoring systems; or**
 - B. In determining compliance with the visible emission standards, 40 C.F.R. Part 60, Appendix A, Method 9, shall be used except that the provisions of Section 2.5 of Method 9 do not apply. Rather than applying the provisions of Section 2.5 of Method 9, each observation that is recorded to be equal to or greater than the opacity standard in §2104.01.a.1 or applicable source permit shall be counted in determining the hourly aggregated period.**

- g. **Quenching.** No person shall quench, or allow the quenching of, coke unless the emissions from such quenching are vented through a baffled quench tower and the water used for such quenching **meets the requirements of 40 CFR 63 Subpart CCCCC. Make-up water for quenching shall be** equivalent to, or better than, the water quality standards established for the nearest stream or river by regulations promulgated by the DEP under the Pennsylvania Clean Streams Law, Act of June 22, 1937, PL. 1987, as amended, 35 P.S. 691.1 et seq., except that water from the nearest stream or river may be used for **make-up water for** the quenching of coke. The nearest stream or river to the **U. S. Steel USX Corporation Mon Valley Works Clairton Plant** facility in Clairton, PA, shall be the Monongahela River. **Measurements of water quality shall be performed according to procedures established or approved by the Commonwealth.**
- h. **Coke oven gas.** Except as provided for in this Section, no person shall operate, or allow to be operated, any source in such manner that unburned coke oven gas is emitted into the open air. In addition, no person shall flare, mix, or combust coke oven gas, or allow such gas to be flared, mixed, or combusted, unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to the following concentrations:
1. Where the rated production capacity of the coke plant producing such gas is less than 70 million standard cubic feet of coke oven gas per day, a concentration of 70 grains per hundred dry standard cubic feet of coke oven gas or the concentration determined by the following formula whichever is less:

$$A = 156E^{-0.27}$$
 where A = allowable hydrogen sulfide content in grains per hundred dry standard cubic feet of coke oven gas, and
 E = maximum coke oven gas production rate in millions of cubic feet per day;
 2. For all coke batteries installed, replaced, or reconstructed, or at which a major modification was made on or after January 1, 1978, where the rated production capacity of the coke plant producing such gas is equal to or more than 70 million standard cubic feet of coke oven gas per day, ~~other than those subject to Paragraph h.3 of this Section,~~ a concentration of ten **(10)** grains per hundred dry **standard** cubic feet of coke oven gas;
 3. ~~For the following battery, on and before December 31, 1996, a concentration of 45 grains per hundred dry cubic feet of coke oven gas, and after December 31, 1996, a concentration of 34 grains per hundred dry cubic feet of coke oven gas:~~

~~SPECIFIC COKE OVEN BATTERIES~~

Source Name	Location
A. Coke Battery #1	Shenango Inc Neville PA

The standard set forth in Paragraph h.2 of this Section for the following coke oven batteries designated 13, 14, 15, 20, and B at the U. S. Steel ~~USX~~ Corporation Mon Valley Works Clairton Plant ~~Works~~ shall be deemed satisfied for such batteries if the coke oven gas from the following batteries and treated by the Clairton Plant ~~Works~~ coke oven gas desulfurization system in existence as of June 24, 1993, has a sulfur compound concentration, measured as H₂S, of no greater than ~~35~~ 40 grains per hundred dry standard cubic feet of coke oven gas produced by the Clairton Works, when all sulfur emissions from its Claus Sulfur Recovery Plant and the tail gas cleaning equipment thereon, expressed as equivalent H₂S, are added to the measured H₂S.

SPECIFIC COKE OVEN BATTERIES

<u>Source Name</u>	<u>Location</u>
A. Coke Battery #1	<u>U. S. Steel</u> USX Corp. Clairton, PA
B. Coke Battery #2	<u>U. S. Steel</u> USX Corp. Clairton, PA
C. Coke Battery #3	<u>U. S. Steel</u> USX Corp. Clairton, PA
D. Coke Battery #7	USX Corp. Clairton, PA
E. Coke Battery #8	USX Corp. Clairton, PA
F. Coke Battery #9	USX Corp. Clairton, PA
<u>D. G.</u> Coke Battery #13	<u>U. S. Steel</u> USX Corp. Clairton, PA
<u>E. H.</u> Coke Battery #14	<u>U. S. Steel</u> USX Corp. Clairton, PA
<u>F. I.</u> Coke Battery #15	<u>U. S. Steel</u> USX Corp. Clairton, PA
<u>G. J.</u> Coke Battery #19	<u>U. S. Steel</u> USX Corp. Clairton, PA
<u>H. K.</u> Coke Battery #20	<u>U. S. Steel</u> USX Corp. Clairton, PA
<u>I. L.</u> Coke Battery B	<u>U. S. Steel</u> USX Corp. Clairton, PA

- ~~4~~ 5. For all other coke batteries, where the rated production capacity of the coke plant producing such gas is equal to or more than 70 million standard cubic feet of coke oven gas per day, other than those subject to Paragraph h.2 ~~or h.3~~ of this Section, a concentration of fifty (50) grains per hundred dry standard cubic feet of coke oven gas.

The concentration of sulfur compounds specified by this Subsection shall include tail-gas sulfur, measured as hydrogen sulfide, emitted from sulfur removal equipment.

- i. Soaking. No person shall operate, or allow to be operated, any battery of coke ovens in such manner that:
1. For Coke Oven Battery C at the U. S. Steel Corporation Mon Valley Works Clairton Plant, at no time shall soaking emissions from a standpipe cap opening exceed ten percent (10%) opacity.

- 2. Any batteries installed, replaced, or reconstructed, or at which a major modification was made on or after the effective date of this paragraph, shall be subject to the applicable requirements under either Section 2102.06 (relating to installation permits for major sources locating in or impacting a nonattainment area) or Section 2102.07 (relating to installation permits for major sources locating in an attainment or unclassified area) of this Article.**
- 3. For any batteries, other than those subject to Paragraphs i.1 or i.2 of this Section, At no time shall soaking emissions from a standpipe cap opening exceed twenty percent (20%) opacity.**

An exclusion from ~~this~~ **the** opacity limits **of Paragraphs i.1 and i.3** shall be allowed for two (2) minutes after a standpipe cap is opened. ~~Compliance with this standard shall be determined through observing the standpipe from a position where the observer can note the time the oven is dampered off and, following the two minute exclusion, read the soaking emissions from the open standpipe in accordance with Method 9.~~ **During the two (2) minute exclusion, all air pollution control equipment and control techniques shall be operated consistent with good air pollution control practices. For purposes of this Subsection, good air pollution control practices may include, but are not limited to, lighting or attempting to light the standpipe immediately following the opening of the standpipe.**

- 4. Inspection Procedures. Compliance with the visible emission standard for soaking shall be determined in accordance with the following method:**
- A. The observer records the time the standpipe cap is initially opened or observed open and note if the observer did not observe the opening of the standpipe cap;**
 - B. The observer shall read the soaking emissions from the open standpipe in accordance with 40 C.F.R. Part 60, Appendix A, Method 9;**
 - C. The observer continues to conduct readings per Method 9 except the provisions of Method 9 Sections 2.4 and 2.5 shall not apply in that observers need not record a minimum of 24 observations; and**
 - D. For determining compliance with this Subsection, a two (2) minute exclusion from the opacity limit shall be allowed after the time the standpipe cap is initially opened. If the observer did not observe the opening of the standpipe cap, the observer may presume that the standpipe cap has been open for more than two (2) minutes unless the operator provides the time the standpipe cap was opened.**

j. Miscellaneous Topside Emissions

- 1. At no time may there be topside emissions from any point on the topside other than allowed emissions from charging port seals under Subsection c, offtake piping under Subsection d and soaking under Subsection i.**
- 2. At no time may there be visible emissions from the coke oven gas collector main.**

1.B

§2109.01 INSPECTIONS

{Subsection d added by May 7, 1998 amendment, effective May 15, 1998. Subsection e added mm/dd/2022, effective mm/dd/2022.}

...

- e. During an inspection by the Department, a source shall operate in a manner consistent with its normal air pollution control practices unless an alternative method or procedure is requested by the Department or if necessary for the protection of worker or public safety. It shall be a violation of this Article for any person to alter or modify a source's normal air pollution control practices during a Department inspection for the purpose of improving compliance with the requirements under this Article or any Department permit. Any person who deviates from a source's normal air pollution control practices during a Department inspection shall have the burden of demonstrating why the alternative or modified practices were required.**

2.

Technical Support Document

Coke Ovens and Coke Oven Gas

This submittal affects the Allegheny County Health Department Air Pollution Control Regulations, Article XXI, related to coke ovens and coke oven gas.

The current regulations set forth in Article XXI, Section 2105.21, address the emissions standards for coke ovens and coke oven gas, while the test methods and inspection procedures for coke ovens are provided in the ACHD's Source Testing Manual. As part of a 2019 settlement agreement with U.S. Steel Corporation relating to violations at its coke oven batteries, the ACHD agreed to amend Article XXI to include the test methods and inspection procedures for coke ovens in the Section 2105.21 regulations. Accordingly, the ACHD Air Quality Program is proposing to amend its regulations to include the test methods and inspection procedures that are appropriate for determining compliance with the ACHD's coke oven standards in Article XXI, § 2105.21.

The ACHD Air Quality Program is also proposing to amend its regulations based on issues of stringency with federal and Pennsylvania regulations. The Pennsylvania Air Pollution Control Act states that the ACHD may enact "ordinances with respect to air pollution which will not be less stringent than the provisions of this act, the Clean Air Act or the rules and regulations promulgated under either this act or the Clean Air Act." 35 P.S. § 4012(a). During this regulatory review process, the ACHD determined that there were provisions in the Article XXI regulations pertaining to coke ovens and coke oven gas which were less stringent than the regulations promulgated under the Clean Air Act and Pennsylvania Air Pollution Control Act. As a result, the ACHD Air Quality Program is proposing to amend the applicable provisions to be at least as stringent as the Pennsylvania and federal regulations.

Finally, the ACHD Air Quality Program is proposing to amend its regulations relating to coke ovens and coke oven gas to clarify regulatory language.

The following portions of Article XXI will be submitted as a SIP Revision:

§2101.20 ("Definitions")
§2105.21.a-h, j ("Coke Ovens and Coke Oven Gas")

The following portion of Article XXI will not be submitted as a SIP Revision:

§2105.21.i ("Coke Ovens and Coke Oven Gas")

The following table provides further explanation for the proposed amendments to Article XXI, Sections 2101.20 and 2105.21:

Section*	Explanation for Change
<p>§2101.20 (Definition of “Charging emissions”)</p>	<p>The Pennsylvania Air Pollution Control Act states that the ACHD may enact “ordinances with respect to air pollution which will not be <u>less stringent</u> than the provisions of this act, the Clean Air Act or the rules and regulations promulgated under either this act or the Clean Air Act.” 35 P.S. § 4012(a). The U.S. Environmental Protection Agency’s regulations on visible emissions from by-product coke oven batteries states in a note that “[visible emissions] from open standpipes of an oven being charged count as charging emissions.” 40 C.F.R. Part 63, Appendix A, Method 303, Section 11.1.4. The ACHD determined that its definition of “charging emissions” is “less stringent” because it does not include the language in the federal regulation. Therefore, the ACHD is proposing to amend the definition for “Charging emissions” to include the language “open standpipes of the oven being charge[d].”</p>
<p>§2101.20 (Definition of “Pushing operation”)</p>	<p>As discussed above, the ACHD regulations cannot be “less stringent” than the regulations promulgated under the Pennsylvania Air Pollution Control Act. 35 P.S. § 4012(a). The Pennsylvania “Air Resources” regulations provide that “pushing operations” begin “when the coke side door is first removed from a coke oven.” 25 Pa. Code § 121.1. Under the current Article XXI regulation, for coke oven batteries 13, 14, 15, 20, and B at the U.S. Steel Corporation Mon Valley Works Clairton Plant, the push does not start until after the coke side door is first removed <u>and</u> the coke mass starts to move. For these batteries, the emissions between the time the coke side door is first removed and when the coke mass starts to move is not included in determining compliance with the pushing emissions standard. Because the ACHD regulation is less stringent, the ACHD is proposing to amend the definition of “Pushing” so that it is identical to the definition of “Pushing operation” in the Pennsylvania “Air Resources” regulations. 25 Pa. Code § 121.1.</p>
<p>§2101.20 (Definition of “Pushing emissions”)</p>	<p>The ACHD added a definition of “Pushing emissions.” This definition is identical to the definition of “Pushing emissions” in the Pennsylvania “Air Resources” regulations. 25 Pa. Code § 121.1.</p>
<p>§2101.20 (Definition of “Soaking emissions”)</p>	<p>ACHD is proposing to delete the words, “i.e., when the coke side door is removed” since that portion of the definition is addressed in the definition of “pushing operation.”</p>
<p>§2105.21.a.1-2</p>	<p>The ACHD is proposing to add the language “or fewer” to these sections. Currently, the ACHD inspectors are required to observe all 4 or 5 consecutive charges even if there is an exceedance of the coke oven charging standards after less than 4 or 5 charges. The proposed change will allow the inspectors to stop observations and proceed with another inspection when the number of seconds of charging emissions observed exceeds the coke oven charging standard.</p>
<p>§2105.21.a.3; §2105.21.b.8; §2105.21.c.5; §2105.21.d.5;</p>	<p>Currently, the test methods for the inspection of coke oven batteries is set forth in the ACHD’s Source Testing Manual. The Settlement Agreement and Order dated June 27, 2019 between the ACHD and U.S. Steel Corp. provides that the ACHD will promulgate regulations to include the test methods for coke batteries in Article XXI.</p>

§2105.21.e.7; §2105.21.i.4	The proposed regulations are amended to include the test methods and inspection procedures that are appropriate for determining compliance with the ACHD’s coke oven standards in Article XXI, § 2105.21.
§2105.21.b.1; §2105.21.b.4; §2105.21.c.1; §2105.21.d.1; §2105.21.f.1; §2105.21.i.1	In 2012, U.S. Steel Corp. installed Coke Oven Battery C. The ACHD is amending the regulations to incorporate the requirements set forth in the installation permit for Battery C. The following is a reference to the applicable sections of the installation permit and the corresponding sections of the regulations: §2105.21.b.1 (IP-11 § V.A.1.c); §2105.21.b.4 (IP-11 § V.A.1.d); §2105.21.c.1 (IP-11 § V.A.1.e); §2105.21.d.1 (IP-11 § V.A.1.f); §2105.21.f.1 (IP-11 § V.A.1.i.1); §2105.21.i.1 (IP-11 § V.A.1.g)
§2105.21.b.2; §2105.21.c.2; §2105.21.d.2; §2105.21.f.2;	Article XXI, § 2105.21, currently includes standards for batteries installed, replaced, or reconstructed, or at which a major modification was made on or after January 1, 1978. These standards were considered the Lowest Achievable Emission Rate (LAER) for coke batteries at the time the regulations were promulgated. On November 1, 2012, U.S. Steel’s Battery C was put into operation. During the permitting process, the ACHD determined that LAER for Battery C was lower than what is currently set forth in the regulations. The ACHD is proposing to amend the regulations to indicate that standards previously considered LAER only apply to batteries installed, replaced, or reconstructed, or at which a major modification was made between the dates of January 1, 1978, and October 31, 2012 (i.e., the day prior to when Battery C began operations).
§2105.21.b.5; §2105.21.c.3; §2105.21.d.3; §2105.21.f.3; §2105.21.i.2	As discussed above, the ACHD is amending the regulations to indicate that standards previously considered LAER only applies to batteries installed, replaced, or reconstructed, or at which a major modification was made between the dates of January 1, 1978, and October 31, 2012. The ACHD is also proposing to include language to address the standards for any batteries installed, replaced, or reconstructed, or at which a major modification on or after the effective date of the current proposed regulations. These batteries will be required to meet either Best Available Control Technology (BACT) (for sources is located in an attainment or unclassified area) or LAER (for sources is located in a nonattainment area).
§2105.21.b.1, b.2, b.3; §2105.21.c.2, c.4; §2105.21.d.1, d.2, d.4	The ACHD provides a standard for visible emissions for the door areas, charging ports, and offtake piping sections. In order to clarify the noncompliance limit under these standards, the ACHD is proposing to amend the regulations to specify that the standards are to the tenth decimal point (“0”).
§2105.21.b – (current Paragraph b.2)	The ACHD is deleting this language because the standard no longer applies to any operating batteries in Allegheny County.
§2105.21.b.3.D- F, b.7.D-F; §2105.21.e.2.D- F, e.6.D-F	The ACHD is deleting the references to Coke Battery Nos. 7, 8 and 9 because the batteries are no longer in operation.
Numerous sections	The regulations identified the batteries as the “USX Clairton Coke Works, Clairton, Pennsylvania.” This language was changed to “U.S. Steel Corporation Mon Valley Works Clairton Plant.” The ACHD is also replacing “USX” with “U.S. Steel.”
§2105.21.e	The Pennsylvania Air Pollution Control Act states that the ACHD may enact

	<p>“ordinances with respect to air pollution which will not be less stringent than the provisions of this act, the Clean Air Act or the rules and regulations promulgated under either this act or the Clean Air Act.” 35 P.S. § 4012(a). Section 129.15 (“Coke pushing operations”) of the Pennsylvania “Air Resources” regulations states: “No person may permit the pushing of coke from a coke oven unless the pushing operation is enclosed during the removal of coke from a coke oven and pushing emissions are contained, except for the fugitive pushing emissions, that are allowed by subsections (c) and (e).” 25 Pa. Code 129.15(a). The ACHD’s current regulations for pushing do not include this requirement. In order to avoid being less stringent than the Pennsylvania regulations, that ACHD is proposing to add this language to its regulations.</p>
<p>§2105.21.e.2.H; §2105.21.h (current h.3)</p>	<p>The ACHD is deleting the references to the coke battery at Shenango Inc. because the facility is no longer in operation.</p>
<p>§2105.21.e.3</p>	<p>After reviewing the permits for the coke batteries identified in §2105.21.e.3, the ACHD determined that only Battery B is required to meet the particulate mass emission rate set forth in this Paragraph. The ACHD deleted the other coke batteries listed.</p>
<p>§2105.21.f.7</p>	<p>The current version of the regulations for combustion stacks provides that the measurement for opacity shall be performed according to the methods in Article XXI, § 2107.11. Section 2107.11 required that for measuring visible emissions, the source must follow the methods in the Allegheny County Source Testing Manual or continuous opacity monitoring system. In order to clarify the regulations, the ACHD moved the methods set forth in Section 2107.11 and the Allegheny County Source Testing Manual into Section 2105.21.f.7.</p>
<p>§2105.21.g</p>	<p>Article XXI, § 2107.07, pertains to test methods for coke oven emissions and includes the following requirement with regard to coke ovens: “Measurements of water quality shall be performed according to procedures established or approved by the Commonwealth.” The ACHD is deleting Section 2107.07 and is proposing to move the quoted language to Section 2105.21.g.</p>
<p>§2105.21.h.3</p>	<p>The coke oven gas concentration is being revised from 40 grains per hundred dry standard cubic feet of coke oven gas to 35 grains. The 40 grains standard was promulgated prior to the installation of Battery C. During the permitting process for the installation of Battery C, the grains standard was reduced to 35 grains based on Battery C being required to meet the 10 grains standard for LAER. (IP #0052-I011, Condition V.A.1.j).</p>
<p>§2105.21.i.3</p>	<p>The ACHD regulations allow for a two minute exclusion from the opacity limit for soaking emissions. Article XXI, § 2105.03, and Condition IV.4 of U.S. Steel Clairton Plant’s Operating Permit requires that all air pollution control equipment be properly installed, maintained, and operated consistent with good air pollution control practice. The ACHD is proposing to add language based on this requirement which provides that during the two minute exclusion, all air pollution control equipment and control techniques shall be operated consistent with good air pollution control practices. The proposed regulation further clarifies that good air pollution control practices may include, but are not limited to, lighting or attempting to light the standpipe immediately following the opening of the standpipe.</p>
<p>§2105.21.j</p>	<p>The ACHD is proposing adding a new section titled “Miscellaneous Topside</p>

	Emissions.” The requirements under this section are from the Pennsylvania “Air Resources” regulations, 25 Pa. Code §123.44(a)(6),(7). The ACHD is required to include these requirements so that the Article XXI regulations are not less stringent than the Pennsylvania regulations. 35 P.S. § 4012(a).
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* Unless otherwise indicated, the citations to the Article XXI regulations under the “Section” column are for the proposed amended sections of the regulations and are not the citations to the current version of the regulations.

Inspections

This portion of the submittal affects the ACHD Air Pollution Control Regulations, Article XXI, related to inspections by the ACHD Air Quality Program.

The ACHD Air Quality Program is proposing to amend its regulations to include requirements that during an inspection, a source is required to operate in a manner consistent with its normal air pollution control practices. The regulation provides that it is a violation for any person to alter or modify a source’s normal air pollution control practices during an ACHD inspection for the purpose of improving compliance with the requirements under Article XXI or any ACHD permit.

§2109.01, “Inspections,” Subsection “e” will be submitted as a SIP Revision.

3.

Documentation of Public Hearing and Certifications

Notice of Public Hearing
Transmittals of hearing notice to EPA & PA DEP
Proof of publication of notice of hearing
Certification of hearing
Summary of Comments and responses
Certification of approval and adoption (later)

**NOTICE OF PUBLIC HEARING AND PUBLIC COMMENT PERIOD
FOR PROPOSED AMENDMENTS TO
ALLEGHENY COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS
ARTICLE XXI, AIR POLLUTION CONTROL**

The Allegheny County Board of Health will hold a public hearing on Wednesday, May 11, 2022, at 6:00 PM at the Clairton Municipal Building, 551 Ravensburg Boulevard, Clairton PA, 15025 to take testimony on proposed modifications to Allegheny County Health Department Article XXI, along with the corresponding sections of County Ordinance 16782, that will revise:

- §2105.21, “Coke Ovens and Coke Oven Gas” and related portions of §2101.20, “Definitions;” and
- §2109.01, “Inspections”

Portion of these changes will be submitted as revisions to Allegheny County’s portion of the Pennsylvania State Implementation Plan as delineated in the associated Technical Support Document.

The proposed SIP revisions are available on the Allegheny County Health Department (ACHD) Air Quality web site at www.alleghenycounty.us/regs-sips. Written copies may be obtained by calling 412-578-8103.

- Persons wishing to present testimony at the hearing must register by going to the ACHD’s Air Quality website at www.alleghenycounty.us/regs-sips. Persons who do not have access to the internet may register by calling 412-578-8103.
- You must register to present testimony no less than 24 hours in advance of the hearing.
- Testimony is limited to 3 minutes. Witnesses are requested to submit written copies of the testimony by email to aqcomments@alleghenycounty.us.

The Board will also accept written comments, beginning on Friday, March 18, 2022, and concluding at 4:00 PM on Tuesday, May 17, 2022, by mail to ACHD Air Program, 301 39th Street, Bldg. 7, Pittsburgh, PA 15201-1811, or by email to aqcomments@alleghenycounty.us.

Please call 412-578-8103, if you have any questions or if you have any difficulty registering for the hearing.

FW: Formal Notice of Allegheny County Health Department hearing on proposed SIP change for Coke Ovens and Coke Oven Gas rules

Lattner, Tom <Tom.Lattner@AlleghenyCounty.US>

Thu 3/17/2022 4:09 PM

To: Hammond, Mark <mahammond@pa.gov>

Cc: Dalal, Kirit <kdalal@pa.gov>; Hepler, Stephen (shepler@pa.gov) <shepler@pa.gov>; Shoyler, Jayme <shoyler@pa.gov>; Graham, Jayme <Jayme.Graham@AlleghenyCounty.US>; Deluca, Dean <Dean.Deluca@AlleghenyCounty.US>; Dowd, Patrick <Patrick.Dowd@AlleghenyCounty.US>

1 attachments (176 KB)

DEP letter.Coke Oven Reg revisions.SIP87.3.15.2022.docx

Hello Mr. Hammond,

This is to formally advise you through the attached letter, that the Allegheny County Health Department will be holding a public comment period starting March 18, 2022 and ending May 17, 2022, and will hold a public hearing on May 11, 2022 on our proposed revision to Article XXI and the PA SIP related to the Coke Ovens and Coke Oven Gas regulation.

Details can be found in the attached letter which includes embedded files for the hearing notice and the proposed SIP change. Thank you for consideration of this matter.

Tom Lattner



Tom Lattner

A.P.C. Engineer III

Air Quality Program

301 39th St., Bldg. 7

Pittsburgh, PA 15201

412-578-7986

Tom.Lattner@AlleghenyCounty.US

FW: Formal Notice of Allegheny County Health Department hearing on proposed SIP change for Coke Ovens and Coke Oven Gas rules

Lattner, Tom <Tom.Lattner@AlleghenyCounty.US>

Thu 3/17/2022 4:09 PM

To: Fernandez.Cristina@epa.gov <Fernandez.Cristina@epa.gov>

Cc: Goold.Megan <goold.megan@epamail.epa.gov>; Graham, Jayme <Jayme.Graham@AlleghenyCounty.US>; Deluca, Dean <Dean.Deluca@AlleghenyCounty.US>; Dowd, Patrick <Patrick.Dowd@AlleghenyCounty.US>

1 attachments (178 KB)

EPA letter.Coke Oven Reg revisions.SIP87.11.20.2020.docx

Hello Ms. Fernandez,

This is to formally advise you through the attached letter, that the Allegheny County Health Department will be holding a public comment period starting March 18, 2022 and ending May 17, 2022, and will hold a public hearing on May 11, 2022 on our proposed revision to Article XXI and the PA SIP related to the Coke Ovens and Coke Oven Gas regulation.

Details can be found in the attached letter which includes embedded files for the hearing notice and the proposed SIP change. Thank you for consideration of this matter.

Tom Lattner



Tom Lattner

A.P.C. Engineer III

Air Quality Program

301 39th St., Bldg. 7

Pittsburgh, PA 15201

412-578-7986

Tom.Lattner@AlleghenyCounty.US

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

March 16, 2022

Mr. Mark Hammond, Director
Bureau of Air Quality
Department of Environmental Protection
Rachel Carson Building
400 Market Street
P O Box 8468
Harrisburg, PA 17105-8468

Dear Mr. Hammond:

Attached is a Notice of Public Hearing for proposed revisions to the Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control and County Ordinance Number 16782, regarding revising §2105.21, Coke Ovens and Coke Oven Gas along with related changes to §2101.20, Definitions, and §2109.01, Inspections. The proposed coke oven regulations will incorporate inspections procedures for coke ovens, address issues of stringency with federal and state requirements, correct the coke oven gas standards, and remove outdated language.

These revisions will also be submitted as changes to Allegheny County's portion of the Pennsylvania State Implementation Plan under our Revision Tracking Number 87, as delineated in the Technical Support Document.

Information regarding the proposed SIP change may also be found on the ACHD website at: <https://www.alleghenycounty.us/Health-Department/Programs/Air-Quality/Coke-Oven-Regulations.aspx>

The public comment period begins March 18, 2022 and concludes May 17, 2022 at 4:00 pm. The public hearing will be held May 11, 2022. Your comments are welcome.

ALLEGHENY COUNTY HEALTH DEPARTMENT • AIR QUALITY PROGRAM
301 39TH STREET BUILDING #7 • PITTSBURGH, PA 15201-1811
PHONE (412) 578-8103 • FAX (412) 578-8144

ACHD SIP87 Hearing Notice Letter
March 16, 2022
Page 2

Sincerely,



Jayme Graham, Manager
Air Quality Program

cc: Kirit Dalal
Steve Hepler

Email Attachments

- Public Hearing Notice



Public_Hearing_Not
ice_Coke Oven Regs

- Proposed Article XXI/SIP Revision 87



Coke Ovens
Regulations. Propos

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

March 16, 2022

Ms. Christina Fernandez, Director
Air Protection Division
Region III (3AP00)
U.S. Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Ms. Fernandez:

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ALLEGHENY COUNTY HEALTH DEPARTMENT • AIR QUALITY PROGRAM

301 39TH STREET BUILDING #7 • PITTSBURGH, PA 15201-1811
PHONE (412) 578-8103 • FAX (412) 578-8144

ACHD SIP87 Hearing Notice Letter
March 16, 2022
Page 2

Sincerely,



Jayme Graham, Manager
Air Quality Program

Email Attachments

- Public Hearing Notice



Public_Hearing_Not
ice_Coke Oven Regs

- Proposed Article XXI/SIP Revision 87



Coke Ovens
Regulations. Propos

Proof of Publication of Notice in Pittsburgh Post-Gazette

Under Act No 587, Approved May 16, 1929, PL 1784, as last amended by Act No 409 of September 29, 1951

Commonwealth of Pennsylvania, County of Allegheny, ss L. Weber, being duly sworn, deposes and says that the Pittsburgh Post-Gazette, a newspaper of general circulation published in the City of Pittsburgh, County and Commonwealth aforesaid, was established in 1993 by the merging of the Pittsburgh Post-Gazette and Sun-Telegraph and The Pittsburgh Press and the Pittsburgh Post-Gazette and Sun-Telegraph was established in 1960 and the Pittsburgh Post-Gazette was established in 1927 by the merging of the Pittsburgh Gazette established in 1786 and the Pittsburgh Post, established in 1842, since which date the said Pittsburgh Post-Gazette has been regularly issued in said County and that a copy of said printed notice or publication is attached hereto exactly as the same was printed and published in the _____ regular _____ editions and issues of the said Pittsburgh Post-Gazette a newspaper of general circulation on the following dates, viz:

17 of March, 2022

Affiant further deposes that he/she is an agent for the PG Publishing Company, a corporation and publisher of the Pittsburgh Post-Gazette, that, as such agent, affiant is duly authorized to verify the foregoing statement under oath, that affiant is not interested in the subject matter of the afore said notice or publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.

PG Publishing Company

Sworn to and subscribed before me this day of:
March 17, 2022

Commonwealth of Pennsylvania - Notary Seal
Karen Flaherty, Notary Public
Allegheny County
My commission expires November 16, 2024
Commission number 1386128
Member, Pennsylvania Association of Notaries

STATEMENT OF ADVERTISING COSTS
ALLEGHENY CO HEALTH DEPT-LEGAL
542 4TH AVENUE
PITTSBURGH PA 15219

To PG Publishing Company

Total ----- \$82.95

Publisher's Receipt for Advertising Costs

PG PUBLISHING COMPANY, publisher of the Pittsburgh Post-Gazette, a newspaper of general circulation, hereby acknowledges receipt of the aforesaid advertising and publication costs and certifies that the same have been fully paid.

Office
2201 Sweeney Drive
CLINTON, PA 15026
legaladvertising@post-gazette.com
Phone 412-263-1440

PG Publishing Company, a Corporation, Publisher of
Pittsburgh Post-Gazette, a Newspaper of General Circulation

By _____

I hereby certify that the foregoing is the original Proof of Publication and receipt for the Advertising costs in the subject matter of said notice.

Attorney For

COPY OF NOTICE OR PUBLICATION

NOTICE OF PUBLIC HEARING AND PUBLIC COMMENT PERIOD FOR PROPOSED AMENDMENTS TO ALLEGHENY COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS ARTICLE XXI, AIR POLLUTION CONTROL
The Allegheny County Board of Health will hold a public hearing on Wednesday, May 11, 2022, at 6:00 PM at the Clinton Municipal Building, 551 Ravensburg Boulevard, Clinton PA, 15025 to take testimony on proposed modifications to Allegheny County Health Department Article XXI, along with the corresponding sections of County Ordinance 16782, that will revise:
• §2105.21, "Coke Ovens and Coke Oven Gas" and related portions of §2101.20, "Definitions," and
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Portion of these changes will be submitted as revisions to Allegheny County's portion of the Pennsylvania State Implementation Plan as delineated in the associated Technical Support Document. The proposed SIP revisions are available on the Allegheny County Health Department (ACHD) Air Quality web site at www.alleghenycounty.us/regs-sips. Written copies may be obtained by calling 412-578-8103.
• Persons wishing to present testimony at the hearing must register by going to the ACHD's Air Quality website at www.alleghenycounty.us/regs-sips. Persons who do not have access to the internet may register by calling 412-578-8103.
• You must register to present testimony no less than 24 hours in advance of the hearing.
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Please call 412-578-8103, if you have any questions or if you have any difficulty registering for the hearing.

Revision 87

Article XXI

Section 2105.21, "Coke Ovens and Coke Oven Gas"

Certification of Hearing

Dean DeLuca deposes and says that he is an Air Pollution Manager in the Air Quality Program of the Allegheny County Health Department and hereby certifies that a Public Hearing was held on May 11, 2022 on the proposed revisions to Article XXI, "Rules and Regulations of the Allegheny County Health Department for Air Pollution Control," and County Ordinance No. 16782 revising Section 2105.21, "Coke Ovens and Coke Oven Gas," Section 2101.20, "Definitions," and Section 2109.01, "Inspections;"

that these changes are to be incorporated as a change to Allegheny County's Portion of the Pennsylvania State Implementation Plan for Attainment and Maintenance of National Ambient Air Quality Standards;

that opportunity for written comments was given in accordance with the requirements of 40 CFR 51.102; that notice of such hearing was given by publication in a newspaper of general circulation on March 17, 2022; and to the best of his knowledge, belief and understanding, such proceedings were in full compliance with all applicable State and Federal laws, regulations, and other requirements.

Dean DeLuca, electronically signed 7/13/2022

Dean DeLuca

Manager,

Planning and Data Analysis Air Program

Allegheny County Health D

SUMMARY OF COMMENTS AND RESPONSES

for

Proposed SIP Revision 87

**Article XXI, §2105.21, Coke Ovens and Coke Oven Gas,
Related §2101.20 Definitions
and
§2109.01 Inspections**

Public Comment Period: March 18 to May 17, 2022

Public Hearing: May 11, 2022

Comments and Responses

1. **COMMENT:** The Allegheny County Health Department (ACHD) should do everything it can to improve air quality. The proposed ACHD regulations must be as strident as possible to protect the health of residents of the Mon Valley and all of Allegheny County from ongoing poor air quality from the Clairton Coke Works. (ID Nos. Group 1, 7)

RESPONSE:

Thank you for your comment. The goal of the ACHD continues to be to protect the air resources of the County by pollution prevention and pollution control for the protection of the health, safety and welfare of its citizens, and to ensure the attainment and maintenance of the ambient air quality standards. The Department continues to pay particular attention to air quality concerns in the Mon Valley area of Allegheny County.

2. **COMMENT:** Neither USS or ACHD is doing its job with regard to cleaning the air. USS management makes decisions on plant operating matters that are not conducive to clean air...the ACHD's job is to protect the health of the community not to protect corporate interests (ID Nos. 14, 24, 25, 27, 30)

RESPONSE:

Thank you for your comment. ACHD acts within the regulatory boundaries established by Article XXI. Article XXI, Section 2101.02.a.1 states that it is the policy of the County of Allegheny to protect the air resources of the County by pollution prevention and pollution control to the degree necessary for the: (1) Protection of the health, safety and welfare of all its citizens;...(4) Development, attraction and expansion of industry, commerce and agriculture."

3. **COMMENT:** ...the Department's new regulations (should) at least meet the standard federal requirements for clean air. The department attempts to pick around the edges of regulation, relegating itself to changing the language of its regulations to conform to the requirements of state regulations. In its responsive comments from the previous round of proposed regulations, the department never explained why state regulations do not already apply (ID Nos. 26,28)

RESPONSE:

Thank you for your comment. Where practicable, the Department is adding regulatory language codifying federal and state standards that are already incorporated by reference, to capture the requirements in the specific section of Article XXI dealing with Coke Oven emissions.

4. **COMMENT:** ACHD should strengthen the regulation by going back to 2018 draft. In 2018, the ACHD took a step in the right direction in its decision to develop new coke oven regulations. The draft in 2018 would have created stricter requirements for leaking equipment. In the draft in 2020, the ACHD reversed these proposed stricter requirements, although other aspects of that draft were better than nothing. (ID Nos. Group 1, 26)

RESPONSE:

Thank you for your comment. In some cases, the regulations were demonstrated to be impractical. However, in all cases an improved method of measuring and accounting for emissions was developed.

5. **COMMENT:** Current regulatory approach is insufficient. The current way that coke ovens are regulated, by allowing a certain percentage of leaking equipment and allowable seconds of visible emissions, is insufficient to protect public health. ACHD should amend the 2022 proposal to impose stricter requirements for leaking equipment. (ID Nos. Group 1)

RESPONSE:

Thank you for your comment. At this time, the intention of these regulation changes is to make the coke oven inspections more precise and clear.

6. **COMMENT:** ACHD should strengthen the regulation by enhancing monitoring. Increase transparency around Coke Works monitoring including real time pollution data that doesn't rely on US Steel. (ID Nos. Group 1, 4, 28)

RESPONSE:

Thank you for your comment. The intention of these regulation changes is to make coke oven inspections more precise and clear.

7. **COMMENT:** ACHD should strengthen the regulation by enhancing enforcement. There should be a clear date set in the regulations by which US Steel will permanently shut down Batteries 1, 2, and 3. US Steel has stated publicly that they will shut these batteries by the end of the first quarter in 2023, so we suggest the date of March 31, 2023. These batteries are 70 years old and far past their retirement date. The compliance history of these batteries demonstrates that US Steel is not capable of operating them in compliance with ACHD air quality regulations, even given the lax rules that are applied to batteries of this age. There needs to be an enforceable date by which the batteries will close. (ID Nos. Group 2, 4,14,34)

RESPONSE:

Thank you for your comment. The intention of these regulation changes is to make coke oven inspections more precise and clear. Requiring decommissioning of batteries is beyond the scope of this regulation revision.

8. **COMMENT:** ACHD cannot protect the health of the community if it merely issues enforcement orders and NOVs and USS Steel just pays fines instead of reducing emissions (pay to pollute) (ID Nos. 29,34)

RESPONSE:

Thank you for your comment. ACHD has enforcement policies and procedures that address the actions to be taken by the agency upon the occurrence of failed inspections. And, the ACHD Penalty Policy addresses the type and level of fines imposed on a violator of ACHD rules. However, none of these policies is the subject of this regulation revision.

9. **COMMENT:** Strengthen regulations by requiring improved work practice standards. The Commenters urge ACHD to develop and propose coke oven regulations that are protective of public health and that incorporate the latest knowledge of health risks and advancements in technologies and practices to reduce harmful air pollution from coke oven facilities. This should include improving a required work practice plan that was prepared in the early 1990s that does not appear to have been used effectively to reduce emissions. ...the department does nothing to expand upon and enhance the work practice plan of requirements relating to leaking doors, lids and oftakes. (ID Nos. Group 1, 26)

RESPONSE:

Thank you for your comment. At this time, the intention of the regulation revisions is to include the test methods in the regulation and to make the inspection procedures more precise and clear. The commenter's work practice standard suggestions are outside the scope of this regulation change.

10. **COMMENT:** Strengthen regulation stringency during adverse weather conditions. Require US Steel to reduce pollution with a Pollution Mitigation Plan when air quality reaches unhealthy levels. (ID Nos. Group 2)

RESPONSE:

Thank you for your comment. ACHD has enacted Article XXI, Section 2106.06, "Mon Valley Air Pollution Episode," which implements requirements suggested by the commenter.

11. **COMMENT:** Strengthen by looking to other states and countries, and new technologies. The ACHD should also incorporate cutting-edge technologies and practices following the example of other countries regulating coke oven facilities. (ID Nos. Group 1)

RESPONSE:

Thank you for your comment. ACHD has looked at other states regulations. In all that were reviewed, Allegheny County regulations are at least as stringent, if not more so, than the regulations in other states. This stringency is necessary due to the large size of this plant and its situation in a valley near public. The intention of these regulation changes is to make coke oven inspections more precise and clear. Addressing new technologies is beyond the scope of this regulation revision.

12. **COMMENT:** Strengthen by idling malfunctioning batteries. The Department should revise the proposed regulations to require US Steel to hot idle coke oven batteries to ensure compliance in the event of noncompliance or a malfunction. There needs to be a clear rule set out in these regulations that parts of the plant, whether an oven, battery, or other unit, cannot be operated if required pollution control equipment is incapacitated, destroyed, or unable to function in a reliable manner. When these situations occur, ACHD rules should require idling of the impacted unit until repairs can be made. (ID Nos. Groups 1 and 2, 14, 33)

RESPONSE:

Thank you for your comment. The intention of these regulation changes is to make coke oven inspections more precise and clear. The subject of imposing hot idling requirements on individual coke ovens is beyond the scope of this regulation change.

13. **COMMENT:** ACHD should not limit its legal authority. The ACHD has unlawfully attempted to use an agreement with U.S. Steel, resulting from enforcement actions against the Clairton Coke Works, to give up its rulemaking authority. The proposed regulations are flawed because the department has attempted to abandon its legal authority to adopt more stringent standards for coke oven batteries in the 2019 settlement agreement with U.S. Steel...It is unlawful for the department to attempt to abandon its authority to adopt more stringent coke oven regulations. (ID Nos. Group 1, 26)

RESPONSE:

Thank you for your comment. By placing requirements on the imposition of more stringent requirements, the Department did not give up or abandon its rulemaking authority. It has merely agreed to conditions for regulatory change.

14. **COMMENT:** The commenter states a list of examples of USS cooperation on meeting the NAAQS, and contends that ACHD did not work collaboratively to produce a regulation revision in a manner called for by the SAO. (ID Nos. 15)

RESPONSE:

Thank you for your comment. The proposed regulation represents a revision that has been agreed to by both U.S. Steel and ACHD.

15. **COMMENT:** ...the Clairton plant already operates under the most stringent environmental standards for steel and coke operations in the United States. (ID Nos. 3)

RESPONSE:

Thank you for your comment. The proposed regulation represents a revision that has been agreed to by both U.S. Steel and ACHD.

16. **COMMENT:** The regulations jeopardize jobs- If the Allegheny County Health Department continues to force more stringent, subjective and arbitrary regulations on the Clairton coke plant, it could jeopardize the future of the entire Mon Valley Works and the thousands of good-paying jobs it provides. ACHD, USS and stakeholders should work toward solutions that benefit jobs and environment. (ID Nos. 3,5,6,8-13,17-21,31)

RESPONSE:

Thank you for your comments. The proposed regulation represents a revision that has been agreed to by both U.S. Steel and ACHD. ACHD acts within the regulatory boundaries established by Article XXI. Article XXI, Section 2101.02.a.1 states that it is the policy of the County of Allegheny to protect the air resources of the County by pollution prevention and pollution control to the degree necessary for the: (1) Protection of the health, safety and welfare of all its citizens;...(4) Development, attraction and expansion of industry, commerce and agriculture."

17. **COMMENT:** Concern for impact of regulations on economic viability of plant. Ask that ACHD work with USS to find the means to meet environmental goals while maintaining good paying jobs. ... the Allegheny County Health Department (should) work more cooperatively with U.S. Steel and all stakeholders that rely on the future of this major employer. The Health Department needs to work with the company to find solutions that will not only continue to benefit the environment, but will also allow for good-paying manufacturing jobs and the continued production of coke, iron and steel in the Pittsburgh region. (ID Nos. 3,5,6,8-10, 12,13,17-21,31)

RESPONSE:

Thank you for your comments. The proposed regulation represents a revision that has been agreed to by both U.S. Steel and ACHD. ACHD acts within the regulatory boundaries established by Article XXI. Article XXI, Section 2101.02.a.1 states that it is the policy of the County of Allegheny to protect the air resources of the County by pollution prevention and pollution control to the degree necessary for the: (1) Protection of the health, safety and welfare of all its citizens;...(4) Development, attraction and expansion of industry, commerce and agriculture."

18. **COMMENT:** Disease levels in area...The commenters states that the emissions from the Clairton plant are killing people by causing cancer, and questions claims made by others testifying that there have been improvements in air quality. The commenter states that there is a correlation between the types of illnesses people in the community suffer and the air pollution and makes a plea that the company comply, or leave. (ID Nos. 22,23)

RESPONSE:

Thank you for your comment. ACHD appreciates the concerns voiced in the comment. The goal of the ACHD continues to be to protect the air resources of the County by pollution prevention and pollution control for the protection of the health, safety and welfare of its citizens, and to ensure the attainment and maintenance of the ambient air quality standards. The Department continues to pay particular attention to air quality concerns in the Mon Valley area of Allegheny County. The intention of these regulation changes is to make coke oven inspections more precise and clear.

19. **COMMENT:** Because regulations in Article XXI must be at least as stringent as corresponding regulations promulgated under the Clean Air Act, section 2105.21.e.1 must be revised so that emissions from the pushing emission control devices associated with Batteries 13, 14, 15, 19, 20, and C at the Clairton Plant are either limited to the 0.010 grains/dscf required by 40 C.F.R. § 7290(a)(1) or to the appropriate measure of pounds per ton of coke produced as required by 40 C.F.R. § 7290(a)(2) – (4). Alternatively, the Department must demonstrate that the 0.020 grains/dscf limit in section 2105.21.e.1 is at least as stringent as the appropriate limit established by 40 C.F.R. § 7290(a)(2) – (4). (ID Nos.35)

RESPONSE:

Thank you for your comment. At this time, the intention of these regulation changes is to add the testing methods and the inspection procedures to make coke oven inspections more precise and clear. The facility is still required to comply with 40CFR 63.7290, even if it is not specifically listed in Article XXI.

20. **COMMENT:** In the latest round of proposed regulations the department proposes to strike the particulate mass emission rates in the regulations applicable in Batteries 1 and 3, 13 and 15 and 19 to 20. Contrary to the department's explanation, these requirements already apply to these batteries. (ID Nos. 26)

RESPONSE:

Thank you for your comment.

21. **COMMENT:** Because sections 7296 and 2105.21.f use different bases to limit the opacity of visible emissions from combustion stacks, it is not clear that the limits established by Section 2105.21.f are at least as stringent as those established by section 7296. Because regulations in Article XXI must be at least as stringent as corresponding regulations promulgated under the Clean Air Act, the Department should either revise section 2105.21.f.5 and 6 so that they are at least as stringent as section 7296 or demonstrate that the limits in Section 2105.21.f.5 and 6 are already at least as stringent as the limits in section 7296. (ID Nos. 35)

RESPONSE:

Thank you for your comment. At this time, the intention of these regulation changes is to add the testing methods and the inspection procedures to make coke oven inspections more precise and clear. The facility is still required to comply with 40CFR 63.7296, even if it is not specifically listed in Article XXI.

22. **COMMENT:** Because compliance with section 2105.21's limits is not determined on the same bases as compliance with Subpart L's limits, it is not self-evident that that the limits in section 2105.21 are at least as stringent as their counterparts in Subpart L. The Department should demonstrate that they are. (ID Nos. 35)

RESPONSE:

Thank you for your comment. At this time, the intention of these regulation changes is to add the testing methods and the inspection procedures to make coke oven inspections more precise and clear. The facility is still required to comply with Subpart L, even if it is not specifically listed in Article XXI.

23. **COMMENT:** The department proposes to retain a two door exclusion that effectively makes the door requirements less stringent than federal requirements. Ironically the department proposed to eliminate the exclusion last year, but now proposes to retain it. (ID Nos. 26)

RESPONSE:

ACHD acknowledged that the regulations were being made more stringent than the PA DEP requirements in §123.44 where they deduct 2 doors from the number of doors with visible emissions and this would result in a violation of the 2019 Settlement Agreement.

24. **COMMENT:** The term “valid charge” is used repeatedly in revised section 2105.21.a, but not defined. EPA Method 303 does not define “valid charge”, but it includes references to “valid observations,” which only further confuses potential interpretations. Further, what constitutes a “valid charge” is not immediately clear from the term itself or from the context in which it is used in section 2105.21. Accordingly, to avoid ambiguity and confusion, Article XXI should define what constitutes a “valid charge.” (ID Nos. 35, 37)

RESPONSE:

Thank you for your comment. Section 2105.21.a.3.G describes that if observations of emissions from a charge are interrupted, the data from that charge may become invalidated. Following from this section, a “valid charge” is a charge which has not been invalidated.

25. **COMMENT:** We don't know how to access funds to obtain air purifiers and other such items – The Commenter questions why community groups cannot access CAF money for programs that purchase air filters for residents. (ID Nos. 29)

RESPONSE:

Thank you for your comment. The commenter’s comments are outside the scope of this regulation change.

26. **COMMENT:** On page 14, the offtake piping calculation in Condition I should have a comma in the last clause of the denominator, not a minus sign before “not to exceed three ovens.” U. S. Steel requests that ACHD correct the following equation to replace the minus (-) sign with a comma (,). (ID Nos. 16, 36)

RESPONSE:

ACHD will remove the minus sign and replace it with a comma.

27. **COMMENT:** On page 14, under pushing, ACHD incorporated a portion of PA Code § 129.15(a) but omitted the rest of the regulatory language in the PA Code. ACHD did not add the portion of PA Code language that specifies a device for the enclosure of pushing operations, which, in this case, would refer to the Pushing Emission Control (PEC) Baghouses previously installed at the Clairton Plant. (ID Nos. 16, 36)

A device for the enclosure of pushing operations shall be subject to the requirements of Chapter 127 (relating to construction, modification, reactivation and operation of sources) and the grant of plan approval.

RESPONSE:

ACHD will not make any changes to address this comment. The commenter says that the ACHD needs to add the portion of PA Code language that specifies a device for the enclosure of pushing operations, which, in this case, would refer to the Pushing Emission Control (PEC) Baghouses previously installed at the Clairton Plant. However, that portion of the code, 25 Pa. Code Section 129.15(a) and (b) as written, reflect language to install new equipment. Article XXI is clearly addressing the operation of existing equipment. Additionally, the issues relating to these comments were resolved through the dispute resolution process set forth under the 2021 settlement agreement addendum.

28. **COMMENT:** On page 15, under pushing, ACHD deleted “determined by an outlet concentration” from Condition 3. This differs from the U. S. Steel/ACHD Coke Oven Regulation Settlement Agreement executed on April 16, 2021 and lacks the clarity needed to adequately determine compliance with the condition. U. S. Steel requests that ACHD add “determined by an outlet concentration” back into the Condition, based on the Settlement Agreement and to provide the necessary clarity needed to comply with the condition. (ID Nos. 16, 36)

*3. At any time, the particulate mass emission rate from the pushing emission control device, for ~~any of the following batteries~~ **Coke Oven Battery B at the U. S. Steel Corporation Mon Valley Works Clairton Plant**, exceeds a rate ~~determined by an outlet concentration~~ of 0.040 pounds per ton of coke:*

RESPONSE:

ACHD will not make any changes to address this comment. The phrase “determined by an outlet concentration” is redundant and unnecessary, as the first portion of the paragraph “the particulate mass emission rate from the pushing emission control device,” makes clear that it is an outlet concentration.

Additionally, the issues relating to these comments were resolved through the dispute resolution process set forth under the 2021 settlement agreement addendum.

29. **COMMENT:** U. S. Steel requests that ACHD work collaboratively with the regulated community when developing new ACHD testing methods. The methods need to be based on facts and be accurate, transparent, fair, consistent, and objective. Consistent with the process adopted by USEPA and other jurisdictions, ACHD must consider: (a) averaging provisions to ensure appropriate and accurate readings; (b) provisions specifying the appropriate positioning of the inspector/observer for visible emission observations to ensure appropriate and accurate readings, including for pushing observations and for coke batteries doors equipped with sheds; and (c) recordkeeping requirements for inspections to support that the test methods were properly followed as well as to provide the regulated entity with the ability to identify any problem(s) and implement timely corrective actions. (ID Nos. 16, 36)

RESPONSE:

ACHD will not make any changes to address this comment. Additionally, the issues relating to these comments were resolved through the dispute resolution process set forth under the 2021 settlement agreement addendum.

30. **COMMENT:** The commenter repeats their Comment 1 from the 2021 public comment period: The Department Should Explain How the Proposed Regulations Would Reduce Emissions of Fine Particulates and Sulfur Dioxide Under the State Implementation Plan. The draft coke oven regulations are intended to be a revision to the Department’s portion of the state implementation plan. See Proposed Regulations (title page)... But the Department does not identify the state implementation plan to be revised... Presumably, fine particulates and sulfur dioxide are the primary criteria pollutants of concern... The Department does not attempt to quantify emissions reductions... The Department should provide more detail regarding how the proposed regulations will improve air quality.

The Commenter then adds this from the 2022 public comment period:

In the response to comments, the Department avoided the comment by asserting that the comments “do not include a specific comment regarding the proposed amendments to the coke oven regulations.”

In fact, the comment was specific. Commenters want to know how the proposed regulations will cause specific reductions in air emissions from the Clairton Coke Works. The Department should answer the question. (ID No. 37)

RESPONSE:

Thank you for your comment. The commenter quoted Comment Number 6 Response, which was not the correct comment. Comment Number 21 has the correct comment and response. Though that response is similar in that it also notes that the comment does not specifically address the regulations. But, it also notes that the Technical Support Document for the draft regulations addresses the basis for the amendments – to include the test methods and inspection procedures for coke ovens in the Section 2105.21 regulations, to amend the regulations based on issues of stringency with Federal and Pennsylvania regulations, and to amend the regulations relating to coke ovens and coke oven gas to clarify regulatory language. Article XXI is incorporated into the Pennsylvania State Implementation Plan in accordance with 40 CFR 52.2020. EPA approved the overall Article XXI effective 10/20/95 on 11/14/02 (67 FR 68935. While it is the case that 40 CFR 50 Appendix V, “Criteria For Determining the Completeness of Plan Submissions” includes certain requirements under Section 2.2, “Technical Support,” including quantification requirements, these are not always necessary for each change, just as there are requirements for modeling information that are seldom necessary. The necessity is to submit to the EPA the regulatory language changes being made that affect the document that EPA approved on 11/14/2002.

31. **COMMENT:** The commenter repeats their Comment 2 from the 2021 public comment period: The proposal to include requirements of federal and state law involves things the Department should already have been doing.

The Department proposes to make four amendments to its regulations to conform to the form of state and federal regulations. Because federal and state regulations are binding on the county, the Department should explain why there is a need to make these revisions at all. For proposed requirements that only repeat the requirements of federal and state regulations, the Department should explain why this is not an academic exercise.

- A. The Department should provide an explanation why it is necessary to make these four amendments
- B. The Department is not exempt from federal requirements, even if they are not incorporated into the county's regulations.
- C. The Department is not exempt from state requirements, even if they are not incorporated into the county's regulations.

The Commenter then adds this comment from the 2022 public comment period:

In the March 14, 2022 Comment/Response Document response to comments (Comment #6), the Department avoided the comment by asserting that the comments “do not include a specific comment regarding the proposed amendments to the coke oven regulations.”

In fact, the comment was very specific. The Commonwealth has regulations on the books. It was a condition of its approval that the Department would implement the requirements of the state regulations. The Department has offered no legal authority demonstrating that it is not already required to implement these state requirements. If the Department is relying on any legal authority, it should explain. (ID No. 37)

RESPONSE:

Thank you for your comment. The Commenter questioned why the Department is updating the definitions of “Charging emissions” and “Pushing operation,” why it is revising Section 2105.21.e by adding language that will make the section consistent with Section 129.15 of the Pa. Code, and why it is adding Section 2105.21.j titled “Miscellaneous Topside Emissions.” The Commenter asked these questions while at the same time including the excerpts of the Technical Support Document that spell out the Department’s reasons for doing so – i.e., in order to be consistent with federal or Pennsylvania regulations. The Commenter’s implication is that there is no need to add these changes because the Department can and should already be enforcing these regulations. The Commenter rejects the Department’s response to this comment during the first round of public comment when the Department stated that the comment was not on the specific regulation change but rather on the legal authority of the ACHD to enforce provisions of state and federal regulations. Nothing has changed. The commenter has not made a comment on the content of the regulation change, but on whether the Department could already be enforcing certain regulations. That is an enforcement issue, not an issue related to these particular regulation changes.

32. **COMMENT:** The Commenter repeats their Comment 3 from 2021 public period: **Section VII of the Settlement Agreement only purports to limit more stringent emission standards, not procedural requirements like inspections.** According to its terms, a settlement agreement with the regulated industry in 2019 that purports to limit the Department’s regulatory authority to adopt more stringent regulations would not apply to proposed procedural requirements concerning inspections. This is because Section VII of the agreement ... relates to emission standards, not procedures. See ...Settlement Agreement dated June 27, 2019, paragraph 12, page 19 (“[t]he Department may pursue a rulemaking to impose more stringent limits on the coke batteries (except C Battery) only if the more stringent limits are determined to be, inter alia, technically feasible in accordance with this Paragraph.”). In addition, Section VII is unlawful for reasons set forth in Comment #6, below.

The Commenter then adds this comment from the 2022 public comment period: In the (March 14, 2022)response to comments, the Department mischaracterized this comment as a request to “strengthen the regulations by enhancing inspection procedures”:

13. **COMMENT:** The ACHD should strengthen the regulations by enhancing inspection procedures. (ID Nos. Group 1, Group 4, 90, 116, 171, 173, 177)
RESPONSE: The proposed amendments to the coke oven regulations incorporate coke oven inspection procedures into the regulations. The ACHD proposed regulations allow inspectors increased flexibility to perform inspections and investigate potential violations. Please be aware that the proposed draft regulations have been revised again and will be available for public comment starting on March 18, 2022. Please note that the ACHD will consider the comments submitted by the commenters which identify specific inspection and work practices that they believe should be included into the regulations at the conclusion of this comment period.

That was not the point of the comment. The point of the comment was that enhancing inspection procedures would not be a violation of the settlement agreement, assuming the settlement agreement were a lawful agreement. It is inappropriate for the Department to assume that all it needs to do is to add simple inspection requirements to outweigh the tremendous harm from not adopting more stringent standards for batteries. That is not sufficient. (ID No. 37)

RESPONSE:

Thank you for your comment. Comment Number 3 as expressed for the 2021 regulation makes no other point than to say that inspection procedures are not limited by the Settlement Agreement. As a result of the language in the comment, in its March 2022 comment response document, the Department could infer only that the commenter desired that the regulation be strengthened by enhancing the inspection procedures. The commenter seems to be now clarifying the initial comment. Finally, the Department clearly states in the Technical Support Document that one of the purposes of this regulation change is to incorporate the testing methods and inspection procedures into the regulation as agreed to in the 2019 Settlement Agreement.

33. **COMMENT:** The Commenter repeats their Comment Number 4 from the 2021 public comment period:

The proposed revision of the emission standard for hydrogen sulfide in coke oven gas would not make the standard more stringent than it should be, if it is merely correcting an error.

- A. The Department should provide more information regarding the nature of the error being corrected in the proposed regulations.
- B. A consent order executed in 1992 does not prevent the Department from lowering the emission standard for coke oven gas
- C. The Department Should Explain How the Proposed Revision Will Have a Meaningful Impact on Emissions of Sulfur Dioxide from the Clairton Coke Works.

The Commenter then adds the following from the 2022 public comment period:

- D. The decision of the Administrative Hearing Officer in the legal challenge by U.S. Steel did not address the lawfulness of Section VII of the 2019 Settlement Agreement.

In the legal challenge brought by U.S. Steel, the Administrative Hearing Officer held that the Department's proposal to impose a 23 grain standard for coke oven gas violated Section VII of the 2019 Settlement Agreement between the Department and U.S. Steel because it imposed a more stringent emissions standard without complying with the technical feasibility criteria...However, the Administrative Hearing Officer did not address the lawfulness of Section VII of the 2019 Settlement Agreement...

The Commenter states also that in the response to comments the Department does not attempt to respond to this comment. The commenter states that, presumably, the Department has reversed its proposal in reliance on the decision of the Administrative Hearing Officer on December 6, 2021. However, Section VII of the 2019 Settlement Agreement is unlawful...(ID No. 37)

RESPONSE:

Thank you for your comment. The Commenter is correct in stating that the March 14, 2022 Comment Response document does not have a readily obvious response to a comment from Commenter Number 171 (the number assigned to the Commenter). However, the responses to Comments number 26 and number 27 make clear that the language related to the lower hydrogen sulfide limits is no longer applicable. The hearing officer's decision stated that per the 2019 Settlement Agreement the Department must follow a certain procedure to set new more stringent emission limits.

34. **COMMENT:** The Commenter repeats Comment Number 5 from the 2021 public comment period: The commenter states that the Department should reinstate proposed requirements in the first draft regulations (June 2018), which were reversed in the second draft regulations (July 2020) and the proposed regulations. In the first draft regulations in 2018, the Department proposed a number of requirements that would have made the regulations more stringent...Then it entered into a settlement agreement with the regulated industry in 2019. Now, it is reversing those proposals under the rationale that it has entered into a settlement agreement preventing it from making emission standards more stringent...The Department is required to provide a justification for its action. But it has not provided a reasonable justification for reversing proposals that it presumably believed to be in the public interest in the first place. (The commenter provides nine pages of examples of regulations that were reduced in stringency from the first draft to the second.)

The Commenter then adds the following from the 2022 public comment period: The Commenter states that in the March 14, 2022 response to comments, the Department avoided the comment by asserting that the proposed regulations “further that goal” of protecting the air sources of Allegheny County, and referencing responses 9 and 10 of the March 14, 2022 comment/response document. The commenter calls the responses vague and conclusory statements that ignore the comment, and states that the Department should explain why more stringent standards were appropriate in 2018, but are not appropriate now. (ID No. 37)

RESPONSE: Thank you for your comment. Throughout the course of developing a regulation, it is not unusual for proposed changes to be contemplated and placed into initial drafts of the proposed regulation revision, but ultimately not find their way to the final version.

35. **COMMENT:** The Commenter repeats Comment Number 6 from the 2021 public comment period, repeating Comments 6A through 6G related to the commenter’s view of the legality of the Settlement Agreement, particularly Section 7 of that agreement.

The commenter then adds the following from the 2022 public comment period: The Commenter states that the decision of the Administrative Hearing Officer in the legal challenge by U.S. Steel did not address the lawfulness of Section VII of the 2019 Settlement Agreement. The commenter also states that Comment Response 20 from the March 14, 2022 Comment Response document avoided the comment by erroneously asserting that “[t]he issues relating to these comments were resolved through the dispute resolution process set forth under the 2019 settlement agreement.” The Commenter states that nowhere in the decision of the Administrative Hearing Officer is there an analysis of the four reasons (set forth above) why Section VII of the Settlement Agreement is unlawful. The Department should provide an appropriate response to the comment. (ID No. 37)

RESPONSE: Thank you for your comment. The Settlement Agreement is not the subject of this public comment period.

36. **COMMENT:** The Commenter repeats their Comment Number 7 from the 2021 public comment period:

The Department's failure to propose any more stringent emission standards is not compelled by Section VII of the Settlement Agreement, even if it could lawfully restrict the Department's regulatory authority.

Even if Section VII of the 2019 settlement agreement could legally restrict the Department from adopting more stringent emission standards, it would not be a basis for doing nothing to improve emission standards for fine particulates -- which is what the Department is doing...To evaluate different compliance scenarios under more stringent emission standards, Commenters created their own spreadsheets... Using these spreadsheets, one can adjust emissions standards to any percentage, and then evaluate the corresponding rate of compliance for each battery for the calendar year 2017. The conclusion is that the Department can propose more stringent emission standards that would still result in a level of compliance of no less than 99%, as set forth in Section VII of the settlement agreement...What is important is that the Department has not performed an analysis evaluating alternate compliance scenarios...As a matter of law, this is unreasonable... Despite the numerous mathematical possibilities for lowering the percent of allowable leaking doors, lids, and offtakes even within the terms of the settlement agreement, the Department has not done this analysis. Accordingly, it has acted unreasonably as a matter of law. It has also failed to do things to protect public health even under its flawed interpretation of the settlement agreement.

The commenter then states the following from the 2022 period:

That the Department did not attempt to respond to this comment in the March 14, 2022 Comment Response Document. (ID No. 37)

RESPONSE: The Department has clearly stated in the regulation revision Technical Support Document and in the March 14, 2022 Comment Response document that the main purpose of this regulation change was to incorporate test methods and inspection procedures into the Article XXI Section 2105.21.

37. **COMMENT:** The Commenter repeats its Comment Number 8 from the 2021 public comment period:

The Department should revise the proposed regulations to require a meaningful work practice plan to facilitate emissions reductions at the Clairton Coke Works. The Commenter states that the 1993 U.S. Steel NESHAPS Work Practices Plan is inadequate with regard to specifying standards and criteria for repair, replacement, or corrective action with regard to door areas, charging, topside lids, and offtakes, and that these weaknesses could be improved by the Department through regulation.

The commenter then states the following from the 2022 public comment period:

That the Department avoids the question in its Comment Response document of March 14, 2022. (ID No. 37)

RESPONSE: At this time, the intention of the regulation revisions is to include the test methods in the regulation and to make the inspection procedures more precise and clear. The commenter's work practice standard suggestions are outside the scope of this regulation change.

38. **COMMENT:** The Commenter repeats its Comment Number 9 from the 2021 public comment period:
The Department should develop more stringent emission standards, including technology-forcing standards. To explore areas for improvement of its coke oven and coke oven gas regulations, the Department should look to present and future innovations made by steel industries in other countries, particularly Japan and members of the European Union. The European Union’s BAT document provides numerous potential improvements to requirements for inspections and maintenance programs. ...Most of this maintenance is centered around repairing brickwork at coke ovens, which has been contemplated at the Clairton Coke Works in the past, including in the settlement agreement in 2019. Rather than simply requiring repairs in settlement agreements, the Department should include such work as a part of a regulatory work practice plan, as discussed above...Japan’s Scope21 program is a comprehensive overhaul of how coke is produced...While the technological improvements demonstrated at Japanese facilities would likely require large scale overhauls, there are other technologies that would likely be much more manageable... It would be responsible to recognize the potential application of new technologies outside the United States.

The commenter then states the following from the 2022 public comment period:
That the Department confused the question in its Comment Response document of March 14, 2022. The Department has not provided an analysis of the applicability of control techniques in other countries to the Clairton Coke Works. The Department should do this. (ID No. 37)

RESPONSE: In its response in the March 14, 2022 Comment Response document, the Department stated that addressing new technologies is beyond the scope of this regulation revision. That is still the case.

39. **COMMENT:** The Commenter repeats its Comment Number 10 from the 2021 public comment period:
The Department should provide a reasonable justification for not strengthening water quality standards for water in quenching operations.
Nearly one-fifth of the emissions of fine particulates at the Clairton facility are from the quench towers (103 tpy out of 554 tpy). The Department should be considering regulatory measures to reduce fine particulates from quenching, through improved water quality standards or other means. The current regulations prohibit quenching unless the water meets water quality standards for the nearest stream or river...See Current Regulations, Section §2105.21(g)...Similar language is found in the facility’s Title V permit...(dated March 27, 2012, Section V.I.1.a)...Despite what appears to be a prohibition, the word “except” in the regulations and the permit might lead one to suggest that if the facility takes water from the Monongahela River for quenching operations, then it is not subject to water quality standards. But the “except” language in the regulations and the permit is not repeated in the review memorandum for the Title V permit, indicating that the facility is indeed subject to water quality standards: All quench towers are equipped with baffles and the water used for quenching the incandescent coke will be equivalent to or better than the water quality standards established for the Monongahela River per Article XXI, §2105.21.g...The Department should clarify whether it believes the facility is subject to water quality standards for the water used in quenching operations. It is not clear what is the Department’s position because the supporting document says nothing on this subject. See Technical Support Document.

If the Department believes that the facility is excepted from water quality standards, it should use the opportunity of the present regulatory initiative to make water quality standards more stringent. If the Department believes that the facility is not excepted from water quality standards, then it should identify applicable water quality standards and provide a background on the history of the

facility's compliance with such standards. It should also provide an explanation as to why it is doing nothing in the proposed regulations to improve the quality of the water used in quenching operations.

The commenter then states the following from the 2022 public comment period:

That the Department addresses the wrong portion of the regulation in its Comment Response document of March 14, 2022, when it responded that it was adding 40 CFR 63 Subpart CCCCC to section 2105.21.g.

The comment was directed to the applicability of water quality standards for the intake water, rather than to the applicability of 40 CFR 63 Subpart CCCCC. In any event, subpart CCCCC already applies. Those requirements are federal requirements, not state requirements. The comment was directed at the applicability of state water quality standards. (ID No. 37)

RESPONSE: The Department clarifies that it believes that notwithstanding the words "except that" in the phrase "except that water from the nearest stream or river may be used for the quenching of coke," the facility is subject to the water quality standards for the water used in quenching operations. Any other analysis of the issues of water quality are beyond the scope of this regulation change.

40. **COMMENT:** The Commenter repeats its Comment Number 11 from the 2021 public comment period:

For the sake of clarity, the Department should preserve material in the Source Testing Manual even if it is also incorporated into the regulations.

The commenter then states the following from the 2022 period:

In the response to comments, the Department does not attempt to respond to this comment. (ID No. 37)

RESPONSE: Because the comment is related to the Source Testing Manual, the Department addresses those comments with other comments on SIP96 the change to Article XXI Part G, "Methods" found in Section 2107.

41. **COMMENT:** The Department should not strike the particulate mass emission rates in the regulations, applicable to batteries 1-3, 13-15, and 19-20.

The Department proposes to strike particulate mass emission rates for batteries other than battery B, under the flawed premise that air permits do not contain these emissions limitations. This is not a matter of the Department attempting to amend its own regulations to be similar to the state regulations. Rather, this is an effort to affirmatively strike from the regulations emission rates that have been in the regulations since 1997. For a number of reasons, this effort is flawed and should be abandoned.

The ostensible rationale from the Department is that the air permits (not the regulations) do not contain these emissions limitations:

(From the Technical Support Document for Section 2105.21.e.3-)

After reviewing the permits for the coke batteries identified in §2105.21.e.3, the ACHD determined that only Battery B is required to meet the particulate mass emission rate set forth in this Paragraph. The ACHD deleted the other coke batteries listed.

It is not necessary that a requirement first be contained in a permit before it is codified in a regulation. If the Department believes there is legal authority for the proposition that the Department can have a requirement in a regulation only if it is in an air permit, the Department should identify

that legal authority. Also, if the Department believes there is legal authority for the proposition that the Department should affirmatively delete emissions rates that have been in the regulations for a period of years, the Department should identify that legal authority. These emission rates were added to the regulations in 1997 – nearly 25 years ago.

There are two different emission rates that apply to different sets of batteries. The first is a rate of 0.010 grains for dry standard cubic foot, which applies to batteries 1-3, 7-9, and 19.

The second is a rate of 0.040 grains for dry standard cubic foot, which applies to batteries 13-15, 20, and B.

Moreover, it is simply incorrect that these emission rates are not in air permits for the Clairton Coke Works.

The draft Title V permit prepared in January 2022 also includes these emission limits for batteries 1-3, 13-15, and 19-20.

In short, the proposal to strike these emissions rates was based on a flawed legal premise and a misstatement of fact. (ID No. 37)

RESPONSE: The Department first notes that the emission rates for Batteries 1-3 and 19, found in Section 2105.21.e.2 are not being revised. The Department does grant that the emission rates regulation at 2105.21.e.3 is being revised by deleting Batteries 13 -15 and 20, such that the paragraph will only apply to Battery B. The Department is removing these batteries from Section 2105.21.e.3 because U.S. Steel Clairton’s 2012 Operating Permit #0052 requires that batteries 13-15, and 19-20 PECs meet a limit of 0.02 lb/ton of coke.

42. **COMMENT:** .The Department should reinstate its proposed elimination of the two-door exclusion from requirements for door emissions from September 2020.

In fact, in September 2020 the Department proposed to eliminate this exclusion because it made the county regulations for calculating the percent of leaking doors less stringent than the federal regulations.

ACHD’s rationale for removing two-door exclusion in TSD from 2020 draft:

When determining compliance with the emissions standards for door areas, the regulations currently provide that the ACHD must exclude the “two door areas of the last oven charged and any door areas obstructed from view.” As noted above, any regulations promulgated by the ACHD cannot be less stringent than the EPA regulations promulgated under the Clean Air Act. When calculating the percent of leaking doors, the federal regulations for determination of visible emissions from byproduct coke oven batteries does not include a two door exclusion. 40 C.F.R. Part 63, Appendix A, Method 303, Section 12.5.3.1. In order to avoid being less stringent than the federal regulation, the ACHD is proposing to remove the two door exclusion.

Under the Pennsylvania Air Pollution Control Act (APCA), the county may enact “ordinances with respect to air pollution which will not be less stringent than the provisions of this act, the Clean Air Act or the rules and regulations promulgated under either this act or the Clean Air Act.” ...The federal regulations promulgated under the Clean Air Act do not contain a two door exclusion. Having previously concluded that the two door exclusion should be removed for the county regulations, the Department has provided no explanation for its decision to retain a two door exclusion that is less stringent than and which therefore violates the federal regulations. This change cannot be justified by the decision of the Administrative Hearing Officer in the legal challenge of U.S. Steel. The two door exclusion was not at issue in that decision. In fact, the Hearing Officer held that the Department is required to include in the county regulations requirements that are at least as

stringent as the regulations required by the APCA. See U.S. Steel Corp. v. ACHD, ACHD-21-037, 15-16 (Dec. 9, 2021) (decision and order) (holding that the Department must incorporate more stringent language on pushing and topside emissions as required by the APCA). Because the two door exclusion makes the county regulations less stringent than the federal regulations, the Department should remove the exclusion. (ID No. 37)

RESPONSE: Thank you for your comment. ACHD acknowledged that the regulations were being made more stringent than the PA DEP requirements in §123.44 where they deduct 2 doors from the number of doors with visible emissions and this would result in a violation of the 2019 Settlement Agreement.

43. **COMMENT:** The Department should reinstate its proposed change from September 2020 to measure sulfur compounds “expressed as equivalent hydrogen sulfide” in coke oven gas.

In the proposed regulations in September 2020, the Department proposed to amend the county regulations because they do not include a state requirement that compliance with the emission standards for coke oven gas must be determined by measuring sulfur compounds “expressed as equivalent hydrogen sulfide.”

ACHD’s rationale for removing two-door exclusion in TSD from 2020 draft:

...the ACHD regulations cannot be “less stringent” than the regulations promulgated under the Pennsylvania Air Pollution Control Act. 35 P.S. §4012(a). Under Section 123.23 (“Byproduct coke oven gas”) of the Pennsylvania “Air Resources” regulations, compliance with the emission standards for coke oven gas is determined by measuring sulfur compounds “expressed as equivalent hydrogen sulfide.” 25 Pa.Code § 123.23(b). The current version of the ACHD regulations are less stringent because it does not include this language. The ACHD is proposing to revise its regulations to state “expressed as equivalent hydrogen sulfide” which is consistent with the Pennsylvania regulations.

As discussed above, the county is required to enact regulations that will not be less stringent than the regulations under the APCA. See 35 P.S. 4012(a). The current county regulations provide that “no person shall flare, mix, or combust coke oven gas, or allow such gas to be flared, mixed, or combusted, unless the concentrations of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to the following concentrations” Article XXI, § 2105.21.h (emphasis added). In contrast, the state regulations governing byproduct coke oven gas under the APCA provide that “[n]o person may permit the flaring or combustion of a coke oven byproduct gas which contains sulfur compounds, expressed as equivalent hydrogen sulfide, in concentrations greater than” 25 Pa. Code § 123.23(b) (emphasis added). To be consistent with the more stringent state regulations, in 2020 the Department proposed to change the language “measured as hydrogen sulfide” to “expressed as equivalent hydrogen sulfide.” Attachment 7 – Third Draft Regulations, dated September 2020, page 16; Technical Support Document, page 25.

In the current proposed revisions, the Department has reversed this proposal, proposing to keep the language “measured as hydrogen sulfide.” See 2022 Proposed Regulations Redlined, page 20. The Department does not provide a justification for this change.

The Department’s reversal is not justified by the decision of the Administrative Hearing Officer in the legal challenge by U.S. Steel. That decision only addressed two other proposed changes to the regulation of coke oven gas: (1) changing the emission standard of coke oven gas from 40 grains to 23 grains; and (2) adding five specific sulfur compounds in addition to hydrogen sulfide to measure compliance with the limits in Article XXI § 2105.21.h. See U.S. Steel Corp. v. ACHD, ACHD-21-037, 4-5, 8-13 (Dec. 9, 2021) (decision and order). The Hearing Officer only held that those two

proposed revisions did not comply with the Settlement Agreement and that the state regulations did not require these changes. See id. at 12-13.

However, the decision did not address the proposal to change the language “measured as hydrogen sulfide” to “expressed as equivalent hydrogen sulfide,” which was intended to make the county regulations consistent with the more stringent state regulations. The Administrative Hearing Officer only addressed the Department’s decision to specifically include five additional compounds in the regulations. See id.

In fact, the decision made it clear that county regulations cannot be less stringent than state regulations. See id. at 15-16. Accordingly, the Department should retain the previously proposed more stringent “expressed as equivalent hydrogen sulfide” language in Article XXI, § 2105.21.h, which is what is required in the state regulations.

As a policy matter, the Department should interpret the regulatory language “sulfur compounds, expressed as equivalent hydrogen sulfide” in an appropriate manner to properly regulate sulfur compounds. (ID No. 37)

RESPONSE: Thank you for your comment. The Hearing Officer determined that ACHD was not allowed to add or include additional sulfur compounds.

44. **COMMENT:** The Department should reinstate the proposed requirement to monitor and record sulfur compounds concentrations on an hourly basis, and apply it to all sulfur emissions as it does in the Title V permit.

In the proposed regulations in September 2020, the Department proposed the addition of language that would require the measurement of sulfur compounds concentrations to be monitored and recorded on an hourly basis:

For determining compliance with the standards in this Subsection, the measured sulfur compounds concentration, expressed as equivalent H₂S, shall be monitored and recorded on an hourly basis.

The rationale was that there was a need to impose a frequency requirement. See id., page 26. But now it intends to withdraw this proposal. The Department has provided no reasonable basis for withdrawing this proposal.

The proposal should be reinstated because the wholesale removal of a hydrogen sulfide monitoring requirement is not necessary to comply with the Administrative Hearing Officer’s decision. The hourly monitoring requirement was not at issue in that decision. The facility still monitors hydrogen sulfide daily averages to comply with its permit, taken from hourly measurements.

The hourly hydrogen sulfide monitoring requirement is necessary for the facility to accurately calculate and report daily averages as required by its Title V Permit. This requirement is present in different versions of the Title V permit for the Clairton Coke Works, though only daily averages are specified under their monitoring requirements. Without a regulatory requirement specifying hourly measurements, this permitting requirement may result in fewer data points being recorded and poorer data on hydrogen sulfide concentrations as a result. The facility should not be allowed to only measure once per day and record it as a daily average. Rather, the Department should amend the regulation such that these measurements are taken hourly and reported as daily averages.

In addition, the Department should require that “all sulfur emissions” be included in this regulatory requirement, consistent with the requirements of the 2012 Title V permit.

As discussed above (i.e. Comment 14), the Department should revise the regulations to include “expressed as equivalent to H₂S” rather than “measured as H₂S” as required by the state regulations, and also as consistent with the facility’s Title V Permit. (ID No. 37)

RESPONSE: Thank you for your comment. A facility is still required to meet all of their applicable permit conditions, even if the conditions are not specifically listed in the regulation.

45. **COMMENT:** The Department should delete the word “uncombusted” in the definition of soaking emissions.

“Soaking emissions from a standpipe cap” means uncombusted emissions from an open standpipe which has been dampered off in preparation of pushing the coke mass out of the oven and shall end when pushing begins, i.e., ~~when the coke side door is removed.~~

In initial versions of the proposed regulation revision, the Department proposed to delete the term “uncombusted.”

Without explanation, the Department now proposes to reinstate the proposed term “uncombusted.” The Department has provided no reasonable basis for doing this.

The Department should delete the term “uncombusted” because it mischaracterizes emissions from soaking operations and is inconsistent with the substantive requirements for soaking emissions.

To illustrate, the soaking requirements include an opacity requirement, which is an indicator for measuring particulate matter. Clearly, the emissions of particulate matter are intended to be addressed by these requirements. But the phrase “uncombusted material” might be interpreted to apply very narrowly to only volatile organic compounds, causing a loophole in the regulatory requirements.

To avoid ambiguity, the Department should simply delete the term “uncombusted.” (ID No. 37)

RESPONSE: As a part of the 2021 addendum to the 2019 settlement agreement, the Department agreed to keep the word “uncombusted.”

List of Commenters

Commenter Group 1 consists of the following list of names of those that emailed a Form Letter to ACHD.

Richard Geiger
Kerri Allen
Patrick Pagano
Laura Horowitz
Eugene Mariani
Kathie Westman
Hannah Rosche
Maria Bajzek
Fayten El-Dehaibi
Jordan Papale
Jessica Bellas
Jennifer Goeckeler-Fried
Savannah Pailloz
Susan Peterson
Jeanne Zang
Catherine Anderson
Virginia Kelly
Stephanie Ulmer
Nancy O
Lynn Glorieux
Bryan Mills
Jon Wilson
Eitan Shelef
Gabrielle Corson
Joan Vondra
Richard Surdyk
Peter Adams
Constantina Hanse
Shawn Conlon
Felecia Bute
Mary Carol Kennedy
Joan Gordon
Kyle Young
Susan Nauhaus
Melanie Meade
Ross Carmichael
Melissa McSwigan
Myra Kazanjian
Kenneth Bickel
Gerard Rohlf
Mari McShane
Al Ferrucci
Emily Willner
Regina Brooks
Don Hawkins
Harry Hochheiser

Commenter Group 2 consists of the following list of names of those that hand-signed a list of comments on forms that were submitted at the May 11 hearing by Ms. Germain Gooden-Patterson.

C.D. Long
J.E. McKenzie
Wesley Sutton
Regina McKenzie
Brandon Small
Meme Atenwood
Anita Tobe
Patricia Batton
Kiy Meachan
Kim Meachan
Bernadette Holly
Jeilyn Milesie
Erika Wanzo
Thomas Spell
Tara Booker
Breona Johnson
Marla Hampton
Tehiran McDougald
Gabriana Glover
Symphonie
Angel Spell
Theresa Morigon
Vincent Mosley
Denise Linner
DaQuan Holly
Jymere Stevenson
Kimblyn Johnson
Nikkia Griffin
Jerome Tobe
Stephanie Flowers
Ashton Reck
Barry Nelson
Rev. Charles Wade
Elaine McCray
Sancerac
Christie Cromell
Royce Stewart
Melba Calloway
Kelli Johnson
Adam Walker
Ellen Dailey
Linda Randall
Robin Prince
Cierra Hilliary
Lisa Ebo
Taylor Stessrey
David Headings
Karl Zellars

Nicolette Kier
Seth Bush
Kristin Breiding
Victoria Baggot
Jacqualyn Harris
Teddy Miti
Sandra Baldwin

The remaining numbered commenters:

3. Sam DeMarco.
4. Thomas Bailey.
5. Elaina Skiba
6. Lee Lasich.
7. Matthew Mehalik.
8. Richard Lattanzi.
10. James Beisler.
11. Ginny Hunt
13. Brian Kuba.
14. Myron Arnowitt, Pennsylvania Director, Clean Water Action.
15. Michael Rhoads
16. Brett Tunno.
17. Jonelle Scheetz.
18. R. Tony Kurta.
19. Tammy Firda.
20. Ken Zapinski. Pittsburgh Works Together.
21. Richard Ford.
22. Art Thomas.
23. Kim Meacham.
24. David Meckel.
25. Cindy Meckel.
26. Jay Ting Walker.
27. Johnie Perryman.
28. Qiyam Ansari.
29. Germaine Patterson.
30. Matthew Nemeth.
- 31 Bob Macey.
- 32 Patrick Campbell (Executive Director, GASP).
- 33 Christine Graziano (Co-founder, Plant Five for Life).
- 34 Melanie Meade.
- 35 Ned Mulcahy.
- 36 Christopher Hardin (Environmental Manager, U.S. Steel).
37. Christopher Ahlers, Clean Air Council

For Board of Health review September 7, 2022.

The Air Program is requesting that the Board of Health grant final approval of this document.

(The Air Advisory Committee recommended such approval at their August 8, 2022 meeting.)

Proposed Final

Revision to

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

**PART G, “Methods”
and
Related Sections**

and

**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. 96)

(Document date: July 21, 2022)

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1. Proposed Revision

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

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PART A - GENERAL

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

Whenever used in this Article, or in any action taken pursuant to this Article, the following words and phrases shall have the meanings stated, unless the context clearly indicates otherwise. Except as specifically provided in this Article, terms used in this Article retain the meaning accorded them under the applicable provisions and requirements of the Clean Air Act.

"Flue" means any duct, pipe, stack, chimney, or conduit which conducts air contaminants into the open air and which permits the performance of the test methods and procedures ~~specified in~~ **established by** Part G of this Article.

"Volatile organic compound" means an organic compound which participates in atmospheric photochemical reactions other than those compounds which the Administrator of the EPA designates in the Federal Register as having negligible photochemical reactivity and those compounds excluded from the definition of volatile organic compounds by 40 CFR Part 51 (relating to permit requirements). VOC shall be measured by the test procedures and conditions ~~specified in~~ **established by** Part G of this Article.

PART B - PERMITS GENERALLY

§2102.09 WASTE-DERIVED LIQUID FUEL

The applications for and issuance of Installation Permits that expressly permit the burning of Waste-Derived Liquid Fuel as provided by this Article shall also be governed by the applicable requirements and standards of this Part except as otherwise specified by this Section. In addition to the other requirements of this Part, an application for an Installation Permit under this Section shall include:

- a. A report of the results of the analysis of a representative sample of the fuel to be used in accordance with ~~Subsection 2107.12.a~~ **Part G** of this Article; and
- b. For equipment in which the owner or operator is requesting to burn waste-derived liquid fuel pursuant to paragraph a.4 of §2105.31 of this Article, a report of the results of a diffusion modeling analysis as required by Subparagraph b.6.C.ii. of §2105.31 of this Article.

PART C - OPERATING PERMITS

SUBPART 3 - ADDITIONAL REQUIREMENTS GENERALLY

§2103.30 WASTE-DERIVED LIQUID FUEL

- a. **Operating Permits.** The applications for and issuance of Operating Permits that expressly permit the burning of Waste-Derived Liquid Fuel as provided by this Article shall also be governed by the applicable requirements and standards of this Part except as otherwise specified by this Section.
- b. In addition to the other requirements of this Part, an application for an Operating Permit under this Section shall include:
 1. A report of the results of the analysis of a representative sample of the fuel collected and analyzed in accordance with ~~Subsection 2107.12.a~~ **Part G** of this Article; and
 2. A report of the results of the direct emission reduction test in accordance with ~~Subsection 2107.12.b~~ **Part G** of this Article.
- c. **Annual Operating Permit Application/Administration Fee and Additional Annual Fees.** On the date that an application for an Operating Permit is submitted under this Subpart, and on or before the last day of the month in which such application was submitted in each year thereafter, while such application is being reviewed and then during the term of any permit subsequently issued, the owner or operator of such source shall submit to the Department, in addition to all applicable emission fees, all applicable administration fees in amounts determined under, and in accordance with, the requirements of Subpart 4 of this Part.

PART D - POLLUTANT EMISSION STANDARDS

§2104.01 VISIBLE EMISSIONS

- d. **Measurements.** Measurements of visible emissions shall be performed according to the procedures established by ~~§2107.14~~ **Part G** of this Article.

§2104.02 PARTICULATE MASS EMISSIONS

{effective February 1, 1994, as §2104.6; renumbered and amended effective October 20, 1995, 2104.02.a, e, g, and h amended effective August 15, 1997; Subsection f. amended March 13, 2008, effective April 15, 2008.}

- a. **Fuel-Burning or Combustion Equipment.** No person shall operate, or allow to be operated, any fuel-burning or combustion equipment, where the actual heat input to such equipment is greater than 0.50 million BTUs per hour, in such manner that emissions of particulate matter exceed the following rates at any time:

- h. No person shall operate, or allow to be operated, any of the Water Cooling Tower processes at the USX Corporation facility in Clairton, PA, unless the water used for such cooling is equivalent to, or better than, the water quality standards established for the Monongahela River by regulations promulgated by the DEP under the Pennsylvania Clean Streams Law, Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. 691.1 et seq., except that water from the Monongahela River may be used for such cooling.

No person shall operate, or allow to be operated, the Keystone cooling tower at the USX Corporation facility at Clairton, PA unless there is installed a mist eliminator.

- i. **Measurements.** Measurements of particulate mass emissions shall be performed according to the applicable procedures established by ~~§2107.02~~ **Part G** of this Article. **Measurements of water quality shall be performed according to procedures established or approved by the Commonwealth.**

§2104.03 SULFUR OXIDE EMISSIONS *{Subsections a, c & d modified July 10, 2003}*

- a. **Fuel-Burning or Combustion Equipment.** No person shall operate, or allow to be operated, any fuel-burning or combustion equipment in such manner that emissions of sulfur oxides, expressed as sulfur dioxide, exceed the following rates at any time:

- e. **Measurements.** Measurements of sulfur oxide emissions shall be performed according to the applicable procedures established by ~~§2107.03~~ **Part G** of this Article.

§2104.04 ODOR EMISSIONS

- a. **General.** No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line of such source.

- c. **Measurements.** Measurements of odor emissions shall be performed according to the procedures established by ~~§2107.13~~ **Part G** of this Article. Measurements of incinerator temperature shall be performed according to the procedures established by ~~§2107.06~~ **Part G** of this Article. Measurements pertaining to an equivalent emissions control system installed pursuant to Subsection b above shall be performed according to the applicable procedures established by Part G of this Article, or if no such procedures are applicable, pursuant to other procedures specified by the Department.

§2104.10 COMMERCIAL FUEL OIL *{Added by 11/28/2017 amendment,, effective 12/8/2017. Subsections a and d amended July 16, 2020, effective July 26, 2020.}*

Fuel-burning or combustion equipment must conform with the following:

- a. **Commercial Fuel Oil.** Except as specified in Paragraphs 1 and 2, a person may not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in Allegheny County, if the commercial fuel oil contains sulfur in excess of the applicable maximum allowable sulfur content set forth in the following table:

c. **Sampling and testing.**

1. For the purpose of determining compliance with the requirements of this section, the actual sulfur content of commercial fuel oil shall be determined by one of the following:
 - A. In accordance with the sample collection, test methods and procedures ~~specified under §2107.16, "Sulfur in Fuel Oil."~~ **established by Part G of this Article.**
 - B. Other methods developed or approved by the Department, PA DEP or the Administrator of the EPA.
1. A refinery owner or operator who produces commercial fuel oil intended for use or used in Allegheny County is required to sample, test and calculate the actual sulfur content of each batch of the commercial fuel oil as specified in Paragraph 1.
2. Prior to offering for sale, delivering for use, exchanging in trade or permitting the use of commercial fuel oil in Allegheny County, a person other than the ultimate consumer that accepts a shipment of commercial fuel oil from a refinery or other transferor, shall sample, test and calculate the actual sulfur content of the commercial fuel oil in accordance with Paragraph 1 if the shipment lacks the record required under Subsection d that enables the transferee to determine if the sulfur content of the shipment of commercial fuel oil meets the applicable maximum allowable sulfur content.

PART E - SOURCE EMISSION AND OPERATING STANDARDS

§2105.01 EQUIVALENT COMPLIANCE TECHNIQUES *{Subsections a, c & e modified July 10, 2003}*

Compliance with the requirements of this Part relating to sources of volatile organic compounds may be achieved by alternative methods provided:

- a. The alternative method is approved by the Department in an applicable installation permit or operating permit;

- f. The test methods and procedures used to monitor compliance with the requirements of this Section are either those ~~specified in~~ **established by** Part G of this Article or approved by the EPA.

SUBPART 1 - VOC SOURCES

§2105.10 SURFACE COATING PROCESSES *{modified July 10, 2003. Paragraphs a.1 & 2 added May 14, 2010 effective May 24, 2010. Paragraphs a.3 & 4 added May 29, 2013 effective June 8, 2013.}*

- a. **Applicability.** This section applies to a surface coating process category, regardless of the size of the facility, which emits or has emitted VOCs into the outdoor atmosphere in quantities greater than 3 pounds (1.4 kilograms) per hour, 15 pounds (7 kilograms) per day, or 2.7 tons (2,455 kilograms) per year during any calendar year since January 1, 1987.

- b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a surface coating process category listed in Table 2105.10, unless one of the following limitations is met:

1. The VOC content of each as applied coating is equal to or less than the standard specified in Table 2105.10.

- A. The VOC content of the as applied coating, expressed in units of weight of VOC per volume of coating solids, shall be calculated as follows:

- D. Sampling and testing shall be done in accordance with the procedures and test methods ~~specified in~~ **established by** Part G (Methods).

2. The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery or incineration or another method which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall efficiency of a control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than the equivalent overall efficiency calculated by the following equation:

$$O = (1 - E/V) \times 100$$

§2105.11 GRAPHIC ARTS SYSTEMS *{Subsection f added May 29, 2013 effective June 8, 2013.}*

- a. This Section applies to sources whose rotogravure and flexographic printing presses in themselves, or in combination with any surface coating operations subject to the provisions of Section 2105.10 of this Article (relating to Surface Coating Processes), have a potential uncontrolled emission rate of 1000 pounds or more per day or 100 tons or more per year of volatile organic compounds, including emissions from solvents used for clean-up and purging. No person shall operate, or allow to be operated, any source to which this Section applies, unless one of the following emission limitations is met:

e. **Measurements.**

Measurements of the volatile fraction of inks and of volatile organic compound emissions shall be performed according to the applicable procedures established ~~in §2107.04~~ **by Part G** of this Article.

f. **Exempt Other.**

The owner or operator of a flexible package printing press subject to §2105.81, Control Of VOC Emissions From Flexible Package Printing, is no longer subject to all subparagraphs of §2105.11 Graphic Arts Systems, and shall be subject to all subparagraphs of §2105.81 as of January 1, 2012.

§2105.12 VOLATILE ORGANIC COMPOUND STORAGE TANKS

- b. **Capacity Greater Than 40,000 Gallons.** No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure greater than 1.5 psia under actual storage conditions in any stationary tank, reservoir, or other container with a capacity greater than 40,000 gallons, unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressure sufficient to at all times prevent vapor or gas loss to the atmosphere or is equipped with:

1. An external or internal floating roof, except that this control equipment shall not be permitted if the volatile organic compounds have a vapor pressure of 11.0 psia or greater under actual storage conditions; or
2. A vapor recovery and disposal system reducing uncontrolled emissions of volatile organic compounds by at least 90% by weight. Compliance testing shall be done in accordance with the provisions of ~~§2107.04~~ **Part G** of this Article.

This Subsection does not apply to petroleum liquid storage tanks used to store waxy, heavy-pour crude oil or to tanks having a capacity less than 420,000 gallons used to store produced crude oil and condensate prior to lease custody transfer.

§2105.13 GASOLINE LOADING FACILITIES

- a. **Handling.** No person shall handle, or allow to be handled, gasoline in any bulk gasoline terminal, bulk gasoline plant, or other source subject to this Section in such manner that it is spilled, discarded in sewers, stored in open containers, or otherwise handled so as to result in uncontrolled evaporation into the open air.
- b. **Transfers.** No person shall transfer, or allow the transfer of, gasoline between any tank truck or trailer and any stationary storage tank located in a bulk gasoline terminal or bulk gasoline plant, or any small gasoline storage tank to which Subsection e below applies, unless:
 1. A vapor balance system is in good working order and is designed and operated during the transfer in such manner that:
 - A. Gauge pressure does not exceed 18 inches of water and vacuum does not exceed six inches of water in the gasoline tank truck;
 - B. Readings do not equal or exceed 100 percent of the lower explosive limit (LEL, measured as propane) at one inch from all points on the perimeter of a potential leak source when measured by the method ~~referenced in §2107.04~~ **established by Part G** of this Article during transfer operations; and
 - C. There are no avoidable visible liquid leaks during trans operations;
 2. Any truck, vapor balance system, or vapor disposal system, where applicable, that exceeds the limits in Paragraph b.1 above is repaired and retested according to the method ~~referenced in §2107.04~~ **established by Part G** of this Article within 15 days;

- c. **Bulk Gasoline Terminals.** No person shall load, or allow to be loaded, gasoline from a bulk gasoline terminal into a vehicular tank unless:
 1. There is in operation on the gasoline loading racks a vapor collection and disposal system reducing uncontrolled emissions by at least 90% by weight or emitting no more than 0.0668 pounds of gasoline for every 100 gallons of gasoline loaded;
 2. There is in operation on the gasoline loading racks a loading arm with a vapor collection adaptor and pneumatic, hydraulic or other mechanical means to force a vapor-tight seal between the adaptor and the hatch of the vehicular tank. A means shall also be provided to prevent gasoline drainage from the loading device when it is not connected to the hatch, and to accomplish complete drainage before disconnection. When loading is done by means other than hatches, all loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which are closed when disconnected; and
 3. Any person who operates, or allows to be operated, a bulk gasoline terminal shall maintain records of daily throughput. Such records shall be retained for not less than two years and shall be made available for inspection and copying by the Department upon request.

Compliance testing shall be done according to the provisions of ~~§2107.04~~ **Part G** of this Article.

- f. **Gasoline Tank Trucks.** No person shall transfer, or allow the transfer of, gasoline into or from a gasoline tank truck subject to Subsections c, d, or e above unless such tank truck:
1. Has been tested within the prior 12-month period in accordance with the procedure ~~referenced in §2107.04~~ **established by Part G** of this Article;

§2105.18 DRY CLEANING FACILITIES

- a. **Perchloroethylene Dry Cleaning Facilities.**
1. Emissions of perchloroethylene from any dry cleaning facility shall be vented through a properly functioning condenser or carbon adsorption system.
 2. In addition, such dry cleaning facilities shall comply with the following:
 - A. Diatomaceous earth filters shall be cooked or otherwise treated so that the residue contains no more than 25 percent by weight of volatile organic compounds;
 - B. Wet waste material from all solvents stills shall be reduced to no more than 60 percent by weight of volatile organic compounds;
 - C. All filtration cartridges shall be drained in the filter housing for a minimum of 24 hours before being discarded; and
 - D. Any component, including hose connections, valves, machine door gaskets, pumps, storage containers, water separators, filter sludge recovery units, distillation units, cartridge filters, and lint depositories found to be leaking volatile organic compounds shall be replaced or repaired within 24 hours of discovery of the leak.
 3. **Measurements.** Measurements relating to this Section shall be performed according to the applicable procedures established by ~~§2107.04~~ **Part G** of this Article.
- b. **Petroleum Solvent Dry Cleaning Facilities.** This Subsection applies to all petroleum solvent dry cleaning facilities, as defined in §2101.20 of this Article, that consume 100 gallons or more of petroleum solvent on a daily basis.

5. Any person who operates, or allows to be operated, any affected petroleum solvent dry cleaning facility shall demonstrate compliance as follows:
 - A. For any dryer:
 - i. Calculate, record, and report to the Department the weight of VOCs vented from the dryer emission control device calculated by using the appropriate method ~~under §2107.04~~ **established by Part G** of this Article;

- C. Where employing a petroleum solvent filtration system, but not employing cartridge filters:
- i. Calculate, record, and report to the Department the weight of VOCs contained in each of at least five 3-pound samples of filtration waste material taken at intervals of at least one week by employing the appropriate method ~~under §2107.04~~ **established by Part G** of this Article;
 - ii. Calculate, record, and report to the Department the total dry weight of articles dry cleaned during the intervals between removal of filtration waste samples, as well as the total mass of filtration waste produced in the same period; and
 - iii. Calculate, record, and report to the Department the weight of VOCs contained in filtration waste material per 100 pounds dry weight of articles dry cleaned.

§2105.19 SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING - FUGITIVE SOURCES

- a. This Section applies to sources with synthetic organic chemical and polymer manufacturing sources, other than equipment exempt under Subsection b below, having a design capacity to manufacture a total of 4,000 tons per year or more of any one or a combination of the following:

- c. Any person who operates, or allows to be operated, a source subject to this Section shall, as a condition to any Installation Permit for such source:
1. Install a second valve, blind flange, plug, cap, or other equivalent sealing system on all open ended lines, except those equipped with safety pressure relief valves; and
 2. Develop and initiate a leak detection and repair program for all pumps, valves, compressors, and safety pressure relief valves collectively referred to as components. The leak detection and repair program shall include, at a minimum, the following:
 - A. Attachment of an identification tag to or placement of any other permanent identification marking on each component. The identification shall be waterproof, be readily visible, and bear an identification number;
 - B. A leak check every three (3) months of all components and at any time of any component with a leak that is detected by sight, sound, or smell, by methods ~~referenced in §2107.04~~ **established by Part G** of this Article;

- E. A leak check of each safety/relief valve within 24 hours after such valve has been vented to the atmosphere, by methods ~~referenced in §2107.04~~ **established by Part G** of this Article; and

SUBPART 2 - SLAG, COKE, AND MISCELLANEOUS SULFUR SOURCES

Editor's Note: the following section is the subject of another regulation revision which may affect the same or more language of the section.

§2105.21 COKE OVENS AND COKE OVEN GAS

{portions effective August 15, 1997, the remainder effective February 1, 1994; Paragraph e.6 added June 22, 1995, effective July 11, 1995 and amended May 14, 2010 effective May 24, 2010; §2105.21.b, e, and h amended effective August 15, 1997; Subsection f amended February 12, 2007 effective April 1, 2007. Subsection i added August 29, 2013, effective September 23, 2013. Paragraph e.6 amended November 13, 2014, effective January 1, 2015.}

- f. **Combustion Stacks.** No person shall operate, or allow to be operated, any battery of coke ovens in such manner that, at any time, emissions from the combustion stack serving such battery:
1. For any battery of coke ovens installed, replaced, or reconstructed, or at which a major modification was made on or after January 1, 1978, exceed a particulate concentration of 0.015 grains per dry standard cubic foot;
 2. For any battery other than those subject to Paragraph f.1 of this Section, exceed a particulate concentration of 0.030 grains per dry standard cubic foot;
 3. Equal or exceed an opacity of 20% for a period or periods aggregating in excess of three (3) minutes in any 60 minute period; or
 4. Equal or exceed an opacity of 60% at any time.

Measurements of opacity shall be performed according to the methods for visible emissions established by ~~§2107.11~~ **Part G** of this Article.

- g. **Quenching.** No person shall quench, or allow the quenching of, coke unless the emissions from such quenching are vented through a baffled quench tower and the water used for such quenching is equivalent to, or better than, the water quality standards established for the nearest stream or river by regulations promulgated by the DEP under the Pennsylvania Clean Streams Law, Act of June 22, 1937, PL. 1987, as amended, 35 P.S. 691.1 *et seq.*, except that water from the nearest stream or river may be used for the quenching of coke. The nearest stream or river to the USX Corporation facility in Clairton, PA, shall be the Monongahela River. **Measurements of water quality shall be performed according to procedures established or approved by the Commonwealth.**

§2105.22 MISCELLANEOUS SULFUR-EMITTING PROCESSES

- a. **Silicon Carbide Manufacturing.** No person shall operate, or allow to be operated, any silicon carbide manufacturing process unless there is in operation on such process air pollution control equipment which reduces uncontrolled emissions of sulfur oxides, expressed as sulfur dioxide, by at least:
1. Eighty-five percent (85%), if such process uses coke with a sulfur content of two percent (2%) by weight;
or

2. A control efficiency which achieves equivalent emissions per ton of product to Paragraph a.1 above, if such process uses coke with a sulfur content other than two percent (2%) by weight.
 - b. **Measurements.** To determine compliance with Subsection a above, measurements of sulfur oxide emissions and measurements of the sulfur content of coke shall be performed according to the applicable procedures established by ~~§2107.03~~ **Part G** of this Article.

SUBPART 3 - INCINERATION AND COMBUSTION SOURCES

§2105.30 INCINERATORS

- g. **Measurements.** Measurements of afterburner temperatures, particulate emissions, and visible emissions shall be conducted according to the procedures ~~set forth in~~ **established by** Part G of this Article.

§2105.31 WASTE-DERIVED LIQUID FUEL

{Paragraphs b.7 & e.6 restored May 7, 1998, effective May 15, 1998}

- b. **General.** Except as provided for in Subsection c of this Section, no person shall burn or allow to be burned waste-derived liquid fuel in any fuel-burning or combustion equipment, process equipment, or incinerator, regardless of size or rated capacity and irrespective of exceptions listed in Parts B or C of this Article, unless:

5. A representative sample of the fuel being used, is taken and analyzed pursuant to ~~Subsection a of §2107.12 of this Article~~ **Chapter 14 of the Source Testing Manual**, and a written report of the results of the analysis is submitted to the Department as part of the application for any Installation Permit required by this Section, as part of the Operating Permit application, and every 12 months after approval of the initial Operating Permit; and
6. **Size of equipment.**
- A. For small equipment: The equipment has a direct emission reduction of at least 99.0 percent to be determined in accordance with ~~Subsection b of §2107.12 of this Article~~ **Chapter 14 of the Source Testing Manual**.
- B. For large equipment: The equipment has a direct emission reduction of at least 99.9 percent to be determined in accordance with ~~Subsection b of §2107.12 of this Article~~ **Chapter 14 of the Source Testing Manual**.
- C. For industrial boilers, utility boilers, or industrial furnaces or processes with a rated heat input of 5,000,000 BTU per hour or greater:
- i. The equipment complies with Subparagraph 6.B of this Subsection; OR
- ii. In order to invoke Paragraph 4 of Subsection a of this Section:
- (a) The equipment has a direct emission reduction of at least:
- (1) 99.9% to be determined in accordance with Subparagraphs ~~2.Aa or 2.Bb~~ of Subsection ~~bB~~ of §2107.12 of this Article **Chapter 14 of the Source Testing Manual** OR

- (2) ~~99.5%~~ **99.95%** to be determined in accordance with Paragraph 1 of Subsection ~~b~~**B** of §2107.12 of this Article **Chapter 14 of the Source Testing Manual**;

7. The analysis of the representative samples of waste-derived liquid fuel required by the Section shall be conducted using the methods specified in ~~Section 2107.12~~ **Chapter 14 of the Source Testing Manual**.

e. **Alternative Standards and Procedures.**

1. The Department may, on a case-by-case basis, approve an alternative standard or procedure to be followed by the owner or operator of specific waste-derived liquid fuel-burning equipment in lieu of a requirement of this Section, provided that:

6. The Department may, upon receiving a written request from the owner or operator setting forth all necessary information, approve in writing an analysis method other than those specified in ~~Section 2107.12~~ **Chapter 14 of the Source Testing Manual** if it finds that, under the circumstances:

- A. Such alternative analysis method is equivalent to or better than the method specified in ~~Section 2107.12~~ **Chapter 14 of the Source Testing Manual** in terms of reliability, availability, feasibility, and enforceability; and
- B. Such alternative analysis method is consistent with accepted testing practices for obtaining accurate results which are representative of the conditions evaluated.

- f. **Violations.** Failure to comply with any requirement of this Section shall be a violation of this Article giving rise to the remedies provided by §2109.02 of this Article.

§2105.32 HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS

{This section added by November 19, 1998 amendment, effective September 1, 1999}

- a. **Applicability.** Except as provided for by paragraphs (e)(1) and (e)(2), this section applies to all hospital/medical/infectious waste incinerators for which construction was commenced on or before June 20, 1996.

- f. **Emission Limitations.**

- 1. On and after the date on which compliance is required under paragraph g of this section, no owner or operator of a HMIWI facility shall discharge, or allow to be discharged, to the atmosphere from that HMIWI facility any gases that contain stack emissions in excess of the limits presented in Table 1 of this subsection:

TABLE 1 of §2105.32

- 2. On and after the date on which compliance is required under paragraph (g) of this section no owner or operator of a HMIWI facility shall discharge, or allow to be discharged, to the atmosphere from that HMIWI facility any gases that exhibit greater than 10 percent opacity(6-minute block average) as defined by ~~§2107.11 of this Article~~ **Chapter 13 of the Source Testing Manual.**

SUBPART 7 - MISCELLANEOUS VOC SOURCES

§2105.70 PETROLEUM REFINERIES

b. **Fugitive Sources.**

4. Any person operating, or allowing the operation of, a petroleum refinery shall conduct a monitoring program consistent with the following requirements:
 - A. Check yearly, by methods ~~referenced in~~ **established by** Part G of this Article, pump seals and pipeline valves in liquid service.
 - B. Check quarterly by methods ~~referenced in~~ **established by** Part G of this Article, compressor seals, pipeline valves in gaseous service, and pressure relief valves in gaseous service.
 - C. Check monthly, by visual methods, all pump seals.
 - D. Check within 24 hours, by methods ~~referenced in~~ **established by** Part G of this Article, pump seal from which VOC liquids are observed to be dripping.
 - E. Check, by methods ~~referenced in~~ **established by** Part G of this Article, relief valve within 24 hours after it has vented to the atmosphere.
 - F. Check within 24 hours after repair, by methods ~~referenced in~~ **established by** Part G of this Article, refinery component that was found leaking.

§2105.76 WOOD FURNITURE MANUFACTURING OPERATIONS *{effective July 10, 2003}*

- a. **General Provisions and Applicability.** This section applies to each wood furniture manufacturing facility located in the county that emits or has the potential to emit 25 tons or more per year of VOCs from wood furniture manufacturing operations.

- d. **Compliance procedures and monitoring requirements.**

- 1. Compliance methods. An owner or operator of a facility subject to the emission standards in Subsection b shall demonstrate compliance with those provisions by using one or more of the following methods:

- A. To support that each sealer, topcoat and strippable spray booth coating meets the requirements of Paragraph b.1 of this section:

- iii. Perform sampling and testing in accordance with the procedures and test methods ~~in~~ **established by** Part G.

- B. To comply through the use of a control system as described in Paragraph b.3:

- iii. Determine the overall control efficiency of the control system using the procedures and test methods ~~in~~ **established by** Part G and demonstrate that the value of O calculated by the following equation is equal to or greater than the value of O calculated by the equation Subparagraph d.1.B.i above:

$$O = (F \times N) (100)$$

Where:

F = the control device efficiency, expressed as a fraction

N = the capture device efficiency, expressed as a fraction

- 2. Initial compliance.

- C. Control systems. An owner or operator of a facility using a control system to comply with this section shall demonstrate initial compliance by submitting a report to the Department that:

- i. Identifies the operating parameter value to be monitored for the capture device and discusses why the parameter is appropriate for demonstrating ongoing compliance.
- ii. Includes the results of the initial performance testing using the procedures and test methods ~~specified in~~ **established by** Part G.

- v. An owner or operator of a facility complying with this subparagraph shall

calculate the site-specific operating parameter value as the arithmetic average of the maximum or minimum operating parameter values, as appropriate, that demonstrate compliance with the standards, using the procedures ~~in~~ **established by** Part G.

g. **Special provisions for facilities using an emissions averaging approach.**

6. Quantification procedures. The emissions averaging program shall specify methods and procedures for quantifying emissions. Quantification procedures for VOC content are ~~included in~~ **established by** Part G (relating to sampling and testing). The quantification procedures shall also include methods to determine the usage of each coating and shall be accurate enough to ensure that the facility's actual emissions are less than the allowable emissions.

§2105.77 CONTROL OF VOC EMISSIONS FROM LARGE APPLIANCE AND METAL FURNITURE SURFACE COATING PROCESSES *{Added May 14, 2010, effective May 24, 2010.}*

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a large appliance or metal furniture surface coating process unless one of the following limitations is met:

1. The VOC content of each as applied coating is equal to or less than the standard specified in Table 2105.77.

D. Sampling and testing shall be done in accordance with the procedures and test methods ~~specified in~~ **established by** Part G (Methods).

2. The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery or incineration or another method which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall efficiency of a control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than 90% as calculated by the following equation:

$$90\% = (1 - E/V) \times 100$$

Where:

V = The VOC content of the as applied coating, in lb VOC/gal of coating solids

E = The Table 2105.77 limit for large appliances and metal furniture surface coatings in lbs VOC per gallon of coating solids

3. A combination of the methods listed in paragraphs 1 and 2.

**§2105.78 CONTROL OF VOC EMISSIONS FROM FLAT WOOD PANELING
COATING PROCESSES** *{Added May 14, 2010, effective May 24, 2010.}*

- b. Limitations. A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a flat wood paneling coating process, unless one of the following limitations is met:
1. The VOC content of each as applied coating is equal to or less than 2.9 lbs VOC per gallon of coating solids (0.35 kg VOC per liter of coating solids).

- D. Sampling and testing shall be done in accordance with the procedures and test methods ~~specified in~~ **established by** Part G (Methods).
2. The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery or incineration or another method which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall efficiency of a control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than 90% as calculated by the following equation:

$$90\% = (1 - E/V) \times 100$$

Where:

V = The VOC content of the as applied coating, in lb VOC/gal of coating solids

E = Limit of 2.9 lbs VOC per gallon of coating solids (0.35 kg VOC per liter of coating solids)

3. A combination of the methods listed in paragraphs 1 and 2.

§2105.79 CONTROL OF VOC EMISSIONS FROM PAPER, FILM, AND FOIL SURFACE COATING PROCESSES *{Added May 14, 2010, effective May 24, 2010.}*

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a paper, film, and foil surface coating process unless one of the following limitations is met:

1. The VOC content of each as applied coating is equal to or less than the standard specified in Table 2105.79.

D. Sampling and testing shall be done in accordance with the procedures and test methods ~~specified in~~ **established by** Part G (Methods).

2. The overall weight of VOCs emitted to the atmosphere is reduced through the use of vapor recovery or incineration or another method which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall efficiency of a control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than 90% as calculated by the following equation:

$$90\% = (1 - E/V) \times 100$$

Where:

V = The VOC content of the as applied coating, in lb VOC/lb of coating solids

E = The Table 2105.79 limit for paper, film, and foil surface coating in lbs VOC per lbs of coating solids

3. A combination of the methods listed in paragraphs 1 and 2.

§2105.80 CONTROL OF VOC EMISSIONS FROM OFFSET LITHOGRAPHIC PRINTING AND LETTERPRESS PRINTING *{Added May 29, 2013, effective June 8, 2013.}*

a. **Applicability.** Beginning January 1, 2012, this section applies to the owner or operator of an offset lithographic printing and/or letterpress printing operation, where the total actual VOC emissions from all offset lithographic printing and letterpress printing operations, with two exceptions, including related cleaning activities, at that facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per twelve month rolling period. These exceptions include heatset web offset lithographic printing operations and heatset web letterpress printing operations, for which this section only applies to those presses with potential to emit from the dryer, prior to controls, of at least 25 tons (22,680 kilograms) of VOC (petroleum ink oil) from heatset inks per twelve month rolling period.

g. **Measurements.** Measurements of the volatile fraction of inks and fountain solution, and of volatile organic compound emissions shall be performed according to the applicable procedures established ~~in~~ § 2107.04 **by Part G** of this Article.

§2105.81 CONTROL OF VOC EMISSIONS FROM FLEXIBLE PACKAGE PRINTING

{Added May 29, 2013, effective June 8, 2013.}

- a. **Applicability.** Beginning January 1, 2012, this section applies to the owner or operator of a flexible packaging printing press, including rotogravure printing and flexographic printing, where the total actual VOC emissions from all flexible package printing press operations, including related cleaning activities, at the facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per twelve month rolling period.

1. The limits from §2105.11 Graphic Arts System no longer apply to flexible package printing presses, as of January 1, 2012.

- f. **Measurements.** Measurements of the volatile fraction of inks, and of volatile organic compound emissions shall be performed according to the applicable procedures established in ~~§2107.04~~ **by Part G** of this Article.

§2105.82 CONTROL OF VOC EMISSIONS FROM INDUSTRIAL SOLVENT CLEANING OPERATIONS

{Added May 29, 2013, effective June 8, 2013.}

- a. **Applicability.** Beginning January 1, 2012, this section applies to the owner or operator of a facility, where the total actual VOC emissions from all of the industrial solvent cleaning operations at that facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per twelve month rolling period. This regulation applies to any facility that employs solvent materials in industrial solvent cleaning operations during the production, repair, maintenance, or servicing of parts, products, tools, machinery, equipment, or general work areas, and stores and/or disposes of these solvent materials.

The provisions of this rule shall not apply to cleaning operations in the following source categories listed for regulation under Section 183(e) of the Clean Air Act:

1. Aerospace coatings;
2. Wood furniture coatings;
3. Shipbuilding and repair coatings;
4. Flexible package printing materials;
5. Lithographic printing materials;
6. Letterpress printing materials;
7. Flat wood paneling coatings;
8. Large appliance coatings;
9. Metal furniture coatings;
10. Paper, film, and foil coatings;
11. Plastic parts coatings;
12. Miscellaneous metal parts coatings;
13. Fiberglass boat manufacturing materials;
14. Miscellaneous industrial adhesives; or
15. Auto and light-duty truck assembly coatings.

- g. **Measurements.** Measurements of the volatile fraction of industrial solvent cleaners, and of volatile organic compound emissions shall be performed according to the applicable procedures established in ~~§2107.04~~ **by Part G** of this Article.

§2105.83 CONTROL OF VOC EMISSIONS FROM MISCELLANEOUS METAL AND/OR PLASTIC PARTS SURFACE COATING PROCESSES *{Added May 29, 2013, effective June 8, 2013.}*

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a miscellaneous metal parts and/or plastic parts surface coating processes, unless one of the following limitations is met:

1. The VOC content of each applied coating is equal to or less than the standard specified in Table 2105.83.1.

C. Sampling and testing shall be done in accordance with the procedures and test methods specified in **established by** Part G (Methods).

2. The VOC content limitations based on low-VOC coatings as specified in Table 2105.83.2 of this rule, the use of add-on pollution control equipment to meet the VOC content limitations, and the use of an application method specified in Subsection e of this rule.

C. Sampling and testing shall be done in accordance with the procedures and test methods specified in **established by** Part G (Methods).

3. The overall weight of VOC emitted to the atmosphere is reduced through the use of an oxidizer, adsorber, absorber, concentrator, or another add-on control which is acceptable under § 2105.01 (Equivalent Compliance Techniques). The overall control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than 90%.

i. **Measurements.** Measurements of the volatile fraction of coatings, other than reactive coatings, used at facilities operating miscellaneous metal parts and/or plastic parts surface coating processes shall be performed according to the applicable procedures established ~~in §2107.04~~ **by Part G** of this Article.

§2105.84 CONTROL OF VOC EMISSIONS FROM AUTOMOBILE AND LIGHT-DUTY TRUCK ASSEMBLY COATINGS *{Added May 29, 2013, effective June 8, 2013.}*

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from an automobile and/or light-duty truck assembly coating operation, unless one of the following limitations is met:

1. The VOC content of each assembly coating process and applied material coating is equal to or less than the standard specified in Table 2105.84.

A. The VOC content, minus exempt compounds, of the applied coating, expressed in units of weight of VOC per volume of total nonexempt material, shall be calculated as follows:

$$\text{VOC} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:

VOC = VOC content, minus exempt compounds, in lb (g) VOC / gal (l) of materials, minus exempt compounds

W_s = Weight of all volatile material in pounds (g), including VOC, water, non-precursor organic compounds and dissolved vapors

W_w = Weight of water in pounds (g)

W_{es} = Weight of all non-precursor compounds in pounds (g)

V_m = Volume of total material, as applied in gallons (l)

V_w = Volume of water in gallons (l)

V_{es} = Volume of all non-precursor compounds in gallons (l)

2. The overall weight of VOC emitted to the atmosphere is reduced through the use of an oxidizer, adsorber, or another add-on control which is acceptable under §2105.01 (Equivalent Compliance Techniques). The overall control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than 85%.

c. **Records.** A facility, regardless of the facility's annual emission rate, which contains an automobile and/or light-duty truck assembly coating operation, shall maintain records sufficient to demonstrate compliance with this section. At a minimum, a facility shall maintain daily records of:

f. **Measurements.** Measurements of the volatile fraction of coatings, other than reactive coatings, used at automobile and/or light-duty truck assembly coating facilities shall be performed according to the applicable procedures established ~~in §2107.04~~ **by Part G** of this Article.

§2105.85 CONTROL OF VOC EMISSIONS FROM MISCELLANEOUS INDUSTRIAL ADHESIVES *{Added May 29, 2013, effective June 8, 2013.}*

b. **Limitations.** A person may not cause or permit the emission into the outdoor atmosphere of VOCs from a miscellaneous industrial adhesive process, unless one of the following limitations is met:

1. The VOC content of each applied adhesive is equal to or less than the standard specified in Table 2105.85.

A. The VOC content, minus exempt compounds, of the applied adhesive, expressed in units of weight of VOC per volume of total nonexempt material, shall be calculated as follows:

$$\text{VOC} = \frac{W_s - W_w - W_{es}}{V_m - V_w - V_{es}}$$

Where:

VOC = VOC content, minus exempt compounds, in lb (g) VOC / gal (l) of materials, minus exempt compounds

W_s = Weight of all volatile material in pounds (g), including VOC, water, non-precursor organic compounds and dissolved vapors

W_w = Weight of water in pounds (g)

W_{es} = Weight of all non-precursor compounds in pounds (g)

V_m = Volume of total material, as applied in gallons (l)

V_w = Volume of water in gallons (l)

V_{es} = Volume of all non-precursor compounds in gallons (l)

B. The VOC content limits of subparagraph A may be met by averaging the VOC content of materials used on a single application unit for each day (i.e., daily within-application unit averaging).

2. The overall weight of VOC emitted to the atmosphere is reduced through the use of an oxidizer, adsorber, absorber or another add-on control which is acceptable under § 2105.01 (Equivalent Compliance Techniques). The overall control system, as determined by the test methods and procedures ~~specified in~~ **established by** Part G, shall be no less than 85%.

3. A combination of the methods listed in paragraphs 1 and 2.

i. **Measurements.** Measurements of the volatile fraction of adhesives, other than reactive adhesives, used at facilities operating miscellaneous industrial adhesive application processes shall be performed according to the applicable procedures established in ~~§2107.04~~ **by Part G** of this Article.

§2105.86 CONTROL OF VOC EMISSIONS FROM FIBERGLASS BOAT MANUFACTURING MATERIALS

{Added May 29, 2013, effective June 8, 2013. Table 2105.86 added May 8, 2015, effective June 19, 2015.}

- a. **Applicability.** Beginning January 1, 2014, this section applies to the owner or operator of a fiberglass boat manufacturing facility, where the total actual VOC emissions from fiberglass boat manufacturing materials, including related cleaning activities, at that facility are equal to or greater than 15 pounds (6.8 kilograms) per day or 2.7 tons (2,455 kilograms) per twelve month rolling period, before controls. This regulation applies to facilities that manufacture hulls or decks of boats from fiberglass, or build molds to make fiberglass boat hulls or decks. This regulation does not apply to facilities that manufacture solely fiberglass parts of boats such as hatches, seats, lockers, or boat trailers.

- g. **Measurements.** Measurements of the volatile fraction of resin and gels, used at fiberglass boat manufacturing facilities shall be performed according to the applicable procedures established in ~~§2107.04~~ **by Part G** of this Article.

SUBPART 9 - TRANSPORTATION RELATED SOURCES

{Editor’s Note: Another regulation revision is deleting Section 2105.90.}

§2105.90 GASOLINE VOLATILITY

{This section added by May 7, 1998 amendment, effective May 15, 1998; Paragraph e renumbered, paragraphs c & d renumbered and amended August 12, 1999, effective September 1, 1999; Paragraph b.3 added February 21, 2019, effective March 3, 2019}

- b. **Compliant Fuel Requirements.**

- 3. This Section will no longer be applicable upon the effective date of approval by the EPA of the removal, suspension or replacement of this Section as part of Allegheny County’s portion of the Pennsylvania SIP.

- e. **Sampling and test methods.** Sampling and testing for the volatility of gasoline shall be performed according to the applicable procedures established ~~§2107.15~~ **by Part G of this Article.**

PART G - METHODS

§2107.01 GENERAL

{effective February 1, 1994; amended effective October 20, 1995. Amended Month/Date/Year; effective Month/Date/Year}

- a. The methods **and procedures** ~~specified in this Part shall be~~ used to determine compliance with the emission standards, **and** source standards ~~and ambient air quality standards~~ established by this Article, **shall be equivalent to those specified in the Allegheny County Source Testing Manual including future revisions as made under Subsection d below.** For purposes of determining compliance with NSPS's, NESHAP's, MACT's, and all other state and federal standards incorporated by reference into this Article, the methods **and procedures** specified in the applicable standard shall be used, or where no such methods **and/or procedures** are specified, methods **and/or procedures** approved by the Department shall be used.
- b. All sampling and analytical procedures promulgated by the Administrator under the Clean Air Act and by the Pa. Environmental Quality Board and Dept. of Environmental Protection (DEP) under the Pa. Air Pollution Control Act as set forth, or referenced, in 25 Pa. Code Chapter 139 Subchapter A, are hereby incorporated, by reference, as part of the methods **and procedures** ~~specified in~~ **established by** this Part. Additions, revisions, and deletions to such procedures adopted by the EPA and the DEP are incorporated into this Article and are effective on the date established by the Federal regulations, unless otherwise established by regulation under this Article.
- ~~c.~~ The Department may, upon written application setting forth all necessary information, approve in writing a method other than those specified by this Part if it finds that, for the particular source or air pollution control equipment involved, such method is equivalent to the methods specified by this Part and that such methods are consistent with accepted air pollution testing practices and with obtaining accurate results which are representative of the conditions evaluated.
- ~~cd.~~ The methods specified in this Part and approved under Subsection ~~c~~ of this Section shall be compiled in the Source Testing Manual of the Allegheny County Bureau of Environmental Quality Division of Air Quality. ~~Such~~ **The Allegheny County Source Testing Manual** shall be open to public inspection during business hours at the headquarters of the Division of Air Quality ~~and at the Allegheny County Health Department Library~~ **and available on the Department's Air Quality Program website.** In addition, any person shall, upon request and upon payment of the reasonable costs of furnishing such material, be furnished with copies of the Manual or parts thereof.
- d. Revisions to the Source Testing Manual. The Department shall follow the following procedures to update and revise the "Source Testing Manual:"**
 - 1. The Department will provide notice of proposed revisions to the Source Testing Manual by posting the public notice and the proposed revisions on the Department's Air Quality Program website for the duration of the public comment period. The notice will describe the proposed revisions. The Department will also provide notice using e-mail or regular U.S. postal service mailing to persons on a mailing list developed by the Department.**

2. The Department will provide an opportunity for comments on the proposed revisions. The comment period will be at least 30 days from the date of the posting of the notice required by Paragraph 1 above.
3. After the public comment period, the Department will evaluate the comments and finalize the changes to the Source Testing Manual.
4. The revisions to the Source Testing Manual shall be approved by the Director of the Allegheny County Health Department.
5. The Department will provide notice of the revisions to the Source Testing Manual on the Department's Air Quality Program website. The notice will describe the revisions and provide the name, address and telephone number of the person from whom a written copy of the revised manual can be obtained.
6. A person proposing a test method and/or procedure other than those specified by the Source Testing Manual shall submit a written application, subject to Department approval, setting forth all necessary information. Such methods and/or procedures shall be consistent with accepted air pollution testing practices and shall obtain accurate results which are representative of the condition evaluated.
7. A person proposing test methods, procedures and guidance for the reporting of emissions different from those contained in the Source Testing Manual shall have the burden of proof to demonstrate that test methods, procedures and guidance accurately characterize the emissions from the source.

§2107.02 to §2107.16 {RESERVED}

§2107.02 PARTICULATE MATTER *— {effective February 1, 1994; amended effective October 20, 1995}*

a. Test Methods.

1. Except as provided below in this Section, the following methods shall be used to determine particulate matter emissions from stationary sources, as specified in Chapters 1 through 5 inclusive of the Allegheny County Source Testing Manual:
 - A. Method 1 through 5F inclusive "Determination of Particulate Emissions from Stationary Sources," United States Environmental Protection Agency, 40 CFR 60 Appendix A.
2. Determination of compliance with the pushing emission standard for coke ovens set forth in §2105.21 of this Article shall be performed as specified in Chapter 54 of the Allegheny County Source Testing Manual, entitled "Determination of Particulate Emissions for Coke Oven Pushing Sources."
3. Determination of compliance with particulate matter standards for sources equipped with pressurized baghouses shall be performed as specified in Chapter 45 of the Allegheny County Source Testing Manual, entitled "Determination of Particulate Matter from Pressurized Baggouses."

- ~~4. Determination of compliance with particulate matter standards for sources equipped with modular baghouses shall be performed as specified in Chapter 47 of the Allegheny County Source Testing Manual, entitled "Determination of Particulate Matter from Modular Baggouses."~~
- ~~5. The following methods shall be used to determine PM 10 emissions from stationary sources, as specified in Chapter 201 of the Allegheny County Source Testing Manual:

 - ~~A. Method 201 "Determination of PM 10 Emissions (Exhaust Gas Recycle Procedure)," United States Environmental Protection Agency, 40 CFR 51 Appendix M; or~~
 - ~~B. Method 201A "Determination of PM 10 Emissions (Constant Sampling Rate Procedure)," United States Environmental Protection Agency, 40 CFR 51 Appendix M.~~~~
- ~~6. The following method shall be used to determine condensible particulate emissions from stationary sources, as specified in Chapter 202 of the Allegheny County Source Testing Manual:

 - ~~A. Method 202 "Determination of Condensible Particulate Emissions from Stationary Sources," United States Environmental Protection Agency, 40 CFR 51 Appendix M.~~~~
- ~~7. Determination of compliance with PM 10 standards for fugitive emissions from sources located within a structure shall be performed as specified in Chapter 53 of the Allegheny County Source Testing Manual, entitled "Determination of Inhalable Fugitive Particulate Emissions from Air Pollution Sources Within a Structure."~~
- ~~b. Calibration. Calibration of test instruments shall be performed as specified in Chapter 50 of the Allegheny County Source Testing Manual relating to Calibration and Maintenance.~~

§2107.03 SULFUR OXIDES

The following methods shall be used to determine sulfur oxide emissions from stationary sources, as specified in Chapters 6 and 8 of the Allegheny County Source Testing Manual:

- ~~a. Methods 6 through 6C "Determination of Sulfur Dioxide Emissions from Stationary Sources," and~~
- ~~b. Method 8 "Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources," United States Environmental Protection Agency, 40 CFR 60 Appendix A.~~

§2107.04 VOLATILE ORGANIC COMPOUNDS

- ~~a. **General.** The following method shall be used to determine volatile organic compound emissions from stationary sources, as specified in Chapter 25 of the Allegheny County Source Testing Manual:

 - ~~1. Method 25 Determination of Total Gaseous Non Methane Organic Emissions as Carbon, "Standards for Performance for New Stationary Sources; Addition of Reference Methods 24 and 25 to Appendix A," Federal Register, Part VII, Volume 45, Number 194, Pages 65956-65973, October 3, 1980, Washington, D.C.~~
 - ~~2. Method 25A Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, U.S. EPA Appendix A Reference Methods (as amended at Fed. Reg., V. 55, No. 220, Pg. 47471, Nov. 14, 1990, Washington, D.C.), 40 CFR Chapter I Part 60 Appendix A Method 25A, Washington, D.C., "Measurement of Volatile Organic Compounds—Guideline Series," U.S. EPA, Research Triangle Park, NC, Publ. No. EPA 450/2-78-041, June, 1978, pp. 46-54.~~~~

- ~~3. Method 25B—Determination of Total Gaseous Organic Concentration Using a Nondispersive Infrared Analyzer, U.S. EPA Appendix A—Reference Methods (as amended at Fed. Reg., V. 55, No. 220, Pg. 47471, Nov. 14, 1990, Washington, D.C.), 40 CFR Chapter I Part 60 Appendix A Method 25B, Washington, D.C., "Measurement of Volatile Organic Compounds—Guideline Series," U.S. EPA, Research Triangle Park, NC, Publ. No. EPA 450/2-78-041, June, 1978, pp. 46-54.~~
- ~~b. **Gasoline Vapor Recovery Systems.** The following methods shall be used to determine volatile organic compound emissions from vapor recovery systems for gasoline loading operations:
 - ~~1. Emission Test Procedures for Tank Truck Gasoline Loading Terminals (Appendix A), "Control of Hydrocarbons from Tank Truck Gasoline Loading Terminals", EPA 450/2-77-026, United States Environmental Protection Agency, October, 1977, as specified in Chapter 55 of the Allegheny County Source Testing Manual, entitled "Determination of Volatile Organic Compound Emissions from Vapor Recovery Systems for Gasoline Loading Operations."~~
 - ~~2. "Sampling and Testing Procedure for Gasoline Facilities", Allegheny County Source Testing Manual, Chapters 25 and 27.~~~~
- ~~c. **Surface Coatings.** The following methods shall be used to determine the volatile organic compound content, water content, and density of surface coatings and inks, as specified in Chapter 24 of the Allegheny County Source Testing Manual:
 - ~~1. Method 24—Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, "Standards for Performance for New Stationary Sources; Addition of Reference Methods 24 and 25 to Appendix A," Federal Register, Part VII, Volume 45, Number 194, Pages 65956—65973, October 3, 1980, Washington, D.C.~~~~
- ~~d. **Effluent Water.** The following method shall be used to determine the volatile organic compound content of effluent water:
 - ~~1. Standard Methods for the Examination of Water and Wastewater, 14th Edition, "Organic Carbon (total), Combustion—Infrared Method", American Public Health Association, Washington, D.C., as specified in Chapter 46 of the Allegheny County Source Testing Manual, entitled "Determination of Volatile Organic Compound Content of Effluent H₂O."~~~~
- ~~e. **Control System Effectiveness.** The following methods shall be used to determine the effectiveness of vapor recovery systems and similar control equipment for volatile organic compound emissions:
 - ~~1. "Sampling and Testing Procedure for Gasoline Facilities", Allegheny County Source Testing Manual, Chapter 25.~~~~
- ~~f. **Tank Trucks.** The following method shall be used to determine the leak tightness of gasoline tank trucks and vapor recovery systems pursuant to §2105.13 of this Article:
 - ~~1. Pressure Vacuum Test Procedures for Leak Tightness of Truck Tanks (Appendix A), "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", EPA 450/2-78-051, U.S. Environmental Protection Agency, December, 1978, as specified in Chapter 56 of the Allegheny County Source Testing Manual, entitled "Determination of the Leak Tightness of Gasoline Tank Trucks and Vapor Recovery Systems".~~~~
- ~~g. **Tank Trucks and Vapor Collection Systems.** The following method shall be used to determine the magnitude of leaks of volatile organic compounds from gasoline tank trucks and vapor collection systems and shall be used in the annual tests required of gasoline tank trucks:~~

- 1. ~~Gasoline Vapor Leak Detection Procedure by Combustible Gas Detector (Appendix B), "Control of Volatile Organic Compound Leaks from Gasoline Tank Trucks and Vapor Collection Systems", EPA 450/2-78-051, U.S. Environmental Protection Agency, December, 1978, as specified in Chapter 57 of the Allegheny County Source Testing Manual, entitled "Determination of the Magnitude of Leaks of Volatile Organic Compounds from Gasoline Tank Trucks and Vapor Recovery Systems".~~
- h. ~~**Perchloroethylene Dry Cleaning Facilities.** The following method shall be used to determine compliance with the requirements of §2105.18 of this Article, relating to perchloroethylene dry cleaning facilities:~~
 - 1. ~~Appendix B, "Compliance Test Method and Leak Detection Equipment for Perchloroethylene Dry Cleaners", Measurement of Volatile Organic Compounds, U.S. Environmental Protection Agency, EPA 450/2-78-041, Washington, D.C., as specified in Chapter 58 of the Allegheny County Source Testing Manual, entitled "Determination of Compliance of Perchloroethylene Dry Cleaning Facilities".~~
 - i. ~~**Synthetic Organic Chemical and Polymer Manufacturing and Petroleum Refinery Equipment.** The following method shall be used to determine the magnitude of volatile organic compound leaks from synthetic organic chemical and polymer manufacturing and petroleum refinery equipment, as specified in Chapter 21 of the Allegheny County Source Testing Manual:~~
 - 1. ~~Method 21 – Determination of Volatile Organic Compounds Leaks, 40 C.F.R. Part 60, Appendix A, 48 FR 37600, August 18, 1983, Washington, D.C.~~
 - j. ~~**Petroleum Solvent Dry Cleaning Facilities.**~~
 - 1. ~~Any person who operates, or allows to be operated, any affected petroleum solvent dry cleaning dryer shall calculate the weight of VOCs vented from the dryer emission control device by using EPA Reference Test (40 CFR Part 60) Methods 1, 2, and 25A as specified in Chapters 1, 2, and 25 of the Allegheny County Source Testing Manual.~~
 - 2. ~~Any person who operates, or allows to be operated, any affected petroleum solvent dry cleaning facility demonstrating compliance, where employing a petroleum solvent filtration system but not employing cartridge filters, shall calculate, record, and report to the Department the weight of VOCs contained in each of at least five 3 pound samples of filtration waste material taken at intervals of at least one week by employing ASTM Method D322-80 (Standard Test Method for Gasoline Diluent in used Gasoline Engine Oils by Distillation), as specified in Chapter 59 of the Allegheny County Source Testing Manual, entitled "Determination of Compliance of Petroleum Solvent Dry Cleaning Facilities Employing a Petroleum Solvent Filtration System But Not Employing Cartridge Filters".~~

~~§2107.05 NITROGEN OXIDES~~

~~The following method shall be used to determine nitrogen oxide emissions from stationary sources, as specified in Chapter 7 of the Allegheny County Source Testing Manual:~~

- a. ~~Methods 7, 7A, 7C, 7D, & 7E "Determination of Nitrogen Oxide Emissions from Stationary Sources", United States Environmental Protection Agency, 40 CFR 60 Appendix A.~~

~~§2107.06 INCINERATOR TEMPERATURES~~

Measurement of incinerator temperatures shall be performed as specified in Chapter 40 of the Allegheny County Source Testing Manual, entitled "Determination of Incineration Temperatures".

~~§2107.07 COKE OVEN EMISSIONS~~

Unless otherwise specified in the applicable regulation, measurements of emissions from coke ovens and coke oven batteries shall be performed as specified in Chapter 109 of the Allegheny County Source Testing Manual, entitled "Determination of Emissions from Coke Ovens". Measurements of water quality shall be performed according to procedures established or approved by the Commonwealth.

~~§2107.08 COKE OVEN GAS~~

Measurements of the hydrogen sulfide concentration of coke oven gas shall be performed as specified in Chapter 44 of the Allegheny County Source Testing Manual, entitled "Determination of Hydrogen Sulfide from Coke Oven Gas".

~~§2107.09 HYDROGEN SULFIDE~~

The following method shall be used to determine hydrogen sulfide emissions from stationary sources, as specified in Chapter 15 of the Allegheny County Source Testing Manual:

Method 15 "Determination of Hydrogen Sulfide, Carbonyl Sulfide, and Carbon Disulfide Emissions from Stationary Sources", United States Environmental Protection Agency, 40 CFR 60 Appendix A.

~~§2107.10 SULFUR CONTENT OF COKE~~

The following method shall be used to determine the sulfur content of coke, as specified in Chapter 49 of the Allegheny County Source Testing Manual:

"Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke", American Society for Testing Materials, D 3177, 1916 Race Street, Philadelphia, PA.

~~§2107.11 VISIBLE EMISSIONS~~ *(Amended February 12, 2007, effective April 1, 2007.)*

Measurements of visible emissions shall be performed in either of the following two ways:

- ~~a. As specified in Chapter 9 of the Allegheny County Source Testing Manual, entitled "Visible Determination of the Opacity of Emissions from Stationary Sources;" or~~
- ~~b. Using any continuous opacity monitoring system (COMS) required by regulation, permit, consent agreement, consent decree, or enforcement order.~~

~~§2107.12 WASTE DERIVED LIQUID FUEL~~

~~Sampling and analysis and equipment testing to determine compliance with the waste derived liquid fuel burning regulations under this Article shall be performed as specified in Chapter 52 of the Allegheny County Source Testing Manual.~~

~~§2107.13 ODOR EMISSIONS~~

~~Measurements of odor emissions beyond source boundary lines shall be performed as specified in Chapter 48 of the Allegheny County Source Testing Manual, entitled "Measurement of Odor Emissions Beyond Source Boundary Lines".~~

~~§2107.14 LEAD~~

~~a. The following methods shall be used to determine the lead content of paint, as specified in the Allegheny County Source Testing Manual:~~

- ~~1. "Field Sampling of Coating Films for Laboratory Analysis of Toxic Metal Content (KTA/SET Method LD2)", Steel Structures Painting Council Publ. No. 94 18.~~
- ~~2. ASTM E 1645, Practice for the Preparation of Dried Paint Samples for Subsequent Analysis by Atomic Spectrometry.~~
- ~~3. ASTM D 3335, Standard Test Method for Low Concentrations of Lead, Cadmium, and Cobalt in Paint by Atomic Absorption Spectroscopy.~~
- ~~4. EPA Method 6010, Inductively Coupled Plasma Atomic Emission Spectroscopy.~~
- ~~5. ASTM E 1613, Standard Method for the Analysis of Digested Samples for Lead by Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP AES), Flame Atomic Absorption (FAAS), or Graphite Furnace.~~

~~§2107.15 GASOLINE VOLATILITY and RFG~~

~~*(This section added by May 7, 1998 amendment, effective May 15, 1998; Subsection c added February 21, 2019, effective March 3, 2019)*~~

- ~~a. **Volatility.** Any sampling or testing of gasoline required by Section 2105.90 shall be performed according to the following methods as specified in Chapter 61 of the Allegheny County Source Testing Manual:
 - ~~1. Sampling of gasoline for the purpose of determining compliance with §2105.90 shall be conducted in accordance with 40 CFR Part 80, Appendix D (relating to sampling procedures for fuel volatility).~~
 - ~~2. Testing of gasoline for purposes of determining compliance with §2105.90 shall be conducted in accordance with 40 CFR Part 80, Appendix E (relating to test for determining the RVP of gasoline and gasoline oxygenate blend).~~~~
- ~~b. **RFG.** RFG shall be certified and tested in accordance with the requirements listed in 40 CFR Part 80 Subpart D (relating to reformulated gasoline) as specified in Chapter 61 of the Allegheny County Source Testing Manual.~~
- ~~c. This Section will no longer be applicable upon the effective date of approval by the EPA of the removal, suspension or replacement of this Section as part of Allegheny County's portion of the Pennsylvania SIP.~~

§2107.16 SULFUR IN FUEL OIL

{Added by 11/28/2017 amendment, effective 12/8/2017}

The following apply to tests for the analysis of commercial fuel oil:

- a. ~~The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in:~~
 1. ~~ASTM D 4057, *Practice for Manual Sampling of Petroleum and Petroleum Products*, including updates and revisions; or~~
 2. ~~ASTM D 4177, *Practice for Automatic Sampling of Petroleum and Petroleum Products*, including updates and revisions.~~
- b. ~~Test methods and procedures for the determination of viscosity and sulfur shall be those specified in ASTM D 396, *Standard Specification for Fuel Oils*, including updates and revisions. The viscosity shall be determined at 100°F.~~
- e. ~~Results shall be reported in accordance with the units specified in §2104.10, Commercial Fuel Oil.~~

§2107.20 AMBIENT MEASUREMENTS

The following methods shall be used to determine concentrations in the ambient air of the air contaminants listed below:

- a. ~~{RESERVED} **Asbestos** - The "aggressive sampling" procedures and the procedures for the measuring of fiber content of a known volume of air collected during a specific period of time in accordance with either, in the sole discretion of the Department:~~
 1. ~~NIOSH Standard Analytical Method for Asbestos in Air P&CAM 239;~~
 2. ~~EPA Method 7400; or~~
 3. ~~Transmission Electron Microscopy (TEM).~~
- b. **Beryllium** - "Air Pollution Measurements of the National Air Sampling Network: Analysis of Suspended Particulates in 1957 - 1961", Public Health Service Pub. No. 978, Washington, D.C., 1962.
- c. **Carbon Monoxide** - "Measurement Principle and Calibration Procedure for the Continuous Measurement of Carbon Monoxide in the Atmosphere (Non-Dispersive Infrared Spectrometry)", United States Environmental Protection Agency pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- d. **Fluorides** - "Standard Method of Test for Inorganic Fluoride in the Atmosphere", ASTM Standards on Methods of Atmospheric Sampling and Analysis, Philadelphia, PA 1962, p.67.
- e. **Hydrocarbons** - "Reference Method for Determination of Hydrocarbons Corrected for Methane", United States Environmental Protection Agency, 40 CFR 50 Appendix E, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- f. **Hydrogen Sulfide** - Jacobs, M.D., et al., "Ultramicrodetermination of Sulfides in the Air", Anal. Chem., 29:1349 (1957).

- g. **Lead** - "Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air", United States Environmental Protection Agency, 40 CFR 50 Appendix G, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- h. **Nitrogen Oxides** - "Measurement Principle and Calibration Procedure for the Measurement of Nitrogen Dioxide in the Atmosphere (Gas Phase Chemiluminescence)", United States Environmental Protection Agency, 40 CFR 50, Appendix F, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- i. **Ozone** - "Measurement Principle and Calibration Procedure for the Measurement of Ozone in the Atmosphere", United States Environmental Protection Agency, 40 CFR 50 Appendix D, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- j. **PM-10** - "Reference Method for the Determination of Particulate Matter as PM-10 in the Atmosphere," United States Environmental Protection Agency, 40 CFR 50, Appendix J, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods," 40 CFR 53.
- k. **Settled Particulates** - "Recommended Standard Method for Continuing Dust Fall Survey (APM- 1 Revision 1)," TR-2 Air Pollution Measurements Committee, J. Air. Poll. Control Assoc., 16:372 (1966).
- l. **Sulfates:**
 - 1. Sampling Method - "Air Pollution Measurements of the National Air Sampling Network: Analysis of Suspended Particulates 1957 - 1961", Public Health Service Pub. 978, Washington, D.C. 1962.
 - 2. Analytical Method - Interbranch Chemical Advisory Committee, "Selected Methods for the Measurement of Air Pollutants", PHS Pub. No. 999-AP-11, Cincinnati, Ohio, 1965, p.I.1.
- m. **Sulfur Oxides** - "Reference Method for the Determination of Suspended Particulates in the Atmosphere (Pararosaniline Method)", United States Environmental Protection Agency, 40 CFR 50 Appendix A, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Methods", 40 CFR 53.
- n. **Suspended Particulate Matter** - "Reference Method for the Determination of Suspended Particulates in the Atmosphere (High Volume Method)", United States Environmental Protection Agency, 40 CFR 50, Appendix B, or equivalent methods, if any, certified by the EPA pursuant to "Ambient Air Monitoring Reference and Equivalent Method", 40 CFR 53.

PART H - REPORTING, TESTING, & MONITORING

§2108.02 EMISSIONS TESTING

{Subsection g added September 6, 1995, effective October 20, 1995}

- a. **New and Modified Sources.** No later than 60 days after achieving full production or 120 days after startup, whichever is earlier, the person responsible for any new, modified, reconstructed or reactivated source for which a permit is required by Part B of this Article shall conduct, or cause to be conducted, such emissions tests as are specified by the Department to demonstrate compliance with all applicable requirements of this Article and shall submit the results of such tests to the Department in writing. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 days after startup, but shall not extend the time beyond 60 days after achieving full production. Additional tests shall be conducted at such intervals as are specified in any applicable permit condition, order, or as required by any other Section of this Article. Emissions testing conducted pursuant to this Subsection shall comply with all applicable requirements of Subsection e below.
- b. **Existing Sources.** On or before December 31, 1981, and at two-year intervals thereafter, any person who operates, or allows to be operated, any piece of equipment or process which has an allowable emission rate, as defined in §2101.20 of this Article, of 100 or more tons per year of particulate matter, sulfur oxides or volatile organic compounds shall conduct, or cause to be conducted, for such equipment or process such emissions tests as are necessary to demonstrate compliance with the applicable emission limitation(s) of this Article and shall submit the results of such tests to the Department in writing. Emissions testing conducted pursuant to this Subsection shall comply with all applicable requirements of Subsection e below.
- c. **Orders.** In addition to meeting the requirements of Subsections a and b above, the person responsible for any source shall, upon order by the Department, conduct, or cause to be conducted, such emissions tests as specified by the Department within such reasonable time as is specified by the Department. Test results shall be submitted in writing to the Department within 20 days after completion of the tests, unless a different period is specified in the Department's order. Emissions testing conducted pursuant to this Subsection shall comply with all applicable requirements of Subsection e below.
- d. **Tests by the Department.** Notwithstanding any tests conducted pursuant to Subsection a through c above, inclusive, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the person responsible for such source or equipment shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.
- e. **Testing Requirements.**
 1. No later than 45 days prior to conducting any tests required by this Section, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this Article.

2. Test methods and procedures shall conform to the applicable reference method **and/or procedure** ~~set forth in~~ **established by** Part G of this Article, or where those methods **and/or procedures** are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with the following:
- A. **General.** All tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions as are specified by the Department. Test results shall include sufficient information to verify the conditions existing at the time of the test and the manner in which the test was conducted, including at a minimum:
- i. A thorough description of the source, any air pollution control equipment and the flue;
 - ii. Source operating conditions during the test, such as the charging rate of raw materials, production rate, combustion rate, boiler pressure, oven temperature, or any other conditions which may affect emissions;
 - iii. The location of the sampling ports;
 - iv. Emission characteristics, including velocity, temperature, moisture content, density, and gas composition (expressed as percent CO, CO₂, N₂ and the like) and static and barometric pressures at pertinent points in the system;
 - v. Sample collection techniques used, including procedures, equipment descriptions, data to verify that isokinetic sampling techniques were used where applicable, and data to verify that test conditions are acceptable under this Article;
 - vi. Laboratory procedures and results; and,
 - vii. Calculated results.
- B. **Fugitive Particulate Matter.** Test methods and procedures for fugitive particulate matter may include ambient test procedures approved by the Department which are in accordance with, or equivalent to, the test procedures ~~set forth in~~ **established by** Part G of this Article.
- C. **Other Air Contaminants.** Test methods and procedures for air contaminants other than those for which a test method **and/or a test procedure** ~~is specified in~~ **established by** Part G of this Article shall be consistent with accepted air pollution testing practices and with obtaining accurate results which are representative of the conditions evaluated. Such methods and procedures shall be clearly described in the report of test results.
- f. **Violations.** The failure to perform tests as required by this Section or an order of the Department issued pursuant to this Section, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this Article giving rise to the remedies provided by §2109.02 of this Article.
- g. Except as specifically otherwise provided under this Article, regulations promulgated by the Pa. Environmental Quality Board and Dept. of Environmental Protection (DEP) under the Pa. Air Pollution Control Act as set forth, or referenced, in 25 Pa. Code Chapter 139 Subchapters B & C, are hereby incorporated, by reference, as part of this Article. Additions, revisions, and deletions to such regulations adopted by 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. Technical Support Document

GENERAL

ACHD is revising Article XXI, Part G, Methods such that the specific named methods and procedures are removed from Sections 2107.02 to 2107.16 and instead established by Article XXI, Section 2107.01, General, as residing in the Allegheny County Source Testing Manual.

The proposed rulemaking will make it possible for ACHD to more quickly incorporate changing test requirements as promulgated by state and federal agencies.

Other sections of Article XXI which cite Sections 2107.02 through 2107.16 are also proposed to be updated to simply require that testing be performed in accordance with the methods established by Part G.

These changes will be submitted as SIP changes, as applicable. See the lists at the end of this TSD.

The following table demonstrates that the testing requirements found in the sections of Part G that are proposed to be deleted are being addressed in the Allegheny County Source Testing Manual undergoing concurrent revision.

TABLE OF ARTICLE XXI SECTIONS BEING DELETED VERSUS SOURCE TESTING MANUAL CHAPTERS THAT COVER THAT TESTING

ARTICLE XXI SECTION BEING DELETED	SOURCE TESTING MANUAL CHAPTER COVERING THE TESTING (Based on the renumbered chapters in the proposed draft STM)
§2107.02 PARTICULATE MATTER	
a.1.A	Chapters 3 and 4
a.2	Chapter 4A
a.3	Chapter 4B and 4C
a.4	Chapter 4D
a.5 and a.6	Chapter 4
a.7	Chapter 4E
b. Regarding calibration.	Analogous statements regarding calibration are not in the STM. The PA STM which is incorporated by reference covers at Section 2.12.

ARTICLE XXI SECTION BEING DELETED	SOURCE TESTING MANUAL CHAPTER COVERING THE TESTING (Based on the renumbered chapters in the proposed draft STM)
§2107.03 SULFUR OXIDES	
a.	Chapter 5A
b.	Chapter 5B and 5C
§2107.04 VOLATILE ORGANIC COMPOUNDS	
a. General	Chapter 7, Table 7
b. Gasoline vapor recovery systems	Chapter 7G However, the new STM does not use the methods mentioned here. Instead, it mentions Methods 21 and 25 or 25a for b.1. For b.2, the Chapter 27 of the old STM did not seem to be carried over to the new STM.
c. Surface coatings	Chapter 7E
d. Effluent water	Chapter 7F
e. Control system effectiveness	Chapter 7G
f. Tank trucks	Chapter 7H and 7I
g. Tank trucks and vapor collection systems	Chapter 7J
h. Perchloroethylene Dry Cleaning Facilities	Chapter 7k
i. Synthetic Organic Chemical and Polymer Manufacturing and Petroleum Refinery Equipment	Chapter 7L
j. Petroleum Solvent Dry Cleaning Facilities	Chapter 7M
§2107.05 NITROGEN OXIDES	Chapter 7A
§2107.06 INCINERATOR TEMPERATURES	Chapter 10
§2107.07 COKE OVEN EMISSIONS	Covered by revised Section 2105.21 from SIP 87. Water quality methods covered by this regulation revision at 2104.02.i and 2105.21.g
§2107.08 COKE OVEN GAS	Chapter 44 of the 2002 STM called out an AGA test method and an ASTM D-1072. No comparable translation was made to the 2014 STM. Chapter 8, "Coke Oven Gas," of the 2014 STM called out Methods 16 and 18. The new STM does not mention Method 18 and only mentions a Method 16A in Chapter 5.C.
	So, it is appropriate to delete 2107.08 and state that the appropriate test requirements are contained in Chapter 5.C of the new STM.

ARTICLE XXI SECTION BEING DELETED	SOURCE TESTING MANUAL CHAPTER COVERING THE TESTING (Based on the renumbered chapters in the proposed draft STM)
§2107.09 HYDROGEN SULFIDE	Chapter 11
§2107.10 SULFUR CONTENT OF COKE	Chapter 12
§2107.11 VISIBLE EMISSIONS	
a.	Chapter 13A
b	Chapter 13B
§2107.12 WASTE-DERIVED LIQUID FUEL	Chapter 14
§2107.13 ODOR EMISSIONS	Chapter 15
§2107.14 LEAD	Chapter 16
§2107.15 GASOLINE VOLATILITY and RFG	It is acceptable to delete this section as part of this action for several reasons. First, the section is no longer applicable because the RVP regs are no longer applicable as a result of the approval of SIP 89, and there are no RFG requirements in Article XXI.
§2107.16 SULFUR IN FUEL OIL	Chapter 19
§2107.20 AMBIENT MEASUREMENTS	
a. Asbestos	Covered by Article XXI, Section 2105.63.j
Note: no other subsection is being deleted from Section 2107.20.	

SECTIONS OF THIS ARTICLE XXI AMENDMENT TO BE SUBMITTED AS A SIP CHANGE

Changes to the following sections will be submitted to the U.S. EPA as changes to the Allegheny County Portion of the Pennsylvania State Implementation Plan

- §2101.20 Definitions
- §2104.01.d, Visible Emissions – Measurements
- §2104.02.i, Particulate Mass Emissions – Measurements
- §2104.03.e, Sulfur Oxide Emissions- Measurements
- §2104.10.c.1.A, Commercial Fuel Oil – Sampling and testing
- §2105.01.f, Equivalent Compliance Techniques
- §2105.10.b.1 & 2, Surface Coating Processes – Limitations
- §2105.11.e, Graphic Arts Systems – Measurements
- §2105.12.b.2, Volatile Organic Compound Storage Tanks – Capacity Greater than 40,000 Gallons
- §2105.13.b, c & f, Gasoline Loading Facilities
- §2105.19.c, Synthetic Organic Chemical and Polymer Manufacturing - Fugitive Sources
- §2105.21.f & g, Coke Ovens and Coke Oven Gas
- §2105.22.b, Miscellaneous Sulfur-Emitting Processes – Measurements
- §2105.30.g, Incinerators – Measurements
- §2105.70.b, Petroleum Refineries – Fugitive Sources
- §2105.76.d & g, Wood Furniture Manufacturing Operations
- §2105.77.b, Control of VOC Emissions from Large Appliance and Metal Furniture Surface Coating Processes - Limitations
- §2105.78.b Control of VOC Emissions from Flat Wood Paneling Coating Processes – Limitations
- §2105.79.b, Control of VOC Emissions from Paper, Film, And Foil Surface Coating Processes - Limitations
- §2105.80.g, Control of VOC Emissions from Offset Lithographic Printing and Letterpress Printing – Measurements
- §2105.81.f, Control of VOC Emissions from Flexible Package Printing – Measurements
- §2105.82.g, Control of VOC Emissions from Industrial Solvent Cleaning Operations – Measurements
- §2105.83.b & i, Control of VOC Emissions from Miscellaneous Metal and/or Plastic Parts Surface Coating Processes – Limitations & Measurements
- §2105.84.b and f, Control of VOC Emissions from Automobile and Light-Duty Truck Assembly Coatings – Limitations & Measurements
- §2105.85.b and i, Control of VOC Emissions from Miscellaneous Industrial Adhesives – Limitations & Measurements
- §2105.86.g, Control of VOC Emissions from Fiberglass Boat Manufacturing Materials - Measurements
- §2107.01 General
- §2107.02 Particulate Matter
- §2107.03 Sulfur Oxides
- §2107.04 Volatile Organic Compounds (Except “h” Perchloroethylene Dry Cleaning Facilities)
- §2107.05 Nitrogen Oxides
- §2107.06 Incinerator Temperatures
- §2107.07 Coke Oven Emissions
- §2107.08 Coke Oven Gas
- §2107.10 Sulfur Content of Coke
- §2107.11 Visible Emissions
- §2107.16 Sulfur in Fuel Oil
- §2108.02.e, Emissions Testing – Testing Requirements

SECTIONS OF THIS ARTICLE XXI AMENDMENT NOT TO BE SUBMITTED AS A SIP CHANGE

Changes to the following sections will NOT be submitted to the U.S. EPA as changes to the Allegheny County Portion of the Pennsylvania State Implementation Plan

§2102.09.A Waste-Derived Liquid Fuel

§2103.30.B Waste-Derived Liquid Fuel

§2104.04.C, Odor Emissions – Measurements

§2105.18 Dry Cleaning Facilities

§2105.31 Waste-Derived Liquid Fuel

§2105.32, Hospital/Medical/Infectious Waste Incinerators

§2105.90 Gasoline Volatility

§2107.04.h, Volatile Organic Compounds – Perchloroethylene Dry Cleaning Facilities

§2107.09 Hydrogen Sulfide

§2107.12 Waste-Derived Liquid Fuel

§2107.13 Odor Emissions

§2107.14 Lead

§2107.15 Gasoline Volatility and RFG

§2107.20.a, Ambient Measurements - Asbestos

3. Documentation of Public Hearing and Certifications

- 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 (later)

NOTICE OF VIRTUAL PUBLIC HEARING AND PUBLIC COMMENT PERIOD
FOR PROPOSED AMENDMENTS TO
ALLEGHENY COUNTY HEALTH DEPARTMENT RULES AND REGULATIONS
ARTICLE XXI, AIR POLLUTION CONTROL

The Allegheny County Board of Health will hold a virtual public hearing on Wednesday, January 20, 2021, at 5:00 PM to take testimony on proposed modifications to Allegheny County Health Department Article XXI, along with the corresponding sections of County Ordinance 16782, and the Allegheny County Source Testing Manual, that will revise:

- §2105.21, “Coke Ovens and Coke Oven Gas” and related portions of §2101.20, “Definitions”;
- Part G, “Methods” related to source testing methods including all subsections from §2107.01 to §2107.20 along with other related affected sections of Article XXI and the Source Testing Manual; and
- §2109.01, “Inspections”

Portion of these changes will be submitted as revisions to Allegheny County’s portion of the Pennsylvania State Implementation Plan as delineated in the associated Technical Support Documents.

The proposed SIP revisions and changes to the Allegheny County Source Testing Manual are available on the Allegheny County Health Department (ACHD) Air Quality web site at www.alleghenycounty.us/regs-sips. Written copies may be obtained by contacting Paulette Poulet, at paulette.poulet@alleghenycounty.us or 412-578-8103.

The hearing will be held virtually in compliance with safety precautions due to the COVID-19 pandemic.

- The hearing will be live streamed on the ACHD’s Facebook page. You do not need a Facebook account to watch the hearing.
- To view the live stream, visit: <https://www.facebook.com/AlleghenyCountyHealth/>.
- Persons wishing to present testimony at the hearing must register by going to the ACHD’s Air Quality website at www.alleghenycounty.us/regs-sips. Persons who do not have access to the internet may register by contacting Paulette Poulet, at 412-578-8103.
- You must register to present testimony no less than 24 hours in advance of the virtual hearing.
- Testimony is limited to 3 minutes. Witnesses are requested to submit written copies of the testimony by email to aqcomments@alleghenycounty.us.

The Board will also accept written comments, beginning on Friday, November 20, 2020, and concluding at 4:00 PM on Thursday, January 21, 2021, by mail to ACHD Air Program, 301 39th Street, Bldg. 7, Pittsburgh, PA 15201-1811, or by email to aqcomments@alleghenycounty.us.

Please contact Paulette Poulet, at paulette.poulet@alleghenycounty.us or 412-578-8103, if you have any questions or if you have any difficulty registering for the hearing.

Formal Notice of Allegheny County Health Department hearing on proposed SIP 96 - change for Source Testing Methods rules, and non-SIP changes to the Source Testing Manual

Lattner, Tom <Tom.Lattner@AlleghenyCounty.US>

Fri 11/20/2020 6:28 PM

To: Hammond, Mark <mahammond@pa.gov>

Cc: Dalal, Kirit <kdalal@pa.gov>; Hepler, Stephen <shepler@pa.gov>; Susan Hoyle (shoyle@pa.gov) <shoyle@pa.gov>; Graham, Jayme <Jayme.Graham@AlleghenyCounty.US>; Etzel, Sandra <Sandra.Etzel@AlleghenyCounty.US>
Bcc: Bailey, Jeff <Jeff.Bailey@AlleghenyCounty.US>

1 attachments (968 KB)

DEP letter.Source Testing Reg revisions.SIP96.11.20.2020.docx

Hello Mr. Hammond,

This is to formally advise you through the attached letter, that the Allegheny County Health Department will be holding a public comment period starting November 20, 2020, and a will hold a public hearing on January 20, 2021 on our proposed revision to Article XXI and the PA SIP related to the Source Testing Methods regulations. Also under public comment with these regulation changes is the ACHD Source Testing Manual, which are not SIP changes.

Details can be found in the attached letter which includes embedded files for the hearing notice and the proposed SIP change.
Thank you for consideration of this matter.

Tom Lattner



Tom Lattner
A.P.C. Engineer III
Air Quality Program
301 39th St., Bldg. 7
Pittsburgh, PA 15201
412-578-7986
Tom.Lattner@AlleghenyCounty.US

Formal Notice of Allegheny County Health Department hearing on proposed SIP 96 - change for Source Testing Methods rules, and non-SIP changes to the Source Testing Manual

Lattner, Tom <Tom.Lattner@AlleghenyCounty.US>

Fri 11/20/2020 6:33 PM

To: Fernandez,Cristina <fernandez.cristina@epa.gov>

Cc: Graham, Jayme <Jayme.Graham@AlleghenyCounty.US>; Etzel, Sandra <Sandra.Etzel@AlleghenyCounty.US>; Goold, Megan <Goold.Megan@epa.gov>
Bcc: Bailey, Jeff <Jeff.Bailey@AlleghenyCounty.US>

1 attachments (967 KB)

EPA letter.Source Testing Reg revisions.SIP96.11.20.2020.docx

Hello Ms. Fernandez,

This is to formally advise you through the attached letter, that the Allegheny County Health Department will be holding a public comment period starting November 20, 2020, and a will hold a public hearing on January 20, 2021 on our proposed revision to Article XXI and the PA SIP related to the Source Testing Methods regulations. Also, under public comment with these regulation changes is the revised ACHD Source Testing Manual. However, changes to that are not being submitted as SIP changes.

Details can be found in the attached letter which includes embedded files for the hearing notice and the proposed SIP change.
Thank you for consideration of this matter.

Tom Lattner



Tom Lattner
A.P.C. Engineer III
Air Quality Program
301 39th St., Bldg. 7
Pittsburgh, PA 15201
412-578-7986
Tom.Lattner@AlleghenyCounty.US

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

November 20, 2020

Mr. Mark Hammond, Director
Bureau of Air Quality
Department of Environmental Protection
Rachel Carson Building
400 Market Street
P O Box 8468
Harrisburg, PA 17105-8468

Dear Mr. Hammond:

Attached is a Notice of Public Hearing for proposed revisions to the Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control and County Ordinance Number 16782, regarding Part G, Methods §§2107.01 to 2107.20, related to source testing methods, as well as other sections of Article XXI impacted by the primary changes.

These revisions will also be submitted as changes to Allegheny County's portion of the Pennsylvania State Implementation Plan under our Revision Tracking Number 96, as delineated in the Technical Support Document.

ACHD will also take comment on the proposed revision of its Source Testing Manual. However, that revision is not being submitted as a change to Allegheny County's portion of the Pennsylvania State Implementation Plan.

Information regarding the proposed SIP change and revised Source Testing Manual may also be found on the ACHD website at:

<https://www.alleghenycounty.us/Health-Department/Programs/Air-Quality/Coke-Oven-Regulations.aspx>

{It should be noted that another SIP change with our Revision Tracking Number 87, which involves changes to regulations related to Coke Ovens and Coke Oven Gas (§2105.21), will also be the subject of this public hearing and this public comment period. Information on that will be submitted in a separate hearing notice letter.}

The public comment period begins November 20, 2020 and concludes January 21, 2021 at 4:00 pm. The public hearing will be held January 20, 2020. Your comments are welcome.

ACHD SIP96 Hearing Notice Letter
November 20, 2020

Sincerely,



Sandra Etzel, Section Head
Planning & Data Analysis

cc: Jayme Graham (ACHD)
Kirit Dalal
Steve Hepler

Email Attachments

- Public Hearing Notice



Public_Hearing_Notice_Coke Oven Regs Ja

- Proposed Article XXI/SIP Revision 96



Regulations related to source testing met

- Proposed Revised Source Testing Manual



Revised-Allegheny-County-Source-Testing

COUNTY OF



ALLEGHENY

RICH FITZGERALD
COUNTY EXECUTIVE

November 20, 2020

Ms. Christina Fernandez, Director
Air Protection Division
Region III (3AP00)
U.S. Environmental Protection Agency
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Ms. Fernandez:

Attached is a Notice of Public Hearing for proposed revisions to the Allegheny County Health Department Rules and Regulations, Article XXI, Air Pollution Control and County Ordinance Number 16782, regarding Part G, Methods §§2107.01 to 2107.20, related to source testing methods, as well as other sections of Article XXI impacted by the primary changes.

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ACHD SIP96 Hearing Notice Letter
November 20, 2020

Sincerely,



Sandra Etzel, Section Head
Planning & Data Analysis

cc: Jayme Graham (ACHD)

Email Attachments

- Public Hearing Notice



Public_Hearing_Notice_Coke Oven Regs Ja

- Proposed Article XXI/SIP Revision 96



Regulations related
to source testing metl

- Proposed Revised Source Testing Manual



Revised-Allegheny-C
ounty-Source-Testing

No. _____ Term, _____


Proof of Publication of Notice in Pittsburgh Post-Gazette

Under Act No 587, Approved May 16, 1929, PL 1784, as last amended by Act No 409 of September 29, 1951

Commonwealth of Pennsylvania, County of Allegheny, ss K. Flaherty, being duly sworn, deposes and says that the Pittsburgh Post-Gazette, a newspaper of general circulation published in the City of Pittsburgh, County and Commonwealth aforesaid, was established in 1993 by the merging of the Pittsburgh Post-Gazette and Sun-Telegraph and The Pittsburgh Press and the Pittsburgh Post-Gazette and Sun-Telegraph was established in 1960 and the Pittsburgh Post-Gazette was established in 1927 by the merging of the Pittsburgh Gazette established in 1786 and the Pittsburgh Post, established in 1842, since which date the said Pittsburgh Post-Gazette has been regularly issued in said County and that a copy of said printed notice or publication is attached hereto exactly as the same was printed and published in the regular editions and issues of the said Pittsburgh Post-Gazette a newspaper of general circulation on the following dates, viz:

19 of November, 2020

Affiant further deposes that he/she is an agent for the PG Publishing Company, a corporation and publisher of the Pittsburgh Post-Gazette, that, as such agent, affiant is duly authorized to verify the foregoing statement under oath, that affiant is not interested in the subject matter of the afore said notice or publication, and that all allegations in the foregoing statement as to time, place and character of publication are true.



PG Publishing Company
Sworn to and subscribed before me this day of:
November 19, 2020



Melanie L. Goodwin

Commonwealth of Pennsylvania - Notary Seal
Melanie L. Goodwin, Notary Public
Allegheny County
My commission expires May 12, 2022
Commission number 1255781
Member, Pennsylvania Association of Notaries

STATEMENT OF ADVERTISING COSTS
ALLEGHENY CO HEALTH DEPT-LEGAL
542 4TH AVENUE
PITTSBURGH PA 15219

To PG Publishing Company

Total ----- \$112.35

Publisher's Receipt for Advertising Costs

PG PUBLISHING COMPANY, publisher of the Pittsburgh Post-Gazette, a newspaper of general circulation, hereby acknowledges receipt of the aforesaid advertising and publication costs and certifies that the same have been fully paid.

Office
2201 Sweeney Drive
CLINTON, PA 15026
Phone 412-263-1338

PG Publishing Company, a Corporation, Publisher of
Pittsburgh Post-Gazette, a Newspaper of General Circulation

By _____

I hereby certify that the foregoing is the original Proof of Publication and receipt for the Advertising costs in the subject matter of said notice.

Attorney For

**COPY OF NOTICE
OR PUBLICATION**

**NOTICE OF VIRTUAL
PUBLIC HEARING AND
PUBLIC COMMENT
PERIOD**

**FOR PROPOSED
AMENDMENTS TO
ALLEGHENY COUNTY
HEALTH DEPARTMENT
RULES AND
REGULATIONS**

**ARTICLE XXII, AIR
POLLUTION CONTROL**

The Allegheny County Board of Health will hold a virtual public hearing on Wednesday, January 20, 2021, at 5:00 PM to take testimony on proposed modifications to Allegheny County Health Department Article XXII, along with the corresponding sections of County Ordinance 16782, and the Allegheny County Source Testing Manual, that will revise:

- §2105.21, "Coke Ovens and Coke Oven Gas" and related portions of §2101.20, "Definitions";
- Part C, "Methods" related to source testing methods including all subsections from §2107.01 to §2107.20 along with other related affected sections of Article XXII and the Source Testing Manual; and
- §2109.01, "Inspections"

Portion of these changes will be submitted as revisions to Allegheny County's portion of the Pennsylvania State Implementation Plan as delineated in the associated Technical Support Documents. The proposed SIP revisions and changes to the Allegheny County Source Testing Manual are available on the Allegheny County Health Department (ACHD) Air Quality web site at www.alleghenycounty.us/regs-sips. Written copies may be obtained by contacting Paulette Poulet, at paulette.poulet@alleghenycounty.us or 412-578-8103.

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• Testimony is limited to 3 minutes. Witnesses are requested to submit written copies of the testimony by email to accmments@alleghenycounty.us.

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Please contact Paulette Poulet, at paulette.poulet@alleghenycounty.us or 412-578-8103, if you have any questions or if you have any difficulty

Revision 96

Article XXI

§§2107.01 through 2107.20 relating to “Source Testing Methods”
And related changes to other Article XXI Sections

Certification of Hearing

Dean DeLuca deposes and says that he is a Manager in the Air Quality Program of the Allegheny County Health Department and hereby certifies that a Public Hearing was held on January 20, 2020 on the proposed revisions to Article XXI, “Rules and Regulations of the Allegheny County Health Department for Air Pollution Control,” and County Ordinance No. 16782 revising §§2107.01 through 2107.20, relating to “Source Testing Methods,” and other associated Article XXI sections.

that these changes are to be incorporated as a change to Allegheny County’s Portion of the Pennsylvania State Implementation Plan for the Attainment and Maintenance of National Ambient Air Quality Standards;

that the opportunity for written comments was given in accordance with the requirements of 40 CFR 51.102; that notice of such hearing was given by publication in a newspaper of general circulation on November 19, 2020; and to the best of his knowledge, belief and understanding, such proceedings were in full compliance with all applicable State and Federal laws, regulations, and other requirements.

Dean DeLuca, electronically signed
Dean DeLuca,
Manager,
Air Quality Program
Allegheny County Health Department

7-21-2022
Date

SUMMARY OF COMMENTS AND RESPONSES

for

Proposed SIP Revision 96

Article XXI, Part G, Methods §2107.01 through 2107.20, and related affected sections

Public Comment Period: November 20, 2020 to January 21, 2021

Public Hearing: January 20, 2021

1. **COMMENT:** For the sake of clarity, the Department should maintain the material in the Source Testing Manual, even if the material is ultimately codified in the regulations. This will enable people reviewing the Source Testing Manual to have the material in the regulations at their fingertips. The Council suggests designating a section of the Source Testing Manual that would set forth verbatim the ultimate requirements to be codified in the regulations.

COMMENTER: Christopher Ahlers, Clean Air Council

RESPONSE:

Thank you for your comment. Though the Department appreciates the comment, it believes the having the requirements in two places may lead to confusion and lack of clarity.

2. **COMMENT:** Section 2105.21 and STM should raise Standards to specific emission limits for potential emissions as per emission levels that the best performing facilities (major sources) have met without geographic limitations and not necessarily equivalent to Federal standards but stricter.

COMMENTER: Brian Joos

RESPONSE:

Thank you for your comment. ACHD included the comment with those related to the test method changes because of the comment mentioned the STM. However, ACHD does not see a role for the STM in establishing emission standards, though of course there is a role for the STM in determining whether such standards are being met.

3. **COMMENT:** Section 2107.01, General, should refer to the Source Testing Manual for all methods i.e., Paragraphs 2107.02 thru 2107.20 (Ambient Measurements). Methods are Methods inclusive of concentrations and emissions. Be as consistent and clear as possible.

COMMENTER: Brian Joos

RESPONSE:

Thank you for your comment. The Department believes that the proposed revision does what the commenter suggests, i.e., the revised Section 2107.01.a will state:

The methods and procedures used to determine compliance with the emission standards and source standards established by this Article, shall be equivalent to those specified in the Allegheny County Source Testing Manual...

4. **COMMENT:** Transpose Section 2107.20 Ambient Measurements in Article XXI to a like-named Chapter in the Source Testing Manual consistent with Paragraph 2107.01 and the separation of standards and methods in the complementary documents – Article XXI and the STM.
COMMENTER: Brian Joos

RESPONSE:

Thank you for your comment. ACHD does not believe this would be appropriate, since, by definition, the STM addresses the testing requirements of sources, as opposed to the testing of ambient air.

5. **COMMENT:** Include PM2.5 in the Ambient Measurements Chapter in the Source Testing Manual regardless of 2101.10 – its bears renewed emphasis and detail.
COMMENTER: Brian Joos

RESPONSE:

Thank you for your comment. ACHD does not believe this would be appropriate, since, by definition, the STM addresses the testing requirements of sources, as opposed to the testing of ambient air.

6. **COMMENT:** Are the standards in Article XXI and the STM in compliance with or compatible with permissible exposure limits as per OSHA?
COMMENTER: Brian Joos

RESPONSE:

Thank you for your comment. Matters related to OSHA are beyond the scope of this regulation revision.

7. **COMMENT:** (Re: the STM) Re-do the Contents to improve the organization of this “new” document in a logical comprehensible fashion for easy recognition and future revisions. PADEP Source Testing Manual is a reasonable example of that. Add Chapters: Coke Ovens and Coke Oven Gas and Ambient Measurements. The proposed Contents is inexplicable.
COMMENTER: Brian Joos

RESPONSE:

Thank you for your comment. ACHD feels that Table of Contents included in the revised STM is satisfactory.

8. **COMMENT:** Re-write the Introduction and Purposes. The proposed revisions are old, outdated material - not new material. Rewrite Introduction and Purposes consistent with the same in Title XXI i.e., in broad language to apply to a variety of emission sources including industrial, commercial and residential and the methods that are inherent in related emissions sampling and testing. Again, consider PADEP Source Testing Manual as a model/guide in concert with Policy and Purpose language in Article XXI.
COMMENTER: Brian Joos

RESPONSE:

Thank you for your comment. ACHD feels that Introduction and Purposes sections included in the revised STM are satisfactory.

9. **COMMENT:** In each Chapter place Tables at the bottom of each Chapter NOT the top; they serve as references which are usually found at the end of the entire document (see PA DEP Source Testing Manual) in a separate part. Each Chapter must have a set of descriptive line by line entries as to methods and special concerns (Notes in Tables). A table alone cannot comprise a Chapter. It's confusing in its current format.
COMMENTER: Brian Joos

RESPONSE:

Thank you for your comment. ACHD feels that Tables included in the revised STM are satisfactory.

10. **COMMENT:** Chapter 13: Visible Emissions – Expand as per current research and technology and EPA approved methods to specify measurement of visible emissions in any of the three following ways:

- A. Allegheny County Method of Determining Visible Emissions;
- B. Continuous Opacity Monitoring System;
- C. EPA Alternate Method 082 (ALT 082) Certified Digital Camera Opacity Technique (DCOT).

The DCOT methodology is long overdue, a tried, true and tested method in wide use with minimal cost and maximum return. DOCS II SaaS is the only ASTM D7520-16 and ALT 082 certified DCOT. We recommend that methodology which many agencies have already adopted including CA EPA. There is nothing to preclude adoption of alternatives here.

COMMENTER: Brian Joos

RESPONSE:

Thank you for your comment. ACHD feels that the methods included in the revised STM are satisfactory.

11. **COMMENT:** Chapter 15: Malodorous Matter (Odor) Emissions – Expand as per current research, definition and technology and EPA allowable methods to specify measurement of odor emissions in any of the three following ways:

- A. Allegheny County Method of Determining: Malodorous Matter Emissions – Revise to accommodate overall subjective measurement of odor emissions in terms of Offensiveness, Frequency, Duration and Strength by observer. Includes new Observation Form with necessary tabulations and new template for mapping site.
- B. Air Quality Program Certified Odor Detection Technique A - --Add a new objective method to accommodate objective instrumented determination of Strength of odor emissions by observer and Field Olfactometer. The Field Olfactometer is a portable odor detecting and measuring device that determines ambient odor strength in terms of “Dilution-to-Threshold” (D/T) values objectively.
- C. Air Quality Program Certified Odor Observation and Detection Technique B - Add a new “hybrid” method to accommodate subjective determination of Offensiveness, Frequency, and Duration as well as objective instrumented determination of Strength by observer and Field Olfactometer. The Field Olfactometer is a portable odor detecting and measuring device that determines ambient odor strength in terms of “Dilution-to-Threshold” (D/T) values objectively.

These methods recognize the research here, advanced technology, wide use of the methods and a broader health-oriented approach. They integrate all aspects of odor emissions e.g., Offensiveness, Frequency, Duration and Strength as well as tried, true and tested instrumentation, certification and training as required by the method. There is nothing to preclude adoption of alternatives here.

COMMENTER: Brian Joos

RESPONSE:

Thank you for your comment. ACHD feels that the methods of odor measurement included in the revised STM are satisfactory.

12. **COMMENT: EPA Reference Method 303**

Issue: ACHD is proposing to remove Method 303 from the STM. ACHD has proposed to add certain provisions of Method 303 into its revised Article XXI Coke Oven Regulations but has not included all necessary procedures and provisions of Method 303.

ACHD has not considered and included many provisions that are adopted by EPA Method 303 with regards to record-keeping, averaging, and observer positioning. ACHD has not provided any justification as to why these test method elements are not applicable or appropriate for ACHD inspectors, yet these standards are accepted and used by EPA and other jurisdictions throughout the country.

ACHD has added more ambiguity than is currently in place. In this instance, clarity is needed to provide the regulated community, the regulator, and community members with a clear path to determining compliance.

ACHD Proposed: Removed EPA Method 303 from the STM.

U. S. Steel Requested: U. S. Steel requests that ACHD add all provisions of EPA Method 303/303A into the proposed Coke Oven Regulations or supplement the proposed Coke Oven Regulations by referencing EPA Method 303 in the proposed STM.

COMMENTER: Chris Harden, United States Steel

RESPONSE:

Thank you for your comment. ACHD will not make any changes to address this comment. The issues relating to this comment were resolved through the dispute resolution process set forth under the 2019 settlement agreement.

The following two comments relate to: STM Chapter 13: Visible Emissions – EPA Method 9; Page 35

13. **COMMENT:**

Issue: ACHD's proposed modifications to EPA Method 9 inspection procedures does not include fair, objective, consistent, and accurate observation methodology so that the regulator, regulated community, and community members can rely on consistent and standardized methods of compliance by ACHD.

ACHD Proposed: In making visible emissions observations the observer should be positioned in accordance with the provisions of Section 2.1 of Method 9 except that if it is an overcast day the reader need not position themselves with their back to the sun.

U. S. Steel requests that ACHD provide justification as to why an observer 'need not position themselves with their back to the sun' on an overcast day, while this requirement is appropriate for EPA and other jurisdictions, noting that it minimizes both the positive and negative bias that can occur with not being properly positioned on an overcast day.

U. S. Steel Proposed: Section 2.1 of EPA Method 9 applies at all times.

COMMENTER: Chris Harden, United States Steel

RESPONSE:

Thank you for your comment. ACHD will not make any changes to address this comment. The issues relating to this comment were resolved through the dispute resolution process set forth under the 2019 settlement agreement.

14. **COMMENT:**

Issue: ACHD has not included provisions or procedures for proper observations pertaining to instantaneous limits.

In its evaluations of visible emission observation methodology and its subsequent rulemakings, USEPA established three points regarding opacity determination:

(1) averaging opacity across multiple readings is critical for yielding a sufficiently accurate result that does not contain unreasonable positive error;

(2) establishing a sufficiently long averaging time and a sufficient number of individual readings over that time period is also critical for yielding an accurate result; and

(3) the approach codified by USEPA at Method 203C reflects an appropriate manner of determining opacity for purposes of compliance determination with instantaneous standards. Basing compliance determinations of an instantaneous opacity standard on a single reading is plainly contrary to USEPA's rulemakings and ignores the USEPA's previous findings of potential for significant positive error associated with such practice. To fairly and accurately determine compliance with the opacity standards that apply "at any time", the ACHD must include some type of averaging provisions in line with Method 203C.

While U. S. Steel recognizes that ACHD was not specifically compelled to adopt Method 203C by the terms of the SAO, ACHD has not properly considered averaging which is necessary to reduce error and to ensure consistent application of opacity readings. The proposed methodology does not include fair, objective, consistent, and accurate observation procedures so that ACHD inspectors will regulate in a consistent, objective manner.

USEPA's Method 203C states that Method 203C is an example test method suitable for State Implementation Plans (SIPs) and is applicable to the determination of the opacity of emissions from sources of visible emissions for regulations with an instantaneous opacity limitation. An instantaneous opacity limitation is an opacity limit which is never to be exceeded.

Method 203C further states that Method 203C is virtually identical to EPA's Method 9 of 40 CFR Part 60, Appendix A, except for 5-second reading intervals and the data-reduction procedures, which have been modified for instantaneous limitation regulations. The certification procedures for this method are virtually identical to Method 9.

Currently, ACHD exempts ACHD observers from following Method 9 sections 2.4 and 2.5 when observing emissions from sources with "at any time" and "at no time" opacity limits. Method 9 sections 2.4 and 2.5 state to record opacities once every 15 seconds for a minimum of 24 readings (6-minutes) and then average them to determine opacity from the source.

U. S. Steel recognizes that emissions from pushing, travel, soaking, and high opacity doors may not last for 6-minutes, or twenty-four 15-second readings, as required by Method 9, and therefore are not appropriate for determining compliance for these sources. However, ACHD has not defined what method the observers shall use in place of the exempted sections of Method 9. ACHD does not provide their inspectors nor the regulated community with a fair, objective, consistent, or accurate method to determine opacity from short-duration events that have "at any time" opacity limits.

In fact, it is U. S. Steel's observation is that ACHD is using a "stare" method when observing short-duration opacities and not averaging any of the readings. The "stare" method is where the observer continuously looks at the opacity from the source for the entire duration and then writes down the maximum opacity observed during that observation. First, this method is concerning because Method 9 requires "recalibration" of the eyes by intermittently looking away from the emissions when conducting visible emissions of a source. Method 9 and the training clearly state to not stare at the visible emissions as staring will add a known biased error to the observed opacities. Secondly, since ACHD has not provided a clear, fair, objective, accurate, and consistent method for its observers to follow, the ACHD observers are left to their own devices and may or may not be consistently following any method.

To fill this gap, and provide inspectors with a clear, consistent, accurate, objective and fair method of determining visible emissions opacities for sources with “at any time” opacity limits, U. S. Steel is proposing use of USEPA’s Method 203C VISUAL DETERMINATION OF OPACITY OF EMISSIONS FROM STATIONARY SOURCES FOR INSTANTANEOUS LIMITATION REGULATIONS. Method 203C is similar in that it includes the same positioning as Method 9 but replaces Method 9 sections 2.4 and 2.5 by requiring 5-second interval readings over one-minute that are averaged to determine the source instantaneous opacity. Method 203C section 12.2 provides for data reduction requirements.

As stated above, Method 203C is virtually identical to Method 9, except for 5-second reading intervals and data reduction procedures that are modified for instantaneous regulations. Method 203C is suitable for State Implementation Plans (SIPs) for the determination of opacity from sources that have instantaneous opacity limitations. USEPA, defines an instantaneous opacity limitation as an opacity limit which is never to be exceeded. In addition, Method 203C states to not look continuously at the plume, which will remove any bias to the observed opacity.

U. S. Steel Requested: U. S. Steel requests that ACHD incorporate/reference 203C/203A into the STM or develop its own observation procedure that goes through the rule-making process to ensure accurate observations of emission sources with instantaneous limits.

COMMENTER: Chris Harden, United States Steel

RESPONSE:

Thank you for your comment. ACHD will not make any changes to address this comment. The issues relating to this comment were resolved through the dispute resolution process set forth under the 2019 settlement agreement.

For Board of Health review September 7, 2022.

The Plumbing Program is requesting that the Board of Health grant final approval of this document.

(The Plumbing Advisory Board approved the revisions at their July 21, 2022 meeting.)

EXHIBIT “A”

PROPOSED FINAL REVISION

**Allegheny County Health Department Rules and Regulations
Article XV, Plumbing and Building Drainage**

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

Deletions are shown with strikethroughs.
Additions are shown in larger font, bolded, and underlined.

CHAPTER 1 ADMINISTRATION

SECTION 102 APPLICABILITY

102.2 Existing installations. Plumbing systems lawfully in existence at the time of the adoption of this code shall be permitted to have their use and maintenance continued if the use, maintenance or repair is in accordance with the original design and no hazard to life, health or property is created by such plumbing system.

102.2.1 Existing buildings. Additional, alterations, renovations or repairs related to building or structural issues shall be regulated by the

International Existing Building Code.

**SECTION 106
PERMITS**

AC-106.7.9 Journeyman plumber qualifications. No journeyman plumber's license shall be granted a registered apprentice plumber until he has:

1. Acquired a minimum four (4) years experience or the equivalent of 8,000 hours worked;
2. Completed 576 hours of plumbing training at an accredited school, preferably within six (6) years of the beginning of the apprenticeship training; and
- 3. If a Master Plumber refuses to qualify records of legitimate past work hours for apprentices, they will be subject to penalties up to and including revocation of plan filing rights and/or more severe penalties as determined by the ACHD plumbing program; and**
- 3.4.** Passed the required examination.

~~**AC-106.7.9.1 Advanced standing examination.** Applicants for advanced standing examination must meet one of the following requirements:~~

- ~~1. Successful completion of a related training program consisting of at least one (1) school year of instruction.~~
- ~~2. Successful completion of related training provided by the military during active service.~~
- ~~3. Successful completion of college credits toward a major in a related field.~~
- ~~4. Successful completion of other comparable training/college credits satisfying the requirements of 1, 2, or 3.~~
- ~~5. Successful Completion of a Bachelor's Degree from an accredited institution.~~

~~Credit granted shall be applicable to the first year of apprentice training only. A passing score of 75% is required on the advanced standing examination. If an applicant fails the examination, he~~

~~may retake the examination once within thirty (30) days of the original examination date. The applicant will be required to pay an additional examination fee to retake the examination.~~

~~If an applicant is claiming college technical credits, an official transcript, with the university/technical school's raised or watermark seal and the registrar's signature on the transcript, must be submitted. The transcript must be mailed directly from the university or technical school to the Allegheny County Health Department Plumbing Program. A transcript that states "issued to the student" is not acceptable. A certificate indicating completion of a training program and military documents verifying training must be submitted if an applicant is claiming this training.~~

SECTION 107 INSPECTIONS AND TESTING

107.1 General. The code official is authorized to conduct such inspections as are deemed necessary to determine compliance with the provisions of this code. Construction or work for which a permit is required shall be subject to inspection by the code official, and such construction or work shall remain ~~accessible and exposed~~ **visible and able to be accessed** for inspection purposes until *approved*. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain ~~accessible and exposed~~ **visible and able to be accessed** for inspection purposes. Neither the code official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

CHAPTER 2 DEFINITIONS

SECTION 202 GENERAL DEFINITIONS

[BE] ACCESSIBLE. A site, building, facility or portion thereof that complies with Chapter 11 of the *International Building Code*.

[A] BUILDING. Any structure occupied **utilized** or intended for supporting or sheltering any occupancy.

AC-GREASE INTERCEPTOR. A plumbing appurtenance that is installed in a sanitary drainage system to intercept oily and greasy wastes from a wastewater discharge. Such device has the ability to intercept free floating fats and oils.

Fats, oils and greases (FOG) disposal system. A plumbing appurtenance that reduces nonpetroleum fats, oils and greases in effluent by separation or mass and volume reduction.

Gravity. Plumbing appurtenances of not less than 1000 gallons (3786 L) capacity that are installed in the sanitary drainage system to intercept free-floating fats, oils and grease from wastewater discharge. Separation is accomplished by gravity during a retention time of not less than 30 minutes.

Hydromechanical. Plumbing appurtenances that are installed in the sanitary drainage system to intercept free-floating fats, oils and grease from wastewater discharge. Continuous separation is accomplished by air entrainment, buoyancy and interior baffling.

FULL-OPEN VALVE. A water control or shutoff component in the water supply system piping that, where adjusted for maximum flow, the flow path through the component's closure member is not a restriction in the component's through-flow area.

[M] PRESS-CONNECT JOINT. A permanent mechanical joint incorporating an elastomeric seal or an elastomeric seal and corrosion-resistant grip ring. The joint is made with a pressing tool and jaw or ring approved by the fitting manufacturer.

PUBLIC SWIMMING POOL. A pool, other than a residential pool, that is intended to be used for swimming or bathing and is operated by an owner, lessee, operator, licensee or concessionaire, regardless of whether a fee is

charged for use.

[A] REGISTERED DESIGN PROFESSIONAL. An individual who is registered or licensed to practice professional architecture or engineering **their respective design profession**, as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

[A] STRUCTURE. That which is built or constructed, ~~or a portion thereof.~~

SWIMMING POOL. Any structure, basin, chamber or tank containing an artificial body of water for swimming, diving or recreational bathing having a depth of 2 feet (610 mm) or more at any point. **A permanent or temporary structure that is intended to be used for swimming, bathing or wading and that is designed and manufactured or built to be connected to a circulation system. A swimming pool can be open to the public regardless of whether a fee is charged for its use or can be accessory to a residential setting where the pool is available only to the household and guests of the household.**

CHAPTER 3 GENERAL REGULATIONS

SECTION 303 MATERIALS

303.4 Third-party testing and certification. All **pP**lumbing products and materials **required by the code to be in compliance** shall comply with the **a** referenced standards, specifications and performance criteria of this code and shall be identified in accordance with Section 303.1. **shall be listed by a third-party certification agency as complying with the referenced standards.** When required by Table 303.4, plumbing **pP**roducts and materials shall either be tested by an approved third-party testing agency or certified by an approved third-party certification agency. **identified in accordance with Section 303.1.**

303.5 Cast-iron soil pipe, fitting and components. Cast-iron soil pipes and fittings, and the couplings used to join these products together, shall be third-party listed and labeled. Third-party certifiers or inspectors shall comply with the minimum inspection requirements of Annex A or Annex A1 of the ASTM and CISPI product standards indicated in the code for such products.

SECTION 305
PROTECTION OF PIPES AND PLUMBING COMPONENTS

AC-305.1 Corrosion. Protection against contact. Pipes passing through concrete or cinder walls and floors or other corrosive material shall be protected against external corrosion by a protective sheathing or wrapping or other means that will withstand any reaction from the lime and acid of concrete, cinder or other corrosive material. Sheathing or wrapping shall allow for movement including expansion and contraction of piping. Minimum wall thickness of material shall be 0.025 inch (0.64 mm). **Metallic piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or cinder walls and floors or masonry. Metallic piping shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the sheathing shall have a thickness of not less than 0.025 inch (25 mil) (0.64 mm) and the sheathing shall be made of plastic. Where the sheathing protects piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.**

SECTION 308
PIPING SUPPORT

308.6 Sway bracing. Rigid support sway bracing shall be provided at changes in direction greater than 45 degrees (0.79 rad) for pipe sizes 4 inches (102 mm) and larger. **Where horizontal pipes 4 inches (102 mm) and larger convey drainage or waste, and where a pipe fitting in that piping changes the flow direction greater than 45 degrees (0.79 rad), rigid bracing or other rigid support arrangements shall be installed to resist movement of the upstream pipe in the direction of pipe flow. A change of flow direction into a vertical pipe shall not require the upstream pipe to be braced.**

308.10 Thermal expansion tanks. A thermal expansion tank shall be supported in accordance with the manufacturer's instructions. Thermal expansion tanks shall not be supported by the piping that connects to such tanks.

**TABLE 308.5
HANGER SPACING**

PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING (feet)	MAXIMUM VERTICAL SPACING (feet)
<u>Acrylonitrile butadiene styrene (ABS) pipe</u>	4	10 ^b
Aluminum tubing	10	15
Brass pipe	10	10
Cast-iron pipe	5 ^a	15
<u>Chlorinated polyvinyl chloride (CPVC) pipe and tubing, 1 inch and smaller</u>	3	10 ^b
<u>Chlorinated polyvinyl chloride (CPVC) pipe and tubing, 1 ¼ inches and larger</u>	4	10 ^b
Copper or copper-alloy pipe	12	10
Copper or copper-alloy tubing, 1 ¼ -inch diameter and smaller	6	10
Copper or copper-alloy tubing, 1 ½ -inch diameter and larger	10	10
Cross-linked polyethylene (PEX) pipe, <u>1 inch and smaller</u>	2.67 (32 inches)	10 ^b
<u>Cross-linked polyethylene (PEX) pipe, 1 ¼ inches and larger</u>	<u>4</u>	<u>10^b</u>
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe	2.67 (32 inches)	4
Lead pipe	Continuous	4
Polyethylene/aluminum/polyethylene (PE-AL-PE) pipe	2.67 (32 inches)	4
<u>Polyethylene of raised</u>	<u>2.67</u>	<u>10^b</u>

<u>temperature (PE-RT) pipe 1 inch and smaller</u>	<u>(32 inches)</u>	
<u>Polyethylene of raised temperature (PE-RT) pipe 1 ¼ inch and larger</u>	<u>4</u>	<u>10^b</u>
Polypropylene (PP) pipe or tubing 1 inch and smaller	2.67 (32 inches)	10 ^b
Polypropylene (PP) pipe or tubing, 1 ¼ inches and larger	4	10 ^b
<u>Polyvinyl chloride (PVC) pipe</u>	4	10 ^b
Stainless steel drainage systems	10	10 ^b
Steel pipe	12	15

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

- a. The maximum horizontal spacing of cast-iron pipe hangers shall be increased to 10 feet where 10-foot lengths of pipe are installed.
- b. 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.

SECTION 310 WASHROOM AND TOILET ROOM REQUIREMENTS

310.5 Urinal partitions. Each urinal utilized by the public or employees shall occupy a separate area with walls or partitions to provide privacy. **The horizontal dimension between walls or partitions at each urinal shall be not less than 30 inches (762 mm).** The walls or partitions shall begin at a height not more than 12 inches (305 mm) from and extend not less than 60 inches (1524 mm) above the finished floor surface. The walls or partitions shall extend from the wall surface at each side of the urinal a minimum of 18 inches (457 mm) or to a point not less than 6 inches (152 mm) beyond the outermost front lip of the urinal measured from the finished back wall surface, whichever is greater.

Exceptions:

1. Urinal partitions shall not be required in a single occupant or family/assisted-use toilet room with a lockable door.
2. Toilet rooms located in ~~day care and~~ child **day** care facilities and containing two or more urinals shall be permitted to have one urinal without partitions.

SECTION 314 CONDENSATE DISPOSAL

[M] 314.2.2 **Drain pipe materials and sizes.** Components of the condensate disposal system shall be cast iron, galvanized steel, copper and copper alloy, cross-linked polyethylene, polybutylene, polyethylene, ABS, CPVC, or PVC or polypropylene pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 relative to the material type. Condensate waste and drain line size shall be not less than 3/4-inch (19.1 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 314.2.2.

CHAPTER 4 FIXTURE, FAUCETS, AND FIXTURE FITTINGS

SECTION 403 MINIMUM PLUMBING FACILITIES

403.1 **Minimum number of fixtures.** Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 403.1. Types of occupancies not shown in Table 403.1 shall be considered individually by the code official. The number of occupants shall be determined by the International Building Code. Occupancy classification shall be determined in accordance with the International Building Code.

403.1.2 ~~Family or assisted-use toilet and bath fixtures.~~ Single-user toilet facility and bathing room fixtures. The plumbing fixtures located in single-user toilet facilities and bathing rooms, including ~~within~~ family or assisted-use toilet and bathing rooms that are required by Section 1109.2.1 of the *International Building Code*, shall contribute toward the total number of required plumbing fixtures for a building or tenant space. ~~are permitted to be included in the number of required fixtures for either the male or female occupants in assembly and mercantile occupancies.~~ Single-user toilet facilities and bathing rooms, and

~~F~~family or assisted- use toilet facilities rooms and bathing rooms shall ~~not~~ be required to be identified for ~~exclusive~~ use by either sex as required by Section 403.4.

403.1.3 Lavatory distribution. Where two or more toilet rooms are provided for each sex, the required number of lavatories shall be distributed proportionately to the required number of water closets.

AC-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.
4. **Separate facilities shall not be required in business occupancies in which the maximum occupant load is 15 or fewer.**

403.3 Required public toilet facilities. Employee and public toilet facilities. For structures and tenant spaces intended for public utilization,

~~C~~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 **associated with structures and tenant spaces** shall be provided with toilet facilities in all occupancies. **The number of plumbing fixtures located within the required toilet facilities shall be provided in accordance with Section 403 for all users.** Employee toilet facilities shall be either separate or combined employee and *public* toilet facilities.

Exception: *Public* toilet facilities shall not be required ~~in~~ **for**:

1. ~~Open or enclosed p~~**P**arking garages where there

are ~~no~~ **operated without** 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).

SECTION 405 INSTALLATION OF FIXTURES

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

405.3.1 Water closets, urinals, lavatories and bidets. A water closet, urinal, lavatory or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition, vanity or other obstruction, ~~or~~. **Where partitions or other obstructions do not separate adjacent fixtures, fixtures shall not be set** closer than 30 inches (762 mm) center-to-center between adjacent fixtures. There shall be ~~at least~~ **not less than** a 21-inch (533 mm) clearance in front of the water closet, urinal, lavatory or bidet to any wall, fixture or door. Water closet compartments shall not be less than 30 inches (762 mm) wide and 60 inches (1524 mm) ~~deep (see Figure 405.3.1)~~ in depth for floor mounted water closets and not less than 30 inches (762 mm) in width and 56 inches (1422 mm) in depth for wall-hung water closets.

Exception: An accessible children's water closet shall be set not closer than 12 inches (305 mm) from its center to the required partition or to the wall on one side.

405.4 Floor and wall drainage connections. Connections between the drain and floor outlet plumbing fixtures shall be made with a floor flange. The flange shall be attached to the drain and anchored to the structure. Connections between the drain and wall-hung water closets shall be made with an approved extension nipple or horn adaptor. The water closet shall be bolted to the hanger with corrosion-resistant bolts or screws. Joints shall be sealed with an approved elastomeric gasket, flange-to-fixture connection complying with ASME A112.4.3 or an approved setting compound.

405.4.1 Floor flanges. Floor flanges for water closets or similar fixtures shall not be less than 0.125 inch (3.2 mm) thick for ~~brass~~ **copper alloy**, 0.25 inch (6.4 mm) thick for

plastic, and 0.25 inch (6.4 mm) thick and not less than a 2-inch (51 mm) caulking depth for cast-iron or galvanized malleable iron.

Floor flanges of hard lead shall weigh not less than 1 pound, 9 ounces (0.7 kg) and shall be composed of lead alloy with not less than 7.75-percent antimony by weight. Closet screws and bolts shall be of ~~brass~~ **copper alloy**. Flanges shall be secured to the building structure with corrosion-resistant screws or bolts.

SECTION 408 BIDETS

408.3 Bidet water temperature. The discharge water temperature from a bidet fitting shall be limited to a maximum temperature of 110°F (43°C) by a water temperature limiting device conforming to ASSE 1070/**ASME A112.1070/CSA B125.70 or CSA B125.3.**

SECTION 409 DISHWASHING MACHINES

409.1 Approval. ~~Domestic~~ **Commercial** dishwashing machines shall conform to ASSE 1006-~~Commercial dishwashing machines shall conform to ASSE 1004 and NSF 3.~~ **Residential dishwashers shall conform to NSF 184.**

SECTION 410 DRINKING FOUNTAINS

410.1 Approval. Drinking fountains shall conform to ASME A112.19.1M, ASME A112.19.2M or ASME A112.19.9M and water coolers shall conform to AHRI 1010 **ASHRAE 18**. Drinking fountains, ~~and~~ **and water dispensers** shall conform to NSF 61, Section 9. ~~Where water is served in restaurants, drinking fountains shall not be required. In other occupancies, where drinking fountains are required, water coolers or bottled water dispensers shall be permitted to be substituted for not more than 50 percent of the required drinking fountains.~~ **Electrically operated, refrigerated drinking water coolers and water dispensers shall be listed and labeled in accordance with UL 399.**

SECTION 411 EMERGENCY SHOWER AND EYEWASH STATIONS

411.3 Water supply. Where hot and cold water is supplied to an emergency shower or eyewash station, the temperature of the water supply shall only be controlled by a temperature actuated mixing valve complying with ASSE 1071.

SECTION 416 LAVATORIES

AC-416.5 Tempered water for public hand-washing facilities. *Tempered water shall be delivered from public hand-washing facilities. Tempered water shall be delivered through an approved water-temperature limiting device that conforms to ASSE 1070/ASME A112.1070/CSA B125.70 or CSA B125.3.*

SECTION 423 SPECIALTY PLUMBING FIXTURES

423.3 Footbaths, and pedicure baths ~~and head shampoo sinks~~. The water supplied to specialty plumbing fixtures, such as pedicure chairs having an integral foot bathtub, **and** footbaths, ~~and head shampoo sinks~~, shall be limited to a ~~maximum temperature~~ **not greater than** of 120°F (49°C) by a ~~water-temperature-limiting~~ device that conforms to ASSE 1070/ASME A112.1070/CSA B125.70 or CSA B125.3.

SECTION 425 FLUSHING DEVICES FOR WATER CLOSETS AND URINALS

425.2 Flushometer valves and tanks. Flushometer valves and tanks shall comply with ASSE 1037/ASME A112.1037/CSA B1.125.37 or CSA B125.3. Vacuum breakers on flushometer valves shall conform to the performance requirements of ASSE 1001 or ~~CAN/CSA B64.1.1~~. *Access shall be provided to vacuum breakers. Flushometer valves shall be of the water-conservation type and shall not be utilized where the water pressure is lower than the minimum*

required for normal operation. When operated, the valve shall automatically complete the cycle of operation, opening fully and closing positively under the water supply pressure. Each flushometer valve shall be provided with a means for regulating the flow through the valve. The trap seal to the fixture shall be automatically refilled after each valve flushing cycle.

425.3 Flush tanks. Flush tanks equipped for manual flushing shall be controlled by a device designed to refill the tank after each discharge and to shut off completely the water flow to the tank when the tank is filled to operational capacity. The trap seal to the fixture shall be automatically refilled after each flushing. The water supply to flush tanks equipped for automatic flushing shall be controlled with a timing device or sensor control devices.

425.3.1 Fill valves. All flush tanks shall be equipped with an antisiphon fill valve conforming to ASSE 1002/ASME A112.1002/CSA B125.12 or CSA B125.3. The fill valve backflow preventer shall be located at least 1 inch (25 mm) above the full opening of the overflow pipe.

CHAPTER 5 WATER HEATERS

SECTION 501 GENERAL

501.7 Pressure marking of storage tanks. Storage tanks and water heaters installed for domestic hot water shall have the maximum allowable working pressure clearly and indelibly stamped in the metal or marked on a plate welded thereto or otherwise permanently attached. Such markings shall be in an accessible position with access on the outside of the tank so as to make inspection or reinspection readily possible.

SECTION 502 INSTALLATION

502.1 General. Water heaters shall be installed in accordance with the manufacturer's installation instructions. Oil-fired water heaters shall conform to the requirements of this code and the *International Mechanical Code*. Electric water heaters shall conform to the requirements of this code and provisions of NFPA 70. Gas-fired water heaters shall conform to the requirements of the *International Fuel Gas Code*. Solar thermal water heating systems shall conform to the requirements of the *International Mechanical Code* and *ICC 900/SRCC 300*.

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.
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. 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.
14. **Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is installed with insert fittings. The outlet end of such tubing shall be fastened in place.**

504.7 Required pan. Where **a storage tank-type** water heaters or **a** hot water storage tanks- are **is** installed in **a** locations where **water** leakage of **from** 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. **constructed of one of the following:**

1. **Galvanized steel or aluminum of not less than 0.0236 inch (0.6010 mm) in thickness.**
2. **Plastic not less than 0.036 inch (0.9 mm) in thickness.**
3. **Other *approved* materials.**

A plastic pan shall not be installed beneath a gas-fired water heater.

CHAPTER 6 WATER SUPPLY AND DISTRIBUTION

SECTION 602 WATER REQUIRED

602.3 Individual water supply. Where a potable public water supply is not available, individual sources of potable water supply shall be utilized.

602.3.1 Sources. Dependent on geological and soil conditions and the amount of rainfall, individual water supplies are of the following types: drilled well, driven well, dug well, bored well, spring, stream or cistern. Surface bodies of water and land cisterns shall not be sources of individual water supply unless properly treated by *approved* means to prevent contamination. **Individual water supplies shall be constructed and installed in accordance with the applicable state and local laws. Where such laws do not address all of the requirements set forth in NGWA-01, individual water supplies shall comply with NGWA-01 for those requirements not addressed by state and local laws.**

SECTION 604 DESIGN OF BUILDING WATER DISTRIBUTION SYSTEM

604.11 Individual pressure balancing in-line valves for individual fixture fittings. Where individual pressure balancing in-line valves for individual fixture fittings are installed, such valves shall comply with ASSE 1066. Such valves shall be installed in ~~an accessible~~ **a location with access.** ~~and~~ **The valves** shall not be utilized alone as a substitute for the balanced pressure, thermostatic or combination shower valves required in Section 424.3.

**SECTION 605
MATERIALS, JOINTS AND CONNECTIONS**

605.4 Water distribution pipe. Water distribution pipe **and tubing** shall conform to NSF 61 and shall conform to one of the standards listed in Table 605.4. ~~All~~ **Hot** water distribution pipe and tubing shall have a minimum pressure rating of 100 psi (690 kPa) at 180°F (82°C).

**TABLE 605.3
WATER SERVICE PIPE**

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe	ASTM D1527; ASTM D2282
Brass pipe	ASTM B43
Chlorinated polyvinyl chloride (CPVC) plastic pipe	ASTM D2846; ASTM F441; ASTM F442; CSA B137.6
<u>Chlorinated polyvinyl chloride/aluminum/chlorinated polyvinyl chloride (CPVC/AL/CVPC)</u>	<u>ASTM F2855</u>
Copper or copper-alloy pipe	ASTM B42; ASTM B302
Copper or copper-alloy tubing (Type K, WK, L, WL, M or WM)	ASTM B75; ASTM B88; ASTM B251; ASTM B447
Cross-linked polyethylene (PEX) plastic pipe and tubing	ASTM F876; ASTM F877 ; <u>AWWA C904</u> ; CSA B137.5
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe	ASTM F1281; ASTM F2262; CSA B137.10 M
Cross-linked polyethylene/aluminum/high-density polyethylene (PEX-AL-HDPE)	ASTM F1986
Ductile iron water pipe	AWWA C151/ <u>A21.51</u> ; AWWA C115/ <u>A21.15</u>
Polyethylene (PE) plastic pipe	ASTM D2239; ASTM D3035; <u>AWWA C901</u> ; CSA B137.11
Polyethylene (PE) plastic tubing	ASTM D2737; <u>AWWA C901</u> ; CSA B137.1
Polyethylene/aluminum/polyethylene (PE-AL-PE) pipe	ASTM F1282; CSA B137.9

<u>Polyethylene of raised temperature (PE-RT) plastic tubing</u>	<u>ASTM F2769; CSA B137.18</u>
Polypropylene (PP) plastic pipe or tubing	ASTM F2389; CSA B137.11
Polyvinyl chloride (PVC) plastic pipe	ASTM D1785; ASTM D2241; ASTM D2672; CSA B137.3
Stainless steel pipe (Type 304/304L)	ASTM A312; ASTM A778
Stainless steel pipe (Type 316/316L)	ASTM A312; ASTM A778

**TABLE 605.4
WATER DISTRIBUTION PIPE**

MATERIAL	STANDARD
Brass pipe	ASTM B43
Chlorinated polyvinyl chloride (CPVC) plastic pipe	ASTM D2846; ASTM F441; ASTM F442; CSA B137.6
<u>Chlorinated polyvinyl chloride/aluminum/chlorinated polyvinyl chloride (CPVC/AL/CVPC)</u>	<u>ASTM F2855</u>
Copper or copper-alloy pipe	ASTM B42; ASTM B302; ASTM B43
Copper or copper-alloy tubing (Type K, WK, L, WL, M or WM)	ASTM B75; ASTM B88; ASTM B251; ASTM B447
Cross-linked polyethylene (PEX) plastic tubing	ASTM F876; ASTM F877 ; CSA B137.5
Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe	ASTM F1281; ASTM F2262; CAN/CSA B137.10M
Cross-linked polyethylene/aluminum/high-density polyethylene (PEX-AL-HDPE)	ASTM F1986
Ductile iron water pipe	AWWA C151/A21.51; AWWA C115/A21.15
Polyethylene/aluminum/polyethylene (PE-AL-PE) pipe	ASTM F1282
<u>Polyethylene of raised temperature (PE-RT) plastic tubing</u>	<u>ASTM F2769; CSA B137.18</u>
Polypropylene (PP) plastic pipe or tubing	ASTM F2389; CSA B137.11
Stainless steel pipe (Type 304/304L)	ASTM A312; ASTM A778
Stainless steel pipe (Type 316/316L)	ASTM A312; ASTM A778

**TABLE 605.5
PIPE FITTINGS**

MATERIAL	STANDARD
Cast-iron	ASME B16.4; ASME B16.12
*****	*****
Copper or copper alloy	ASSE 1061; ASME B16.15; ASME B16.18; ASME B16.22; ASME B16.23 ; ASME B16.26; ASME B16.29; ASME B16.51; ASTM F1476; ASTM

	<u>F1548</u>
*****	*****
Fittings for cross-linked polyethylene (PEX) plastic tubing	ASSE 1061, ASTM F877; ASTM F1807; ASTM F1960; ASTM F2080; ASTM F2098; ASTM F2159; ASTM F2434; <u>ASTM F2735</u> ; CSA B137.5
<u>Fittings for polyethylene of raised temperature (PE-RT) plastic tubing</u>	<u>ASSE 1061, ASTM D3261; ASTM F1807; ASTM F2098; ASTM F2159; ASTM F2735; ASTM F2769; CSA B137.18</u>
*****	*****
Gray iron and ductile iron	<u>ASTM F1476; ASTM F1548</u> ; AWWA C110/ <u>A21.10</u> ; AWWA C153/ <u>A21.53</u>
Insert fittings for polyethylene/aluminum/polyethylene (PE-AL-PE) and cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX)	ASTM F1974; ASTM F1281; ASTM F1282; CAN/CSA B137.9; CAN/CSA B137.10
*****	*****
Stainless steel (Type 304/304L)	ASTM A312; ASTM A778; <u>ASTM F1476; ASTM F1548</u>
Stainless steel (Type 316/316L)	ASTM A312; ASTM A778; <u>ASTM F1476; ASTM F1548</u>
Steel	ASME B16.9; ASME B16.11; ASME B16.28; <u>ASTM F1476; ASTM F1548</u>

TABLE 605.7
VALVES

<u>MATERIAL</u>	<u>STANDARD</u>
<u>Chlorinated polyvinyl chloride (CPVC) plastic</u>	<u>ASME A112.4.14; ASME A112.18.1/CSA B125.1; ASTM F1970; CSA B125.3; IAPMO Z1157; MSS SP-122</u>
<u>Copper or copper alloy</u>	<u>ASME A112.4.14; ASME A112.18.1/CSA B125.1; ASME B16.34; CSA B125.3; MSS SP-67; MSS SP-80; MSS SP-110; IAPMO Z1157; MSS SP-139</u>
<u>Cross-linked polyethylene (PEX) plastic</u>	<u>ASME A112.4.14; ASME A112.18.1/CSA B125.1; CSA B125.3; NSF 359; IAPMO Z1157</u>
<u>Gray iron and ductile iron</u>	<u>AWWA C500; AWWA C504; AWWA C507; MSS SP-67; MSS SP-70; MSS SP-71; MSS SP-72; MSS SP-78; IAPMO Z1157</u>
<u>Polypropylene (PP) plastic</u>	<u>ASME A112.4.14; ASTM F2389; IAPMO Z1157</u>
<u>Polyvinyl chloride (PVC) plastic</u>	<u>ASME A112.4.14; ASTM F1970; IAPMO Z1157;</u>

MSS SP-122

**TABLE 605.8
MANUFACTURED PIPE NIPPLES**

MATERIAL	STANDARD
Brass, e Copper, <u>copper alloy, and</u> chromium-plated	ASTM B687
Steel	ASTM A733

AC-605.15 Copper tubing. Joints between copper or copper-alloy pipe or fittings shall comply with Sections 605.15.1 through 605.15.5 **6**.

AC-605.15.6 Push-fit joints. Push-fit joints shall conform to ASSE 1061 and shall be installed in accordance with the manufacturer's instructions.

AC-605.16 CPVC plastic. Joints between CPVC plastic pipe and fitting shall comply with Sections 605.16.1 through 605.16.3**4**.

AC-605.16.4 Push-fit joints. Push-fit joints shall conform to ASSE 1061 and shall be installed in accordance with the manufacturer's instructions.

605.17 PEX Plastic. Joints between cross-linked polyethylene plastic tubing or fittings shall comply with Sections 605.17.1 and 605.17.2**3**.

605.17.3 Push-fit joints. Push-fit joints shall conform to ASSE 1061 and shall be installed in accordance with the manufacturer's instructions.

SECTION 606
INSTALLATION OF THE BUILDING WATER DISTRIBUTION SYSTEM

606.5 Water pressure booster systems. Water pressure booster systems shall be provided as required by Sections 606.5.1 through 606.5.10.

606.5.9 Pressure tanks, vacuum relief. All ~~w~~Water pressure tanks shall be provided with a vacuum relief valve at the top of the tank that will operate up to a maximum water pressure of 200 psi (1380 kPa) and up to a maximum temperature of 200°F (93°C). The ~~minimum~~ size of such vacuum relief valve shall be **not less than** 1/2 inch (12.7 mm).

SECTION 607
HOT WATER SUPPLY SYSTEM

~~607.3 Thermal expansion control. A means of controlling increased pressure caused by thermal expansion shall be provided where required in accordance with Sections 607.3.1 and 607.3.2.~~

Where a storage water heater is supplied with cold water that passes through a check valve, pressure reducing valve or backflow preventer, a thermal expansion control device shall be connected to the water heater cold water supply pipe at a point that is downstream of all check valves, pressure reducing valves and backflow preventers. Thermal expansion tanks shall be sized in accordance with the tank manufacturer's instructions and shall be sized such that the pressure in the water distribution system shall not exceed that required by Section 604.8.

SECTION 608
PROTECTION OF POTABLE WATER SUPPLY

608.3 Devices, appurtenances, appliances and apparatus. All ~~d~~Devices, appurtenances, appliances and apparatus intended to serve some special function, such as sterilization, distillation, processing, cooling, or storage of ice or foods, and that connect to the water supply

system, shall be provided with protection against backflow and contamination of the water supply system. ~~Water pumps, filters, softeners, tanks and all other appliances and devices that handle or treat potable water shall be protected against contamination.~~

608.3.2 Potable water handling and treatment equipment. Water pumps, filters, softeners, tanks and other appliances and devices that handle or treat potable water to be supplied to the potable water distribution system shall be located to prevent contamination from entering the appliances and devices. Overflow, relief valve and waste discharge pipes from such appliances and devices shall terminate through an air gap.

**TABLE 608.1
APPLICATION OF BACKFLOW PREVENTERS**

DEVICE	DEGREE OF HAZARD ^a	APPLICATION ^b	APPLICABLE STANDARDS
<u>Backflow prevention assemblies:</u>			
Double check backflow prevention assembly and double check fire protection backflow prevention assembly	Low hazard	Backpressure or backsiphonage Sizes 3/8"–16"	ASSE 1015, AWWA C510, CSA B64.5, CSA B64.5.1
Double check detector fire protection backflow assemblies	Low hazard	Backpressure or backsiphonage (Fire-sprinkler systems) Sizes 2"–16"	ASSE 1048
Pressure vacuum breaker assembly	High or low hazard	Backsiphonage only Sizes 1/2"–2"	ASSE 1020, CSA B64.1.2
Reduced pressure principle backflow prevention <u>prevention assembly</u> and reduced pressure principle fire protection backflow preventer	High or low hazard	Backpressure or backsiphonage Sizes 3/8"–16"	ASSE 1013, AWWA C511, CAN/CSA B64.4, CSA B64.4.1
Reduced pressure detector fire protection backflow prevention assemblies	High or low hazard	Backsiphonage or backpressure (Fire sprinkler systems)	ASSE 1047
Spill- <u>resistant</u> proof vacuum breaker <u>assembly</u>	High or low hazard	Backsiphonage only Sizes 1/4"–2"	ASSE 1056, <u>CSA B64.1.3</u>
<u>Backflow preventer plumbing devices:</u>			
Antisiphon-type fill valves for gravity water closet flush tanks	High hazard	Backsiphonage only	ASSE 1002/ <u>ASME A112.1002/CSA B125.12</u> , CSA B125.3
Backflow preventer for	Low hazard	Backpressure or	ASSE 1022

carbonated beverage machines		backsiphonage Sizes 1/4"–3/8"	
Backflow preventer with intermediate atmospheric vents	Low hazard	Backpressure or backsiphonage Sizes 1/4"–3/4"	ASSE 1012, CAN/ CSA B64.3
Dual-check-valve-type backflow preventer	Low hazard	Backpressure or backsiphonage Sizes 1/4"–1"	ASSE 1024, CSA B64.6
Hose connection backflow preventer	High or low hazard	Low head backpressure, rated working pressure, backsiphonage Sizes 1/2"–1"	<u>ASME A112.21.3,</u> ASSE 1052, CSA B64.2.1.1
Hose connection vacuum breaker	High or low hazard	Low head backpressure or backsiphonage Sizes 1/2", 3/4", 1"	<u>ASME A112.21.3,</u> ASSE 1011, CAN/ CSA B64.2, CSA B64.2.1
Laboratory faucet backflow preventer	High or low hazard	Low head backpressure and backsiphonage	ASSE 1035, CSA B64.7
Pipe-applied atmospheric-type vacuum breaker	High or low hazard	Backsiphonage only Sizes 1/4"–4"	ASSE 1001, CSA B64.1.1
Vacuum breaker wall hydrants, frost-resistant, automatic-draining type	High or low hazard	Low head backpressure or backsiphonage Sizes 3/4", 1"	<u>ASME A112.21.3,</u> ASSE 1019, CAN/ CSA B64.2.2
<u>Other means or methods:</u>			
Air gap	High or low hazard	Backsiphonage or backpressure	ASME A112.1.2
Air gap fittings for use with plumbing fixtures, appliances and appurtenances	High or low hazard	Backsiphonage or backpressure	ASME A112.1.3
Barometric loop	High or low hazard	Backsiphonage only	(See Section 608.13.4)

For SI: 1 inch = 25.4 mm.

- a. Low hazard—See Pollution (Section 202).
High hazard—See Contamination (Section 202).
- b. ~~See Backpressure (Section 202).~~
See Backpressure, low head (Section 202).
See Backsiphonage (Section 202).

608.9 Reutilization prohibited. Water utilized for the **heating or** cooling of equipment or other processes shall not be returned to the potable water system. Such water shall be discharged into a drainage system through an *air gap* or shall be utilized for nonpotable purposes.

608.11 Painting of Potable water tanks. Where in contact with potable water intended for drinking water, water tanks, coatings for the inside of tanks and liners for water tanks shall conform to NSF 61. The interior surface of a potable water tank shall not be lined, painted or repaired with any material that changes the taste, odor, color or potability of the water supply when the tank is placed in, or returned to, service.

608.13 Backflow protection. Means of protection against backflow shall be provided in accordance with Sections 608.13.1 through 608.13.9.

608.13.5 Pressure-type vacuum breakers. Pressure-type vacuum breakers **assemblies** shall conform to **comply with** ASSE 1020 or CSA B64.1.2, and spillproof **Spill-resistant** vacuum breakers **assemblies** shall comply with ASSE 1056 **or CSA B64.1.3.** ~~These devices are designed for installation under continuous pressure conditions when the critical level is installed at the required height.~~ **These assemblies shall be installed with the critical level of the assembly located not less than 12 inches (305 mm) above all downstream piping and outlets.**

Pressure-type vacuum breakers **assemblies** shall not be installed in locations where spillage could cause damage to the structure.

608.16 Connections to the potable water system. Connections to the potable water system shall conform to Sections 608.16.1 through 608.16.4**11.**

608.16.11 Humidifiers. The water supply connection to humidifiers that do not have internal backflow protection shall be protected against backflow by a backflow preventer conforming to ASSE 1012 or by an air gap.

SECTION 611 DRINKING WATER TREATMENT UNITS

611.1 Design. Point-of-use reverse osmosis drinking water treatment units shall comply with NSF 58 or CSA B483.1. Drinking water treatment units shall meet the requirements of NSF 42, NSF 44, NSF 53, ~~or NSF 62,~~ **or CSA B483.1.**

CHAPTER 7 SANITARY DRAINAGE

SECTION 702 MATERIALS

**TABLE 702.1
ABOVE-GROUND DRAINAGE AND VENT PIPE**

MATERIAL	STANDARD
*****	*****
Brass pipe	ASTM B43
*****	*****
Copper or copper-alloy pipe	ASTM B42; ASTM B43 ; ASTM B302
*****	*****
Polyvinylidene fluoride (PVDF) plastic pipe	ASTM F1673; CAN/CSA B181.3
*****	*****

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

MATERIAL	STANDARD
*****	*****
<u>Polyethylene (PE) plastic pipe (SDR-PR)</u>	<u>ASTM F714</u>
Polyolefin pipe	ASTM F1412; <u>ASTM F714</u> ; CAN/CSA B181.3
*****	*****
Polyvinylidene fluoride (PVDF) plastic pipe	ASTM F1673; CAN/CSA B181.3
*****	*****

For SI: 1 inch = 25.4 mm.

**TABLE 702.3
BUILDING SEWER PIPE**

MATERIAL	STANDARD
*****	*****
Concrete pipe	ASTM C14; ASTM C76; CAN/CSA A257.1M ; CAN/CSA A257.2M
*****	*****

<u>Polypropylene (PP) plastic pipe</u>	<u>ASTM F2736; ASTM F2764; CSA B182.13</u>
*****	*****
Polyvinylidene fluoride (PVDF) plastic pipe	ASTM F1673; CAN/CSA B181.3
*****	*****

For SI: 1 inch = 25.4 mm.

**TABLE 702.4
PIPE FITTINGS**

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters	ASTM D2661; ASTM F628; CAN/CSA B181.1
*****	*****
Gray iron and ductile iron	AWWA C 110/ <u>A21.10</u>
Malleable iron	ASME B 16.3
<u>Polyethylene</u>	<u>ASTM D2683</u>
Polyolefin	ASTM F1412; CAN/CSA B181.3
*****	*****
Polyvinylidene fluoride (PVDF) plastic pipe	ASTM F1673; CAN/CSA B181.3
*****	*****

**SECTION 703
BUILDING SEWER**

703.2 Drainage pipe in filled ground. Where a *building sewer* or *building drain* is installed on filled or unstable ground, the drainage pipe shall conform to one of the standards for ABS plastic pipe, cast-iron pipe, copper or copper-alloy tubing, ~~or~~ PVC plastic pipe **or polypropylene plastic pipe** listed **indicated** in Table 702.3.

703.4 Existing building sewers and drains. Existing building sewers and drains shall connect with new building sewer and drainage systems only where found by examination and test to conform to the new system in quality of material. The code official shall notify the owner to make the changes necessary to conform to this code. **Where the entire sanitary drainage system of an existing building is replaced, existing building drains under concrete slabs and existing building sewers that will serve the new system shall be internally examined to verify that the piping is sloping in the correct direction, is not broken, is not obstructed and is sized for the drainage load of**

the new plumbing drainage system to be installed.

**SECTION 705
JOINTS**

705.19 Joints between different materials. Joints between different piping materials shall be made with a mechanical joint of the compression or mechanical-sealing type conforming to ASTM C1173, ASTM C1460 or ASTM C1461. Connectors and adapters shall be *approved* for the application and such joints shall have an elastomeric seal conforming to ASTM C425, ASTM C443, ASTM C564, ASTM C1440, ~~ASTM D1869~~, ASTM F477, ~~CAN/CSA A257.3M~~ or ~~CAN/CSA B602~~, or as required in Sections 705.19.1 through 705.19.7~~9~~. Joints between glass pipe and other types of materials shall be made with adapters having a TFE seal. Joints shall be installed in accordance with the manufacturer's instructions.

705.19.1 Copper pipe or ~~copper-alloy~~ tubing to cast-iron hub pipe. Joints between copper pipe or ~~copper-alloy~~ tubing and cast-iron hub pipe shall be made with a ~~brass~~ **copper or copper alloy** ferrule or compression joint. The copper pipe or ~~copper-alloy~~ tubing shall be soldered to the ferrule in an *approved* manner, and the ferrule shall be joined to the cast-iron hub by a caulked joint or a mechanical compression joint.

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

705.19.9 Polypropylene plastic. The joint between polypropylene plastic pipe and fittings shall incorporate an elastomeric seal. The joint shall conform to ASTM D3212. Mechanical joints shall not be installed above ground.

**SECTION 709
FIXTURE UNITS**

~~709.3 Values for continuous and semicontinuous flow.~~ Drainage fixture unit values for continuous and semicontinuous flow into a drainage system Conversion of gpm flow to dfu values. Where discharges to a waste receptor or to a drainage system are only known in gallons per minute (liters per second) values, the drainage fixture unit values for those flows shall be computed on the basis that 1 gpm (0.06 L/s) of flow is equivalent to two drainage fixture units.

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. serving 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 fitting fitting materials shall be constructed of ~~brass,~~ copper or copper-alloy, CPVC, ductile iron, PE, or PVC.

SECTION 717 REPLACEMENT OF UNDERGROUND SEWERS BY PIPE-BURSTING METHODS

~~717.1~~ **717.4 Pipe.** The replacement piping shall be made of high-density polyethylene (HDPE) and ~~manufactured with~~ shall have a standard dimension ratio (SDR) of 17. ~~and~~ The pipe shall be in compliance with ASTM F714.

~~717.2~~ **717.5 Pipe fittings.** Pipe fittings to be connected to the replacement piping shall be made of extra-high molecular weight PE3408 material high-density polyethylene (HDPE) and shall be ~~manufactured with an SDR of 17 and~~ in compliance with ASTM D2683.

CHAPTER 8

INDIRECT/SPECIAL WASTE

SECTION 801 GENERAL

801.1 Scope. This chapter shall govern matters concerning indirect waste piping and special wastes. This chapter shall further control matters concerning food-handling establishments, sterilizers, **humidifiers**, clear-water wastes, swimming pools, methods of providing *air breaks* or *air gaps*, and neutralizing devices for corrosive wastes.

801.2 Protection. All **d**evices, appurtenances, appliances and apparatus intended to serve some special function, such as sterilization, **humidification**, distillation, processing, cooling, or storage of ice or foods, and that discharge to the drainage system, shall be provided with protection against backflow, flooding, fouling, contamination and stoppage of the drain.

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 1003.3.58.

CHAPTER 11 STORM DRAINAGE

SECTION 1102 MATERIALS

**TABLE 1102.4
BUILDING STORM SEWER PIPE**

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe <u>in IPS diameters, including Schedule 40, DR 22 (PS 200) and Dr 24 (PS140); with a solid, cellular core or composite wall.</u>	ASTM D2661; ASTM D2751; ASTM F628; <u>ASTM F1488;</u> CAN/CSA B181.1; CAN/CSA B182.1
Cast-iron pipe	ASTM A74; ASTM A888; CISPI 301
Concrete pipe	ASTM C14; ASTM C76; CAN/CSA A257.1M; CAN/CSA A257.2M
Copper or copper-alloy tubing (Type K, L, M or DWV)	ASTM B75; ASTM B88; ASTM B251; ASTM B306
Polyethylene (PE) plastic pipe	<u>ASTM F667;</u> ASTM F2306/F2306M; <u>ASTM F2648/F2648M</u>
<u>Polypropylene (PP) pipe</u>	<u>ASTM F2881; CSA B182.13</u>
Polyvinyl chloride (PVC) plastic pipe (Type DWV, SDR26, SDR35, SDR41, PS50 or PS100) <u>in IPS diameters, including Schedule 40, DR 22 (PS 200) and Dr 24 (PS 140); with a solid, cellular core or composite wall.</u>	ASTM D2665; ASTM D3034; ASTM F891; <u>ASTM F1488;</u> CSA B182.4; CSA B181.2; CSA B182.2
Vitrified clay pipe	ASTM C4; ASTM C700
Stainless steel drainage systems, Type 316L	ASME A112.3.1

**SECTION 1103
TRAPS**

1103.4 Cleanout. An accessible cleanout shall be installed on the building side of the trap **and shall be provided with access.**

**SECTION 1113
SUMPS AND PUMPING SYSTEMS**

1113.1 Pumping system. The sump pump, pit and discharge piping shall conform to Sections 1113.1.1 through 1113.1.4.

1113.1.2 Sump pit. The sump pit shall not be less than 18 inches (457 mm) in diameter and 24 inches (610 mm) deep in depth, unless otherwise *approved*. The pit shall be accessible provided with access and shall be located such that all drainage flows into the pit by gravity. The sump pit shall be constructed of tile, steel, plastic, cast-iron, concrete or other *approved* material, with a removable cover adequate to support anticipated loads in the area of use. The pit floor shall be solid and provide permanent support for the pump.

CHAPTER 13 NONPOTABLE WATER SYSTEMS

SECTION 1301 GENERAL

1301.6 ~~Approved e~~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 by the manufacturer for the intended application.

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~~1~~ 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. Any storage tank or portion thereof that is above grade shall be protected from direct

exposure to sunlight by one of the following methods:

- 1. Tank construction using opaque, UV-resistant materials such as heavily tinted plastic, fiberglass, lined metal, concrete, wood, or painted to prevent algae growth.**
- 2. Specially constructed sun barriers.**
- 3. Installation in garages, crawl spaces or sheds.**

1301.9.32 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.

1301.9.43 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.

1301.9.43.1 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.

1301.9.43.2 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.

1301.9.54 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.

1301.9.65 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.

1301.9.76 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: Treated water ~~Storage tanks~~ **that are** 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~~ **provided that the tank has a** service port not less than 8 inches (203 mm) in diameter.

1301.9.87 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.

1301.9.98 Draining of Tanks. ~~Where tanks require draining for~~ **Tanks shall be provided with a means of emptying the contents for the purpose of** 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.

1301.9.109 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.

1301.9.140 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.

SECTION 1302 ON-SITE NONPOTABLE WATER REUSE SYSTEMS

1302.1 General. The provisions of ASTM E2635 and 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.~~ **Where approved and as appropriate for the intended application, water from other nonpotable sources shall be collected for reuse by on-site nonpotable water reuse systems.**

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 **provided with access that allows for removal.** Two shutoff valves shall not be installed to serve as a bypass valve.

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.

1303.1.1 Fire protection systems. The storage, treatment and distribution of nonpotable water to be used for fire protection systems shall be in accordance with the *International Fire Code*.

1303.2 Collection Surface. Rainwater shall be collected only from above-ground impervious roofing surfaces constructed from *approved* materials. ~~Collection of water from~~ **and where approved,** vehicular parking or pedestrian **walking** 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~~ **that is designed to remove** leaves, sticks, pine needles and similar material **debris to prevent such from entering the storage tank.** Debris excluders and equivalent devices shall be self-cleaning.

1303.4 Roof Washer First-flush diverter. 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. **First-flush diverters shall operate automatically and shall not rely on manually operated valves or devices.** 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 **First-flush diverters** shall be accessible **provided with access** for maintenance and service.

1303.12 Pumping and Control System. Mechanical equipment including pumps, valves and filters shall be easily accessible and removable **provided with access that allows for removal** 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.

1303.15 Tests and Inspections. Tests and inspections shall be performed in accordance with Sections 1303.15.1 through 1303.15.9.

1303.15.2 Roofwasher First-flush diverter test. Roofwashers **First-flush diverters** shall be tested by introducing water into the gutters **the collection system upstream of the diverter.** Proper diversion of the first quantity **amount** of water **shall be** in accordance with the requirements of Section 1303.4 ~~shall be verified.~~

1303.15.9 Collected raw rainwater quality. ASTM E2727 shall be used to determine what, if any, site conditions impact the quality of collected raw rainwater and whether those site conditions require treatment of the raw water for the intended end use or make the water unsuitable for specific end uses.

Comments and Responses

1. **Comment:** In reviewing the proposal article XV plumbing code; in regards to the AC-106.7.9.1 Advance Standing Examination. The concern is, in the Plumbing trade, the first year is extremely crucial for the fundamental building blocks which are the foundation of the apprentice's career. While having some prior knowledge from a program or training is beneficial, it is not directly addressing the requirements of article XV. In the apprentice's first year, they learn the introduction to the plumbing code and safety procedures, along with the hands on portion of learning the equipment, proper handling, and functioning of these materials. With this exam in place, these apprentices will miss this valuable information. As an employer of an apprentice coming in as a second year, my expectations is that he/she is already accomplished in these basic skill sets. With this Advanced Standing exam these expectations would not be met. The importance of the health and safety of the county and nation should not be circumvented . The ability to advance over this crucial period is detrimental to the safety and health of the community. All those wishing to be in the plumbing trade should be required to complete the 576 hours of training and 8,000 working hours no matter their background or education.

RESPONSE:

Thank you for your comment. Based upon the Plumbing Program's assessment, we agree with removing AC-106.7.9.1 from the Article XV Plumbing Code for the following reasons:

- The Apprentice who is granted Advanced Standing does not participate in learning industry basics; such as the use of basic tools, the proper handling of materials; and most importantly, safety procedures. These basics are taught extensively in the first year of Apprenticeship school. This can create a disparity in training and working hours earned for purposes of the Journeyman's examination. As such, to maintain consistency with the high standards of the educational program, we are removing AC-106.7.9.1 from Article XV Plumbing Code.

Rooming House Plan Review									
	<u>Priority Rooming House</u>		<u>Non-Priority Rooming House</u>		<u>Rooming House with Guest Food Service</u>		<u>Personal Care Boarding Home</u>		
# of Rooms	Current Fees 2020-2022	Proposed Fees 2023-2025	Current Fees 2020-2022	Proposed Fees 2023-2025	Current Fees 2020-2022	Proposed Fees 2023-2025	Current Fees 2020-2022	Proposed Fees 2023-2025	
0-9	\$ 102	\$ 108	\$ 102	\$ 108	\$ 167	\$ 177	\$ 167	\$ 177	
10-24	254	269	254	269	320	339	320	339	
25-100	382	404	382	404	447	474	447	474	
101-200	399	423	399	423	465	492	465	492	
201-300	417	442	417	442	483	511	483	511	
301-400	434	460	434	460	500	529	500	529	
401-500	452	479	452	479	518	549	518	549	
501-600	470	498	470	498	536	568	536	568	
601-700	488	517	488	517	553	586	553	586	
701-800	506	536	506	536	571	605	571	605	
801-900	523	554	523	554	589	624	589	624	
901-1000	541	573	541	573	607	643	607	643	

Rooming House Fee Schedule									
	<u>Priority Rooming House</u>		<u>Non-Priority Rooming House</u>		<u>Rooming House with Guest Food Service</u>		<u>Personal Care Boarding Home</u>		
# of Rooms	Current Fees 2020-2022	Proposed Fees 2023-2025	Current Fees 2020-2022	Proposed Fees 2023-2025	Current Fees 2020-2022	Proposed Fees 2023-2025	Current Fees 2020-2022	Proposed Fees 2023-2025	
0-9	\$ 203	\$ 215	\$ 203	\$ 215	\$ 334	\$ 354	\$ 334	\$ 354	
10-24	508	538	508	538	639	677	639	677	
25-100	763	809	763	809	894	948	894	948	
101-200	798	846	798	846	929	985	929	985	
201-300	834	884	834	884	965	1,023	965	1,023	
301-400	868	920	868	920	999	1,059	999	1,059	
401-500	904	958	904	958	1,035	1,097	1,035	1,097	
501-600	940	996	940	996	1,071	1,135	1,071	1,135	
601-700	975	1,034	975	1,034	1,106	1,172	1,106	1,172	
701-800	1,011	1,072	1,011	1,072	1,142	1,211	1,142	1,211	
801-900	1,046	1,109	1,046	1,109	1,177	1,248	1,177	1,248	
901-1000	1,082	1,147	1,082	1,147	1,213	1,286	1,213	1,286	

Rooming House Plan Review						
	<u>Traditional Boarding Home</u>		<u>Nursing Home</u>		<u>Nursing home/ Personal Care Boarding Home Combo</u>	
# of Rooms	Current Fees 2020-2022	Proposed Fees 2023-2025	Current Fees 2020-2022	Proposed Fees 2023-2025	Current Fees 2020-2022	Proposed Fees 2023-2025
0-9	\$ 167	\$ 177	\$ 167	\$ 177	\$ 167	\$ 177
10-24	320	339	320	339	320	339
25-100	447	474	447	474	447	474
101-200	465	492	465	492	465	492
201-300	483	511	483	511	483	511
301-400	500	529	500	529	500	529
401-500	518	549	518	549	518	549
501-600	536	568	536	568	536	568
601-700	553	586	553	586	553	586
701-800	571	605	571	605	571	605
801-900	589	624	589	624	589	624
901-1000	607	643	607	643	607	643

Rooming House Fee Schedule						
	<u>Traditional Boarding Home</u>		<u>Nursing Home</u>		<u>Nursing home/ Personal Care Boarding Home Combo</u>	
# of Rooms	Current Fees 2020-2022	Proposed Fees 2023-2025	Current Fees 2020-2022	Proposed Fees 2023-2025	Current Fees 2020-2022	Proposed Fees 2023-2025
0-9	\$ 334	\$ 354	\$ 334	\$ 354	\$ 334	\$ 354
10-24	639	677	639	677	639	677
25-100	894	948	894	948	894	948
101-200	929	985	929	985	929	985
201-300	965	1,023	965	1,023	965	1,023
301-400	999	1,059	999	1,059	999	1,059
401-500	1,035	1,097	1,035	1,097	1,035	1,097
501-600	1,071	1,135	1,071	1,135	1,071	1,135
601-700	1,106	1,172	1,106	1,172	1,106	1,172
701-800	1,142	1,211	1,142	1,211	1,142	1,211
801-900	1,177	1,248	1,177	1,248	1,177	1,248
901-1000	1,213	1,286	1,213	1,286	1,213	1,286

On Lot Sewage Fees Schedule

Initial Application Fees -New System

	Current Fees	Proposed Fees
	2014-2022	2023-2025
Single Family (residential)	\$ 385	\$ 408
Single Family (residential) in tested/approved subdivision	320	339
Commercial or Multi-Family	505	535
Holding Tanks (Commercial & Residential)	320	339
Privies	185	196
Transfers	110	117
Renewals	150	159
Reactivation of inactive file (3 months +)	110	117
Evaluation of existing system due to change in use	400	424

Initial Application Fees-Repairs

	Current Fees	Proposed Fees
	2014-2022	2023-2025
Residential	\$ 150	\$ 159
Commercial/Multi-Family/ Non-Residential	295	313

Testing Fees

	Current Fees	Proposed Fees
	2014-2022	2023-2025
Additional Deep Pit Tests	\$ 100	\$ 106
Percolation Tests	195	207
Soils Verification	150	159

Permit & Final Inspection Fees

	Current Fees	Proposed Fees
	2014-2022	2023-2025
Site Visits	\$ 150	\$ 159
Mandatory Pre-Construction Inspection	150	159
Interim Inspection	150	159
Final Inspection	150	159
Review of System Design (Conventional Systems)	75	80
Review of Engineer-Designed System	265	281
Review of Alternate/Experimental System Design	265	281

Subdivision Application Fees

	Current Fees	Proposed Fees
	2014-2022	2023-2025
Mandatory Pre-Planning Meeting	\$ 150	\$ 159
Planning Module/ Proposal Review (1-3 lots)	235	249
Planning Module/ Proposal Review (>3 lots)	375	398
All Subsequent Meetings	150	159
Reconstructive Planning	75	80
Form B or Form C Review (Non-Building Waivers)	110	117
General Fee Per Session Charge	75	80