CITY OF PHILADELPHIA

DEPARTMENT OF PUBLIC HEALTH

AIR POLLUTION CONTROL BOARD

The virtual meeting of the Air Pollution Control Board was held Monday, March 27, 2023.

Eddie R. Battle, Chairman,
presided:

ATTENDING:

MEMBERS: Eddie Battle, Chair of the APCB

Dr. Arthur Frank Member, APCB

Dr. Carol Ann Gross-Davis, Member, APCB

Dr. Cheryl Bettigole, M.D., M.P.H. Health Commissioner

DEPUTY COMMISSIONER:

Palak Raval-Nelson

STAFF:

Dr. Kassahun Sellassie, Director, Air Management Services Edward

Wiener, Source Registration Chief, AMS

Jiazheng (Jason) Li, Environmental Engineering Supervisor, AMS

Richard Annunziato, Asbestos Manager, AMS

India McGhee, City Solicitor, Environmental Law

Vijya Patel

Charlotte Hogan, AMS Central Adm Tech

Menelik Negash

Attendees

Richard Pepino

Adrian Wood

Peter Winslow

Eliza Alford

Charles McPhedran

Nidhi Patel

Max Avener

12676789446 (Caller)

Chairman Battle: Announcements and Instructions

Welcome Everyone!

Members introductions:

Carol Anne Gross-Davis

US EPA in Philadelphia. I am an Epidemiologist and affiliate Professor at Drexel University and an Adjunct Professor at Jefferson University. Happy to be here!

Richard Pepino:

From the University of Pennsylvania. Work in a group out of Medical School called the Center of Excellence for Environmental Toxicology and I teach out of University of Penn and Jefferson

Dr. Arthur Frank:

Occupational Physician by training. Professor of Environmental and Occupational Health at the school of Public Health at Drexel and a Professor of Medicine.

Dr. Cheryl Bettigole:

Health Commissioner. By background, Family Doctor, and Public Health Doctor.

Eddie Battle:

Chairman. Businessman: I do City and Regional Planning.

Chairman Battle:

We are on number two of the agenda.

April 28, 2022, Air Pollution Control Board Meeting Minutes

Any additions or corrections?

Arthur Frank: Motion to Approve

Chairman Battle: Is there a second?

Background: Second

Chairman Battle: OK.

Those in favor say Aye!

Members: AYE!

Chairman Battle: Those oppose?

Silence.

Chairman Battle: Motions Carries.

Number three on Agenda: Air Management Regulation VI Comments Response discussion with the APCB members and the public; APCB action on the Comments/Response.

Kass, you have the Floor.

Director Kassahun Sellassie: Thank you Chairman Eddie Battle. Good afternoon, Chairman, Board Members and Guest.

Today I would like to present a short summary about the Regulation AMR6 Public Comments and Responses.
We worked almost a year on this. Every week we had a meeting. One hundred and eighty-six people asked questions.
We prepared a finalized Risk Assessment and today we want to give you the status of where we are and once you have time to review it, the transcripts, questions, and responses, in two weeks we might come back and vote for AMR6.

Today we will just discuss the public questions and comments.

Risk Assessment

To make short and give you some input and not the details. If you have any questions the group will answer.

In a nutshell this is how it looks.

Cancer and noncancer Risk

- For individual air toxics (HAPs), cancer URF and noncancer RfC

- Use EPA AERMOD model - using assumed (highly conservative), 5-year meteorological data. At first we use AERSCREEN, AMS-SPREADSHEET, or others approved by EPA

- Risk screening and refined assessment
  a. Cancer risk : if risk no more than 1 in a million – negligible; **if > 50** in a million – permit application unacceptable; if between 1 and 50 in a million – case-by-case review and mitigation plan.
  b. Noncancer risk : if Hazard Quotient no more than 1 - negligible; if Hazard Quotient > 1, case-by-case review and mitigation plan

- We might use TO-15 six cylinder canister ambient air collection and conduct analysis on GC/MS or refined modeling that EPA is working on, or using latest technology approved by EPA

We also use the Air Mode model, that is a refined one. Before that, when a facility submits a permit, we use AR screen or AMS spreadsheet, the one we have or any other mode approved by EPA

If risks are no more than one in a million, it will be negligible and we don't do anything .
If the risk is greater than fifty in a million, permit application is unacceptable.

If you remember that the last time it was one in a hundred. We changed it to one in a million.
Philadelphia is a high toxic area in EJ community.

We decided to reduce from one hundred to one in five million for non-cancer and less than one for the Hazard question it would be negligible its more than one.

That's our index. We will do it case by case.

We might use TO -6-cylinder canister ambient air collection that is one of the EPA approved. That would take toxins from different sites to our lab. We use Gas Chromatography and Mass Spectrometer and once we have the concentration, we convert the lab with the concentration then they will send us what the concentration is a the location where the facility will install air pollution source.

We tried to take the TO-15 at the maximum ground level concentration from the new facility, so once we have that one we will have the concentration at the Lab and we convert that based on our formula on our excel or other. We can use that formula and change the risks of that concentration to the maximum concentration at exposure point. So, we change that concentration to risk. That is how we do the background.

By the way the background was not the previous one back before April 28, 2022. After April 28, 2022, we added the background.
So that is another change by public comments we responded.

Cancer and noncancer Risk

- For each HAP from a single source: health risk is calculated based on URF and RfC, Max. ground level concentration with unit emission, and the proposed emission amount (tons/year, pounds per hour).

- Model the emissions from all sources together and determine the risk

- For different HAPs of a facility: we do not add up the health risk values (due to scientific uncertainties and lack of guidance).

Cancer and Non Cancer Risk is from each hub single source we do the health risk. The risk is calculated based on what they said the unit risk and reference concentration is. We take that one from the maximum ground level. We do whatever, wherever we take the maximum concentration at ground level, and we take that one to calculate the risk of the emissions from all sources.

We take all sources from the facility, say benzene, there might be many sources, so we add up all the sources and calculate, if four or five sources are from benzene, we take each source and modeling for each one. Add up all those benzenes from the facility. That is another change.

For different hubs of facilities, we do not add up the risk value because benzene or cyanide and others attack various organs and EP has no reference or guidelines for all toxins or which organs or it will or might attack. That's why we added the same toxins Benzene, Cyanide, mercury or whatever on site.

Comments and Responses

•186 people/questions received

•Comment : Background Risk included

•Comment : Upper Risk limit reduced from 100 in a million to 50 in a million

•Comment: Exemptions which all removed except the Minor OPs (Ed Wiener more on permitting).

•Comment: More stringent, yes it is more stringent, example

TAC:	*Recommended Ambient Air Concentration Limit (1981)*	*Ambient Concentration based on 1-in-a-million risk*
Benzene:	76.6 $\mu g/m^3$	0.13 $\mu g/m^3$
Chromium (VI):	0.12 $\mu g/m^3$	0.00008 $\mu g/m^3$

•Comment: regulation is not in compliance with Chapter 127.45(a) of the Pennsylvania Code: two different regs

One hundred and eighty-six questions received; comments background risk included.
A lot of people asked to include background risk. It was difficult but we tried our best and we decided to add the background risk comments. Upper risk limits reduced from one hundred million as mentioned we now have fifty in a million. There are some exemptions. A lot of people asked to remove the exemptions we do remain one OP, Minor OP for existing one. (Ed Weiner) will explain about permitting.
A lot of people also comment for more stringent.

I don't know how they compare. This is the first one in Philadelphia we are doing this risk analysis. I don't see a lot of these being done. Maybe New Jersey will start, maybe California. Still, they did not. Most of them don't finalize, it is not the right way.

If they take like benzene the existing one is 76.6 microgram per meter cube. In our regulation. Regulation VI. Now we changed to point 1 3 microgram per meter cube. That's a big, huge difference. The same with chromium 6 which is very toxic. Chromium 6 .1 2 microgram per meter cube previous regulation. The amendment is now 0. 0 0 0 8 microgram per meter.

This is the most stringent regulation passed by Air Pollution Control Board Members.

Comment: Regulation is not in compliance with Chapter 1.2645 of Pennsylvania Code. Two things you should know. It has nothing to do with the Clean Air Act or the Pennsylvania or even the local one. That is about permitting Air Pollution and Air Pollution.

This one we will do risk assessment completely different. This is the first time PADP has not had risk assessment. So, we are the first in the state to start this risk assessment.

Permitting is still easier. People apply for permits. Once we check the risk, toxics, then we ask them for a second permit. Can you or we do the risk assessment on the facility. The first one is a regular permit. This one is for risk assessment. That one is a mission limitation for something, but this one is for exposure of the point of concentration.

Comments and Responses

•Comment: Already regulated by Federal law why AMR VI required: one is for MACT this one is for Risk Assessment at the exposure point. Philadelphia has higher cancer risk (Henry and Jason Explain)

• Comment: Cumulative Impact, we took the worst case scenario; different chemicals affect different organs; EPA has no guidelines;

•Comments: Transparency and revisit every five yrs.

•Comment: Risk mitigation: tech guideline section IV

•Comment: Reporting thresholds concern; Chromium (VI) has a reporting threshold of 0.0045 lbs./year while benzene has a reporting threshold of 7 lbs./year. (See AMR VI Exhibit A).

Once we're modeling, what is an exposure point we can change that to a risk (Cancer or non-Cancer risk). This is our Cancer and Non-Cancer Risk Assessment. Nothing to do with pay. I am sure PA responded. Is what I said to those who asked the questions. We need to know the difference. Comments and responses are already regulated by Federal Law.

A lot of industries ask if this is regulated by MACT (Maximum Available Control Technology) for toxics, so why do we need this? The MACT is for Single one ten tons a year of any toxic. If more than one, it will go to twenty-five. That is a big difference. The same explanation I said before, this is about risk Assessment.

Commutative Impact
We took the worse case scenario. Different Chemicals affect different organs. Commutative Impact is not just AMS (Air Management Services). It involves a lot because the path is different, and the risk is different.

It's on so many risks, inhalation, ingestion and dormant, we are only dealing with inhalation. Just Air. We are Air Management.
So maybe look for EPA or PADP in the future to work together.

Comment: Transparency
The Health Department, Commissioners Office and Air Management Services, all agreed to be transparent and to revisit in five years.

Comment: Risk Mitigation
We have a risk mitigation plan in the tech guidelines in section 4, so we can see comment reporting threshold concerns as I said before even chromium has a reported threshold of three short of 0 5 for five pounds per year.

Chromium is still toxic. If you follow MACT, this threshold is really very low.
Not only threshold, but we also use worse case scenarios, difference in time. For example, early morning is usually the highest because there is inversion. So, you got maximum ground level concentration. The threshold is very stringent and hi

Comments and Responses

•Comment: Exclusion of background concentrations

•Comment: Who conduct risk: AMS, the Department's air management division, will provide guidance and feedback, verify emission quantities and risk calculations, correct errors, and ensure that the risk assessment is done following the regulation and the guidelines.

•Comment: EJ we will consider but needs guidance

•Cancer Risk: A lifetime cancer risk of 1-in-1 million means that, for every 1 million people who are continuously exposed to a certain level of a pollutant over 70 years, one person may develop cancer.

Comments; Exclusion of background
We will include background concentration it is to protect public health. Not exclude but include.

Comments: Who Conduct Risk?
Air Management Services (AMS) will prepare guidelines and whatever necessary to stop whatever facility will do. AMS will have the same software modeling to check. Jason and Henry research group will conduct research and they will look at all those results. We will look at what the facility submitted; we check everything.

Comment: EJ
We consider the EJ community to be very important. Health Commissioner Office, Community, and Air Pollution Control Board. EJ community is always involved during permitting, modeling, and monitoring. That will remain our process to involve the public.

Cancer Risk
Lifetime cancer risk of one in a million. For everyone million who are continuously exposed to a certain level of pollutants over seventy years one person may develop cancer.

Questions

Arthur Frank

Will somebody be monitoring the EPA regulations?
If they came out with a new standard/regulation before five years, will we still have to wait five. years to change if they come out with new data?

Response

Director Sellassie

Air Pollution Control Board will meet and decide if something comes up.

Deputy Palak Ravel Nelson

The goal is as AMS does to keep track. AMS routinely meets with EPA. Kass has a very solid relationship with them.
The expectation would be that we would monitor all those things. If something changed a new technique or requirement, we would definitely bring it up through the Commissioners office and

the board go through the process if it is a regulatory change go through the process of the regulatory change and if it is a technical guidance document change we would make that change accordingly.

Carol Anne Gross

EPA perspective. It is routine to follow up with our monitoring and permitting folks who routinely let all our state and environmental agencies know what is coming down the pike. Unfortunately, it takes some time to get through all the regulatory hurdles. Normally the regular updates through the programmatic contacts and updates that Kass will have access to do to his relationship with EPA.

Director Sellassie

Every year we have a meeting where we discuss what is new, what we need. Each director, special directors meeting, we discuss everything. We have a good relationship.

Henry Kim

One thing that we will be doing on the regular basis for this regulation is to really check the unit risk factors and the reference concentrations for cancer and non cancer risk as they get updated. These values will be updated in our spreadsheet and the regulations.

Question:

Richard Pepino

Public Participation; More informational than interaction. We have to make sure that they public is seen as transactional that have to feel as though we're hearing them rather than communicating to them.

What does it take in Philadelphia to get exceptions from AMR6?

Responses:

Deputy Palak Raval-Nelson

AMS team is working diligently to figure out what are the points of public interaction and where and how we can best communicate with all communities that are both affected and impacted. Verifying if they don't have any existing voice how we can make things available. Specifically for our environmental justice community and vulnerable populations. How can we be more accessible and have things on our website to make them more easily understandable. We are going to be working very diligently with AMS team to make sure we are translating all of this information and making sure that the public understands it and that the public feels like part of the conversation.

After the regulations there will be more work associated with how we can be more inclusive people can understand what is all this and why does it matter to me.

Ed Weiner

The exemptions and exceptions that we proposed for emergency generators and a certain range of boilers sizes, we are now getting rid of because they did not have the potential to emit this level of the threshold. Predetermined risk would be ok for those. Based on the comments we decided to get rid of those. We created a specialized spreadsheet to accommodate smaller facilities. Boiler spreadsheet instead of them trying to calculate the emissions themselves. They can just put in their boiler size and know it is going to burn natural gas and use their stack height. The spread sheet will use EPA emissions factors and calculate to determine if they are about the threshold, and they could block stack heights and stuff like that to see if it helps. There are certain other exemptions that are both within the regulations itself that are proposed to stay. They are mostly certain types of permit applications that at the end of its stationary sources like mechanical ventilation systems. Garage permits for new underground garages, that

permits basically make sure that our regulation is being followed. Make sure that there is the correct amount of ventilation and alarm systems to prevent carbon monoxide problem. It doesn't make sense to put through risk analysis.

Richard Pepino:

Suppose you have a bad actor? Compliance absolutely a measurement or does a compliance factor go into this decision?

Ed Weiner:

Whether something kicks in needing risk, is based on the potential emissions to various toxic air contaminants. That would be based on the wors case. What they are allowed to do and what they physically can do. There is a little bit of compliance issue. We determine the exempt from risk analysis is because they only emit like 2,000 hours a year or throughout or whatever; its fine. Those are going to be permit conditions. They would have a record-keeping requirement. Facilities will have licenses for equipment. Facility compliance will come out to look at the source and check the records. If they are out of compliance, well know.

Commissioner Dr. Cheryl Bettigole:

If there is a permit process if someone is not in compliance, we can ticket them. We can go out in the mobile air monitoring van and take samples if there is some concern?

Director Sellassie:

Yes. That's what we do.

We are ready. Run that mobile source. We added a lot of the latest technology, even real time air toxic monitors. If it's approved. We have two other EPA grants, one is approved and the other which is not competitive, but they will grant us about two hundred thousand and we will do a lot for the city.

Deputy Palak Ravel-Nelson:

EPA agents may not as routinely go out to sites. The city is different, we have inspectors. We can definitely go out. If there is a bad actor, we monitor them. They give us data we are going to do a comparison. We have ways of measuring and verifying it they are not in compliance. We will take the **necessary actions for fees and fines etcetera.**

Arthur Frank:

Reasonable exceptions.

How are small laboratories being addressed?

Ed Weiner:

Practically the vast majority won't trigger it. If you don't require a permit, you don't have to worry about this. Even if they do, they will be small emit source that have the potential emission below the thresholds for everything, hypothetically. If we come across this down the road where that is not the case and it can emit toxic slightly about the threshold, maybe that type of source should have a permit.

Director Sellassie:

Not significant. In general, we would remove them from the exemption. If so, we have to do an analysis for each one, that is another exemption we removed from regulation.

Arthur Frank:

They all have to now come in with a permit?

Ed Weiner:

Doesn't necessarily need a permit. Depending on what they emit.

Carol Anne Gross Davis

They can still normally call up AMS and say I am concerned about this facility?

Deputy Palak Ravel-Nelson:

Absolutely!

Carol Anne Gross Davis (Comments)

I think its great to get some real time Air Monitoring response equipment and think it will be a real help to the city to address this kind of combination with new regulations.
You have the ability to do some of the sampling and verify if there is cause for concern.

Environmental justice concerns in communities that are vulnerable. EPA haven't announced. them yet but they are building tech assist centers in each region to have access to communities with technology issues, training and to build some capacity help with grant writing. Hopefully it will be announced soon. That will be another resource for citizens of Philadelphia.

Questions:

Peter Winslow:

Can you say more about EJ guidance?

Director Sellassie:

PADPS are almost in the final stage. Waiting for them. We will work together. Once we finalize we will put together.

Charles Sumac

Will there be written comments and response documents.

Director Sellassie:

Once finalized we will send out regulations and documents.
That is our plan.

Commissioner: Dr Cheryl Bettigole

We will be sending documents out to the board and Posting on the website?

Director Sellassie:

Yes. We do that.

Commissioner: Dr Cheryl Bettigole

Member so the pubic would see a detailed document that by the way, I would remis if I didn't thank our team for a huge amount of lift on this. Documents go through all the public comments. Bucket those that are related together with responses. There are changes in regulations in response to public comments. It lays it all out.
There is a comment by Peter Winslow about "participation being relational and not transactional. Consultation will be beyond informational exchange."
I think when you see that document, you will see the approach applied.
There are real changes in the regulations due to public comments. I think the response has been really thoughtful. That doesn't mean that every public comment resulted in a change in the regulation. There are some real changes there that you are going to see.

Deputy Palak Ravel Nelson: Summary

The board has the documents. They will be make the response to the comments document available to the public in two days or so. Kass will be contacting the board for availability to reconvened in and take a vote. Get everything finalized and sorted.
Is that your understanding Chairman?

Chairman Battle:

Yes!

Any additional questions or comments from the public members?

JiaZheng Li:

There is one hand raised.

Peter Winslow:

Will you attend the "Thrive Summit"?

I just want to express again the invitation from community in South Philadelphia, Philly Thrive is having a summit in which we would love to have Air Pollution Control Board to join in the conversation. Some of the subjects deal with air quality.

Commissioner Dr. Cheryl Bettigole:

If there is a piece of that we can attend, we can't commit to that large block of time, if you can reduce it to one to two hours, share that information.

Peter Winslow

The session that is most prominent is 11 am to 12pm. We will deal with remediation in general. But most of it would have to do with air quality.

Deputy Palak Ravel Nelson

Would you mind sharing that information in the chat so that we focus on potentially attending that session.

Chairman Battle:

Number four of the Agenda

Is there a motion to Adjourn?

Arthur Frank :

Motion to Adjourn

Chairman Battle:

Is there a second?

Carol Anne Gross Davis

Second!

Chairman Battle:

All in Favor say Aye

Board Members

Aye!

Chairman Battle:

Oppose!

Motion Carried