

CITY OF PHILADELPHIA
DEPARTMENT OF PUBLIC HEALTH
AIR POLLUTION CONTROL BOARD MEETING

Thursday, April 27, 2023

The Air Pollution Control Board held a public meeting on Thursday, April 27, 2023. The APCB Meeting was held virtually using the Zoom platform to facilitate access by the public via computer or other device and toll-free phone number.

Board Members Present

Chairman Eddie Battle, Health Commissioner Dr. Cheryl Bettigole, Dr Arthur Frank, Terry Soule, Thomas Edwards, Dr. Richard Pepino, Mariel Diane Featherstone, Dr. CarolAnn Gross-Davis

Guest

Deputy Health Commissioner, Palak Raval-Nelson

WELCOME AND INTRODUCTIONS

Air Pollution Control Board Chairman Eddie called the meeting to order at 4:01PM.

Announcement

Board Member Dr. Carol Anne Gross Davis made a statement declaring that She is there as a Citizen of Philadelphia and that her views and opinion made in the course of this public hearing are hers alone and do not reflect Environmental Protection Agency.

Board Members introduced themselves.

MINUTES

Dr. Arthur Frank moved; Dr. Carol Anne Gross Davis, seconded.

The Board unanimously approved the minutes from March 27, 2023.

Deputy Commissioner Palak Raval Nelson gives further instruction to the non-panelists on the question-and-answer portion that will commence after the presentation has been made.

Air Management Regulation AMR VI

Director Kassahun Sellassie provided a summary on response procedure associated with how Air Management Services calculate the risk when accepting permits. Starting with Cancer and Non-Cancer risks for individual air toxic (HAPs) and Cancer Unit Risk Factor (URF) and non-cancer reference concentration. Also, consideration of the worst-case scenario like the five-year meteorological data and maximum ground level concentration. That is the maximum risk we are calculating based on the emission or the ground level concentration.

The screen is a refined assessment. Cancer risk, if the risk is no more than one in a million, its negligible. If Cancer risk is greater than fifty million, permit application is unacceptable.

Before it was one hundred, it has been reduced to fifty. If it is between one and fifty, there will be a case-by-case review. There may be some mitigation to reduce the risk from the source.

We can use TO15 Six-cylinder canisters that we are using now EPA or federal standard. I know it is expensive, we will get new or the latest technology. EPA is working on the refined risk analysis. We will review again whenever that technology or EPA refined assessment is available.

We use TO15 to take samples for toxins for the EPA standard and we analyze using gas chromatography.

For the cancer and non-cancer HAP from a single source. The risk is calculated based on URF and RfC. Maximum ground level will be taken into consideration and models. Emission from all sources together to determine the risk. If benzene comes from all sources, we model that one and we add them. Benzene or similar HAP or Haps from different HAPs of a facility we do not add up health risk values due to scientific uncertainty.

There are thirty urban toxins that are identified by EPA. The thirty are the most concentrated. We still must consider all two hundred and twenty-seven risk analyses. This is new data. This is still a screen tool. The EPA is doing a refined one. This will help to identify what toxins in a particular location/area and its magnitude.

Formaldehyde is the top air toxic in Philadelphia. It has a lot of sources from natural gas, exhaust pipes, mold source, gasoline and fertilizers. Benzene is the second. Then acetaldehyde butadiene, carbon tetrachloride and chromium which is a toxic one.

Many sources around the area is built, we have to take some extra measurements to assess what the actual concentration is.

Comments, questions:

Is the background risk included?

Yes, for the safety of the public, background risk is included.

Upper Risk limit reduced from one hundred to fifty, so we reduced to fifty?

Anything more than one we have to do a risk mitigation. Fifty is the acceptable upper limit.

Exemptions?

There are exemptions. A lot of people asked to remove that one. Most of it is removed, but some remained and that is due to renewal, so we will do analysis similar to others.

More Stringent?

Yes, it is because if you see the 1981 version for benzene, it is 76.6 micrograms per cubic meter. With the risk analysis, one in a million the maximum is 0.13 micrograms per cubic meter. Chromium VI is 0.12 micrograms and with the risk analysis it is 0.00008. Very Stringent. Really protects the public.

Already regulated by federal.

Industry does not want to do a risk assessment because they said the maximum available control technology in 1990 by Clear Air Act. This is similar.

We are doing Risk Analysis.

Cumulative impacts?

We took the worst-case scenario to calculate risk. Different chemicals affect different organisms. We are doing our best to include the backgrounds. Transparency and review it every five years.

Risk Mitigation.

Reporting Threshold We are low. Details on technical guidelines in Section 4 Reporting Threshold.

Exclusion of background concentration.

Commissioner Office and Air Management Service priority is to protect public safety. We include the background concentration.

Who conducts Risk Analysis?

We conduct risk analysis. The industry submits risk analyses we verify it. We don't just accept whatever they provide us with.

Cancer Risk

Cancer risk is one in a million.

For every one million people who are continuously exposed to a certain level of pollutants over many years, one person may develop cancer.

Other States locals/Backgrounds Cancer Risk

We will use the TO15 Method for toxic reporting to EPA.

AMR VI SCREENING WORKBOOK

Enter the data. Once they have the concentration and stack parameters it will calculate the risk. If it is above threshold, they have to do a refined risk.

Procedure to submit Risk Assessment

Whomever permits a source emission and pollutants, they have to do a risk analysis for facility wide. If the cancer risk is greater than ten in a million or the quotient is greater than one, it will need to include a risk mitigation plan.

If a risk mitigation plan is submitted the Risk Assessment team will review it. That includes the director, chief of Permitting, and chief of Program Services. Detailed in Technical Guidelines Section 4.

Once we have done the permitting the same process of public notice, PA Bulletin and newspaper and thirty-day public comment period.

Major sources will have to go through EPA. Public Hearing, applicant meets all requirements and public agrees.

This concludes the presentation.

Questions; Read by Mr. Li

Question; Peter Winslow
Request copy of presentation

Director Sellassie replied yes.

Question: Can Verbal comments be made today before the board's action?

Commissioner Bettigole responded
We had a very extensive public hearing process. We are not taking comments today but we are taking any questions.

Question Dr. Gross Davis

Based on whatever actions happen today, if and when it is approved, what is the implementation timeline?

Answer; Director Sellassie
January 1, 2024.

Chairman Battle
Other Questions or Comments?

No response

Is there a Motion to approve the Air Management Regulation 6?

Arthur Frank: So, moved.

Motion for approval of the Regulation approved unanimously.

Statement from Commissioner Bettigole

Grateful for the immense amount of work by the Board and Air Management Services team that has gone into this regulation. This regulation will make for cleaner air, fewer cases of cancer and it takes us forward in some truly historic important ways. I know that not everyone is perfectly happy in the community with this, and I recognize that. We are listening and trying to come up with something that navigates but I just want to recognize everything that went into this moment.

Statement from Palak Raval Nelson

Recognizing team members for their hard work and effort and acknowledging that this is a high achievement and amazing step forward.

ADJOURNMENT

Motion to adjourn the meeting Terry Soule

Seconded by Arthur Frank

Chairman Battle adjourned the meeting at approximately 4:32 PM.