

**Public Hearing Minutes
of the
Louisville Metro Air Pollution Control Board
January 18, 2012**

A public hearing of the Louisville Metro Air Pollution Control Board was called to order on January 18, 2012, at 10:00 a.m. in the Board Room of the Louisville Metro Air Pollution Control District, 850 Barret Avenue, Louisville, Kentucky, by the Chairman, Dr. Robert Powell.

General Statement, Rules and Purpose

The Chairman read the opening announcements, rules and purpose of the public hearing which was to review two amended District regulations: **Regulation 5.20 *Methodology for Determining Benchmark Ambient Air Concentration of a Toxic Air Contaminant, Version 3 – Proposed, October 19, 2011*; and Regulation 5.23 *Categories of Toxic Air Contaminants, Version 4, Proposed, October 19, 2011*.**

Ms. Lauren Anderson, Executive Director, introduced the amendments to Regulations 5.20 and 5.23 together because the regulations and the proposed amendments are interrelated. As background, Ms. Anderson reminded the Board that it had recently revised Regulation 5.20 to include new Sections 2.3, 2.4 and 2.5 as part of the July 2011 amendments to the STAR program. Ms. Anderson said the new sections provided a mechanism to determine when a toxic air contaminant (TAC) should no longer be regulated as a carcinogen under the STAR program by providing a mechanism for the District to recommend, and for the Board to approve, de-listing a TAC as a carcinogen.

Ms. Anderson said the proposed amendments to Regulation 5.20 would delist ethyl acrylate as a carcinogen and specifically revise section 2.5.1 to list ethyl acrylate. In Regulation 5.23, the proposed amendments would move ethyl acrylate from a carcinogenic Category 1 TAC to a non-carcinogenic Category 4 TAC. She said the effects of ethyl acrylate was minimal regardless if it was placed in Category 1 or Category 4 than in the benchmark ambient concentration. Ms. Anderson said the primary effect of the proposed change would be on the benchmark ambient concentration used to demonstrate compliance under the STAR program. Currently, the carcinogenic benchmark ambient concentration for evaluating the emissions of ethyl acrylate is $0.07 \mu\text{g}/\text{m}^3$, while the non-carcinogenic hazard quotient is 30 $\mu\text{g}/\text{m}^3$. If adopted, ethyl acrylate would be regulated only under the non-carcinogenic hazard quotient of 30 $\mu\text{g}/\text{m}^3$, instead of both as currently required.

Emissions of ethyl acrylate were monitored with a risk above one in a million during the West Louisville Air Toxics Study (WLATS), which was conducted by the District in 2000 and 2001 in conjunction with the West Jefferson County Community Task Force and EPA. As a result, it was listed as a Category 1 TAC when the Board first adopted the STAR program in 2005. In accordance with the hierarchy established in Regulation 5.20, the carcinogenic benchmark ambient concentration of $0.07 \mu\text{g}/\text{m}^3$ used to demonstrate compliance with the STAR program was developed by the State of Michigan. In 2007, after the regulations were adopted, the STAR Implementation Advisory Group met frequently to discuss issues related to implementation of the STAR regulations. One of the items discussed was whether to de-list ethyl acrylate as a carcinogen, a topic which has continued at the District for the past five years.

Ms. Anderson reviewed the results of studies undertaken by the National Toxicology Program (NTP) which is part of the federal department of Health and Human Services, and the International Agency for Research on Cancer (IARC). She said the NTP scientific study conducted in 1985-86, which was the only study that had evidence of carcinogenic affects from ethyl acrylate, concluded that ethyl acrylate was

reasonably anticipated to be a carcinogen and listed it as such in the Report on Carcinogens. In 2000, NTP reviewed its listing and determined that ethyl acrylate did not fit its criteria to be considered reasonably anticipated to be a carcinogen. NTP subsequently delisted it from the Report on Carcinogens.

IARC, however, continued listing ethyl acrylate as a carcinogen based on the 1985-86 study. In 2007, IARC was asked to reconsider de-listing ethyl acrylate but declined due to other priorities. In 2008, the State of Michigan considered all of the studies on ethyl acrylate and delisted it as a carcinogen and removed its 0.07 $\mu\text{g}/\text{m}^3$ standard.

Ms. Anderson said in 2008, there were three local companies that used ethyl acrylate. The District was asked to consider de-listing ethyl acrylate and subsequently prepared a draft amendment to Regulation 5.20 to de-list ethyl acrylate as a carcinogen on the basis of NTP's subsequent review and the State of Michigan's delisting decision.

In January 2009, the District released an Advanced Notice of Public Rulemaking (ANPR), that included a discussion of the District intended to propose. One of the changes in the ANPR included a provision for the District to decide if a chemical was not a carcinogen for purposes of determining the BACc. Public comments were accepted and a STAR Advisory Group¹ was formed to consider the amendments outlined in the ANPR.

In March 2010, the District informally released amended STAR program regulations for informal public review and comment, which the District responded to. In April 2010, the University of Louisville reported to the Board that emissions of ethyl acrylate since the 2001 WLATS study were not insufficient to analyze. In November 2010, the Board formed the Committee-of-the-Whole and released the proposed STAR amendments for formal comment following a thorough review by District staff. Again, comments were reviewed and responses prepared by the District.

In June 2011, the District presented the entire packet of STAR regulations to the Board for adoption. The Board adopted the majority of the District's recommended changes then, but deferred action on Regulations 5.20, 5.21 and 5.22 until July 2011, when the amendments allowing the District to recommend and for the Board to approve de-listing a TAC as a carcinogen were adopted.

Ms. Anderson said the District had relied on the determinations made by other agencies that were knowledgeable on toxicology in initially developing the STAR program and throughout the recent rulemaking process. She stressed that none of the actual STAR program goals had been changed, but many changes were made to simplify the language in the STAR regulations and clarify several complicated provisions.

Statements

Mr. Dennis Conniff, representing the Greater Louisville Air Toxics Task Force, stated that the Air Toxics Task Force supported the proposed amendments to the STAR program since de-listing ethyl acrylate as a carcinogen was well supported by the most current scientific evidence. Changes, such as those proposed by the District should be made to the STAR program, when appropriate, to keep up with scientific evidence. Mr. Conniff stated that the Air Toxics Task Force also supported the change to Regulation 5.23 which would amend the list of hazardous air pollutants (HAPs) that were also TACs in order to conform to the Clean Air Act's list of HAPs. Specifically, "phosphorus" rather than "phosphorus

¹ The 2009 STAR Advisory Group (SAG) was named to distinguish it from the 2007 STAR Implementation Advisory Group (SAIG).

compounds” should be listed. But, he said that there were conforming amendments that needed to be made to Regulation 5.14 and other regulations in order to be consistent with the proposed changes in Regulation 5.23. Mr. Conniff encouraged District staff to make the change as soon as possible.

Ms. Anderson said the reason to change the TAC list was to conform it to the federal list of HAPs. Ms. Hamilton stated the list of HAPs was established by Congress during the 1990 amendments to the Clean Air Act. When Congress listed the pollutants, they listed “phosphorus” as a HAP. However, Regulations 5.14 and 5.23 listed “phosphorus compounds” based on a 1996 EPA proposal adding “phosphorus compounds.” Ms. Hamilton said when Congress established the list of chemicals in the Clean Air Act under Section 112(b), they recognized that science changes and included provisions for EPA to periodically review the list of TACs and make revisions. These provisions include a test that includes the criteria that EPA must use to add or remove a chemical from the list and require EPA to undertake public rulemaking. To date, EPA has not undertaken the formal rulemaking steps necessary to add “phosphorus compounds” to the list. The District’s HAP list currently conforms to what Congress established in 1990. The District will conform its HAP list to the federal list when appropriate.

Discussion

Mr. Jacobs asked if phosphorus was on the HAP list. Ms. Hamilton confirmed that only phosphorus was on the list.

Dr. Al-Shami asked that if the Board had to decide to de-list ethyl acrylate, why District staff expected the Board to base their decision based on a single study. District staff and other Board members explained the rationale that determined the amendments to Regulations 5.20 and 5.23.

Mr. Steve Thomas asked how much intake of ethyl acrylate was toxic. Ms. Anderson said she was not aware of the amount of ethyl acrylate used in the scientific studies but carcinogenic risk levels were established by the state of Michigan.

Ms. Matheny asked what the practical effect of not having ethyl acrylate on the list would be. Ms. Anderson said the practical effect was that the companies that use ethyl acrylate would use only the non-carcinogenic benchmark ambient concentration of 30 $\mu\text{g}/\text{m}^3$ when preparing environmental acceptability modeling demonstrations.

Dr. Powell asked if ethyl acrylate was changed to a non-carcinogen, would it fall into another TAC category and continue to be regulated, but not as stringently. Ms. Anderson said that if the proposed amendment were adopted, ethyl acrylate would become a Category 4 TAC that would continue to be regulated, not as stringently as a carcinogen, but in accordance with the danger it poses as a non-carcinogen. Ms. Anderson said the District would not be less stringent than EPA.

Dr. Al-Shami asked if the District expected companies to use higher percentages of ethyl acrylate if it was a non-carcinogenic. Ms. Anderson said she believed that the change would not lead to an increase in the percent of ethyl acrylate used by a company since they were not changing their process.

Adjournment

The public hearing adjourned at 10:49 a.m.

Robert W. Powell
Chairman

Rachael Hamilton
Secretary-Treasurer