

# Louisville Metro Air Pollution Control District

## Comment and Response Document

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### Regulation 5.21

#### *Environmental Acceptability for Toxic Air Contaminants*

#### Version #3, Draft #6 - Proposed, February 10, 2007

#### I. Public Comment Period: 2-15-07 to 3-16-07

1. Carolyn Embry, American Lung Association of Kentucky (ALA)
2. Tom FitzGerald, Kentucky Resources Council (KRC)
3. Diane Guenthner, Thomas Jefferson Unitarian Church (TJUC) (Guenthner)
4. Martha Flack, TJUC Social Justice Committee (Flack)
5. Deborah Weeter (Weeter)
6. The Rev. Elwood Sturtevant (Sturtevant)
7. Mary C. Woolridge, Councilwoman District 3 (Woolridge)
8. Glen Logan, Ford Motor Company (Ford)
9. Greater Louisville, Inc., Air Toxics Task Force (GLI)
10. Dennis Neyman, TJUC Social Justice Committee (Neyman)
11. George E. Lee, Jr., Multi County Clients Council (Lee)
12. Kate Cunningham (Cunningham)
13. Jill Harmer (Harmer)
14. Susan Collins (Collins)
15. Raoul Cunningham, National Assoc. for the Advancement of Colored People (NAACP)
16. Eboni Neal Cochran, Rubbertown Emergency ACTION (REACT); Linda Thomas, Louisville Coalition of Neighborhoods (LOCN); Shameka Parrish, Kentucky Alliance Against Racism & Political Repression; James Dixon; Edna Mae S; Frances L. Thomas; Sylvia Johnson; Theodore Scott; Cora Hashburn; Patricia Germany; and Sherrell Hayden (REACT et al)
17. Meme Sweets Runyon and Leslie Elizabeth Barras, River Fields (River Fields)
18. Harry Johnson (Johnson) [Received at 5:52 p.m. on 3-16-07]
19. Judy Schroeder, Portland Now, Inc. (Portland) [Received on 3-20-07]
20. Senator Georgia M. Powers (Powers) [Received on 3-20-07]

#### General comment

**Comment:** *With the exception of the amendment to section 2.9, the proposed amendments are supported.* (ALA)

## Sections 1.5 and 1.7 - Ohio River receiving and shipping facilities

**Comment:** *Receiving and shipping activities are commonly conducted as part of industrial operations and should be considered as part of the industrial property. The proposed modifications are supported.* (GLI)

**Comment:** *The proposed modification of the definition of “industrial source” in section 1.5, with its narrowly drawn geographic scope of appurtenant receiving and shipping facilities, is supported. This modification does not sacrifice important and needed protections for river and river corridor air quality.*  
(River Fields)

## Sections 2.3 and 2.6 - Implementation of T-BAT

**Comment:** *Deleting reference to “any jurisdiction and other sources” of air pollution control information and specifically referencing the EPA’s RACT/BACT/LAER Clearinghouse is supported.* (Ford, GLI)

**Comment:** *Establishing different standards of review for demonstrating T-BAT based on the potential estimated risk from the process or process equipment reduces the burden on businesses with a process or process equipment emission that poses minimal risk, but still contribute to an exceedance of an EA goal, and is supported.* (GLI)

**Comment:** *The definition of T-BAT should include a direct reference to the federal BACT determination guidance.* (Ford)

**Response:** The District disagrees. The District notes that even the federal BACT definition does not include a direct reference to the federal BACT determination guidance. The EPA’s guidance document on determining BACT indicates, “The guideline does not address the evaluation of each factor nor the weighting of any factor relative to another. Such determinations should be made on a case-by-case basis by the permitting authority.” T-BAT considers factors in addition to those contained in the federal BACT definition, such as the toxicity of individual chemicals, and thus evaluation of these other factors would not be discussed in the guidance.

**Comment:** *Sections 2.3.2.2 and 2.6.2.1.2 require justification why any **identified** available method to achieve a higher degree of TAC emission and risk reduction was not chosen as T-BAT. (emphasis added) Sections 2.3.2.1 and 2.6.2.1.1, in nearly parallel language, use the phrase “any available method ...” These sections should be identical in this regard.* (GLI)

**Response:** The District agrees that these sections were intended to be identical with respect to this phrase, and will recommend the addition of the word “identified” in sections 2.3.2.1 and 2.6.2.1.1.

## Section 2.6 - Removing 3.0 HQ cap, adding target-organ-specific hazard index

**Comment:** *The proposed change to establish a case-by-case limit for non-cancer risks greater than a hazard quotient (HQ) of 1.0 and dropping the 3.0 HQ cap, especially since the change requires the use of a target-organ-specific hazard index (TOSHI) as a factor to be considered, is supported.* (GLI)

## **Section 2.9 - Industrial property adjustment factor**

**Comment:** *There is no justification for increasing the risk factor on industrial property from 4.2 to 10. The rationale of basing the factor on the hours a person works in a lifetime is seriously flawed. This does not use the same degree of conservatism applied to risk at a residence. Allowing an individual's entire allocation of acceptable risk to be consumed at the workplace erroneously assumes the individual would have no exposure outside the workplace. A Rubbertown resident who works near a company emitting toxic chemicals may already be at a disproportionate risk at home and would now be assuming additional risk in the workplace. This is clearly an environmental justice issue. Protection of public health should not be determined based upon workers' beliefs that their health would not be compromised by an increased risk factor on industrial property. This proposed amendment should be rejected.* (ALA)

**Comment:** *The original adoption of the 4.2 factor for industrial property in section 2.9 was opposed because this discounts the protection of the health of workers in an industrial workplace, since unlike the transient exposure on roadways that supported the adjustment factor for public roadways, workers within and outside of structures in the workplace face exposure for a longer duration on a more frequent schedule, and typically reside in the community, thus accumulating exposures at concentrations that exceed the benchmarks set for the general public. The proposed factor increase would result in an additional erosion of protection of the industrial workforce and sanctioning lifetime exposure of those workers to elevated levels of carcinogens significantly higher than the threshold EA goals adopted for the general population. The proposed factor increase should be rejected.* (KRC)

**Comment:** *The weakening the STAR Program by increasing the factor for industrial property is opposed (Section 2.9). Many of the chemicals transported and emitted by Rubbertown companies are associated with developmental problems, respiratory and cardiovascular disease, cancer, and other acute and chronic illnesses. To weaken the requirements of STAR seems a slap in the face to all those who have become ill due to the effects of toxic air and to those who have tirelessly labored to reduce the level of toxic chemical emissions in our community. Allowing an increase in the amount of toxic chemicals permitted increases the risk of higher levels of toxic chemicals exposure to Rubbertown neighborhood residents, chemical plant workers, and the larger community.* (Guenthner, Flack, Weeter, Sturtevant, Woolridge, Neyman, Lee, Cunningham, Harmer, Collins, NAACP, REACT et al, Johnson, Portland, Powers)

**Comment:** *The increased factor for industrial property is supported. This more*

*accurately reflects the amount of time an employee spends in the workplace. This change does not affect - in any way- the EA goals that currently apply to residential property, commercial property, or other non-industrial property, and will have no effect on any modified EA goal for non-industrial property. Even with the proposed change, the EA goals for industrial exposures will be more stringent than, for example, the Michigan program for industrial exposures or the U.S. Environmental Protection Agency's 1 to 100 in one million risk range for residential exposures.* (Ford, GLI)

**Comment:** *The "flexibility" factor of 4.2 in the current regulation was not initially a part of the proposed STAR regulations, but was added later in response to industry concerns, over the objections of many citizen and public interest organizations. An underlying assumption for this factor is that industrial workers are protected from air toxics exposure on the worksite by federal and state occupational health and safety standards. This is not necessarily a correct or valid assumption for smaller, less sophisticated companies or contract employees, even at larger worksites. All workers deserve protection from unacceptable risks of exposure to air toxics and the current adjustment factor should not be raised.* (River Fields)

**Response:** The District notes that adjustment factor for industrial property does not affect the level of protection for any property that is not the emitting company's plant site or industrial property (or public roadway, which has its own adjustment factor). Thus, regardless of the allowed impact on industrial property (or public roadway), the environmental acceptability (EA) goals are required to be met elsewhere, for example, the 1-in-one-million EA goal for a single carcinogenic chemical from a single process.

Although the inclusion of the adjustment factor would allow higher concentrations on neighboring industrial properties, Regulation 5.21 still provides goals to be met for impacts on those neighboring industrial properties. If the goals are exceeded, then the emitting company is required to address the exceedance.

With respect to the workers at neighboring industrial properties, the Occupational Safety and Health Administration (OSHA) standards apply to workplace exposures. The District believes that, in general, these OSHA standards are less stringent than the benchmark ambient concentrations (BACs) established by the STAR Program. For example, the BAC for aluminum (fume or dust) is 50 µg/m<sup>3</sup> for an 8-hour averaging time period and is based upon 1% of the NIOSH occupational exposure level. With the proposed adjustment factor for industrial property, Regulation 5.21 would allow a worker to be exposed to a concentration caused by emissions from a neighboring company that is only 10% of the permissible occupational exposure level.

Additionally, the OSHA standards apply individually to exposures to single chemicals, whereas Regulation 5.21 establishes EA goals for the cumulative

cancer risk from all applicable carcinogens, and thus worker protection beyond that provided by OSHA.

Some of the chemical plants in the Rubbertown area, for example, B.F. Goodrich, have split and are under different ownership. If B.F. Goodrich had not split, then none of the emissions from any of the processes would have been evaluated for concentrations at any location of the entire plant site. With the split, each of the smaller companies is required to evaluate the concentrations of its emissions at locations off its smaller plant site that are within the former entire plant site. Even with the proposed industrial site adjustment factor, there will be more protection of the workers because the Regulation 5.21 EA goals apply to the emissions impacts from the other smaller companies on the neighboring companies. Additionally, because of the Regulation 5.21 requirements, more information regarding concentrations from emissions will be available to the other smaller companies and the workers as well as the public. Having this information, the smaller companies and/or workers could advocate or negotiate with their industrial neighbors for any appropriate reductions.

The District notes that the Michigan program provides an adjustment factor of 10 for impacts on industrial property.

Changing the industrial property adjustment factor to 10 will streamline and clarify regulatory confusion between the applicability of the adjustment factor for industrial property and for public roadways where it is not clear if a roadway should be considered an industrial area or whether certain industrial areas should be considered public roadways. For example, rail lines have been characterized by some as roadways, by others as industrial areas. Likewise, there is uncertainty regarding roadways in areas such as Riverport and Bluegrass Industrial Park. Additionally, having both the industrial property and public roadway adjustment factors the same will significantly simplify modeling for areas, such as Rubbertown or the airport/landfill/Ford/UPS area, where roadways and industrial properties are significantly interlaced.

#### **Section 4.8 - Hierarchy for developing Risk Reduction Plan/Assessing multi-company risks**

**Comment:** *The proposed hierarchy for considering T-BAT as part of a developed Risk Reduction Plan is supported. However, this does not address the concern that section 2.8 should be revised to clearly identify the information and the process that will be used by the District to evaluate emissions and estimate risks from multiple businesses. A company should be able to conduct an evaluation without contacting the District.* (GLI)

**Response:** This issue was discussed several times by the STAR Implementation Advisory Group (IAG). To address the issue of the information that the District might use, the District drafted a more specific list of sources of

information. This list was included in a number of different drafts reviewed by the STAR IAG. After further discussion, it was the consensus of the STAR IAG to remove the list of potential sources of information and instead identify that the process specified in section 2.8 would be used. The District believes that the final STAR IAG consensus, as proposed, should be adopted, concluding this issue.

## **Sections 5.2 and 5.3 - Public notices**

**Comment:** *The proposed changes in sections 5.2 and 5.3, which provide for public notice and opportunity for public review for additional steps or submittals within the existing STAR process are supported. The proposals provide an established timeframe, and thus some temporal certainty, during which the public has an opportunity to voice questions or concerns about individual applications of the program.* (GLI, River Fields)

## **II. Public Hearing: 3-21-07**

1. Susan Clark, Noveon, Inc. (Noveon)
2. Stephen M. Samuel, Jr., REACT (Samuel)
3. Gracie Lewis, REACT (Lewis)
4. Denny Larsen, Global Community Monitor (GCM)
5. Martha Flack, REACT/TJUC Social Justice Committee (Flack)
6. Carolyn Skees Franklin (Franklin)
7. Leah McKinley, Butchertown Neighborhood Association (Butchertown)
8. Dennis Conniff, GLI Air Toxics Task Force (GLI)
9. Carla F. Wallace, Braden Memorial Center (Braden)
10. Greg Brotzge, KY Paint Council, Louisville Chemistry Partnership (LCP)
11. Tom FitzGerald, Kentucky Resources Council (KRC)
12. Wallace McMullen, Sierra Club (Sierra)
13. Eboni Cochran, REACT (Cochran)

## **Section 2.9 - Industrial property adjustment factor**

**Comment:** *The increase in the factor for industrial property is supported. Note: the reasons for the support were consistent with the reasons given in the written comments, above.* (Clark, GLI, LCP)

**Comment:** *The increase in the factor for industrial property is opposed. Note: the reasons for the opposition were consistent with the reasons given in the written comments, above.* (Samuel, Lewis, GCM, Flack, Franklin, Butchertown, Braden, KRC, Sierra, Cochran)

### **III. Substantive Changes Resulting from Public Review Process**

1. Insert the word “identified” between the words “any” and “available” in section 2.3.2.1 Line 182 and section 2.6.2.1.1 Line 250.