

Section 14 Plan of Action

14.1 Context and Limitations of Recommended Actions

14.1.1 Context

Historically, addressing air pollution issues has been approached through separate strategies for separate pollutants - ozone, carbon monoxide, particulates, etc. However, over time, it has become clear that a more sensible and effective approach would be to develop an air quality management plan for a community or area that comprehensively addresses multiple pollutants through harmonized strategies. After decades of the former approach, our community is poised on the cusp of a great opportunity to move toward such a comprehensive approach. In 2006, the Board adopted a set of recommendations for improving ozone levels. The STAR 5.30 process has generated this Report and Plan of Action for various sources of toxic emissions. A Climate Change Committee is underway to reduce greenhouse gas emissions and by April 2008 a State Implementation Plan must be submitted to the EPA identifying strategies that will be implemented to achieve attainment of the federal annual standard for fine particles.

Through these efforts, it is clear that for these pollutants and issues similar sources and similar strategies are involved. It is recommended that the Board and District take the appropriate next steps to converge on a unified Air Quality Management Plan through which multiple pollutants can be addressed efficiently and effectively in our community.

1. **Recommendation:** *The Air Pollution Control Board (Board) and Louisville Metro Air Pollution Control District (District) should take the appropriate next steps to converge on a unified Air Quality Management Plan through which multiple pollutants can be addressed efficiently and effectively in our community.*

14.1.2 Limitations

The Group would like to acknowledge that while this Report and Plan of Action represents an innovative approach to reducing adverse impacts from exposure to toxic emissions at the community level; it is only the beginning of the process to fulfill the mandate of Regulation 5.30. The Group agrees that the stakeholder process is an important component of the STAR 5.30 Program. However, they believe strongly that the Board should consider the expertise and recommendations of the District, in conjunction with this report, in determining the appropriate course of action for reducing the adverse impacts from toxic emissions in our community. It should also be noted that while many toxic reduction strategies were discussed and considered throughout the process, the recommendations found in this Report and Plan of Action represent only the strategies for which consensus could be reached.

The Group also recognizes the dynamic nature of toxics issues in Louisville and around the country. The recommendations in this report represent a snapshot in time of possible strategies for toxics reductions and exposure abatement. As new reduction technologies are developed and more funds become available, the opportunity to further reduce toxic emissions may arise. In an effort to continue down the path of innovation and excellence in toxics reduction, the Group

recognizes the need for regular progress reports to the Board on Regulation 5.30 implementation efforts and new opportunities and technological advances that may become available in the future.

The following recommendations address the limitations of the Report and Plan of Action:

2. **Recommendation:** *The Board should recognize and consider the District's expertise and recommendations for reducing toxic emissions along side the STAR 5.30 Stakeholder Group's Report and Plan of Action.*
3. **Recommendation:** *The District should make a report to the Board once every other month on the implementation of the STAR Regulation 5.30 Program and new opportunities and technological advances that may become available in the future.*

14.1.3 Future Information Needs and Further Planning

The Group determined that more information was necessary to make an informed recommendation in several cases. The constraints of the STAR 5.30 process timeline did not allow for this information to be collected and/or presented for review. For example, a total of eight area and minor sources of concern were identified. It was determined early in the process that a thorough examination of all eight sources of concern was outside the scope of the stakeholder process. As a result, the list of eight was narrowed down to the two sources of greatest concern for in depth modeling and risk analysis, to be reviewed and discussed by the Area and Minor Source Committee. However, the Group recommended that three of the six remaining sources of concern be considered in a second tier area source review. The Group also recommended that three other sources be analyzed to determine if the risk levels justify a full area source review in the future.

The following recommendations address issues for which more information is needed:

4. **Recommendation:** *The next tier of area source review should include the following sources:*
 - *MSD industrial wastewater treatment plants*
 - *Gas stations*
 - *Areas where multiple sources are located in close proximity and may produce a higher than acceptable cumulative risk.*
5. **Recommendation:** *The following area sources should be analyzed to determine if potential risk levels justify being listed as a "next tier" source:*
 - *Tank and drum cleaning*
 - *Architectural surface coating*
 - *Auto body repair shops*
6. **Recommendation:** *Quantify, where feasible, toxic emissions reduction from existing and proposed federal engine requirements and fuel standards, as a part of ongoing public outreach and education.*

The Group found several issues incredibly complex and deserving of more time and resources than the STAR 5.30 process timeline could allow for. For example, the Group came to consensus on the need for an idling regulation in Louisville. However, the Group could not agree on the language of a draft idling regulation to be proposed to the Board. As a result, the Group recommended that a stakeholder process be initiated to draft and propose an idling regulation for local adoption by the Board.

The following recommendations address issues for which more time and/or resources are necessary:

7. **Recommendation:** *Future involvement of ad hoc stakeholder groups to fulfill the mandate of Regulation 5.30 should be convened on an issue-specific, as-needed basis and may require stakeholders not included in the STAR 5.30 Stakeholder Group process.*
8. **Recommendation:** *Initiate a stakeholder process for local adoption of an idling regulation with the proposed draft regulation (see appendix 14) as a starting point for discussion.*
9. **Recommendation:** *The District, with the help of interested stakeholders, should identify the next steps and the process to follow for future modeling, monitoring, and emissions inventory analysis for diesel PM and other mobile source emissions to continue to better understand their effects on public health.*

A majority of the long-range land use and transportation planning solutions, including the recommendation to initiate a stakeholder process, were originally recommended by the Mobile and Non-Road Mobile Source Committee and focused on reducing exposure to tailpipe emissions, with particular emphasis placed on diesel particulate matter (PM) emissions. Based on the disproportionately high levels of risk associated with exposure to diesel PM, the STAR 5.30 Stakeholder Group did not wish to detract from the importance of the planning solutions in reducing exposure to diesel PM. However, the group felt that these long-range planning solutions could also be beneficial in reducing exposure to other sources of toxic emissions.

While the following recommendations pay particular attention to diesel PM emissions, they are intended to be considered as a strategy for reducing all toxic emissions in our community:

10. **Recommendation:** *Institute a process, involving interested parties including planning organizations, to explore feasible long range planning solutions to reduce exposure to toxic emissions with initial emphasis placed on diesel particulate matter (PM) and other tailpipe emissions.*
11. **Recommendation:** *The following recommendations were made during an internal Louisville Metro exploratory meeting and will serve as a starting point for further discussion of long range planning solutions to reduce exposure to toxic emissions.*
 - *Increased coordination between Planning & Design Services, the District and other development review agencies to assure that best practices are suggested for diesel*

- and other toxic emission reduction and plans comply with applicable sections of the Cornerstone 2020 and the Land Development Code.*
- *The Planning Commission and staff in cooperation with District staff should develop neighborhood and area-wide plans, review and revise, if necessary, the Land Development Code, and develop Best Management Practice Guidelines with the following goals:*
 - a. *Minimize exposure from high concentrations of diesel particulate and other toxic emissions to sensitive populations. For instance, land use change and development reviews of land uses with high volumes of diesel engine usage should include their proximity to sensitive populations.*
 - b. *Reduce idling, particularly diesel idling, within land uses with high volumes of diesel engine usage.*
 - c. *Reconcile the need for efficient movement of goods and services by diesel trucks with the need for such movement to minimally impact residential neighborhoods.*
 - d. *Reduce vehicle miles traveled, with initial emphasis on diesel vehicles, through increase trip efficiencies and reduce congestion.*

14.2 Recommended Actions

The following recommended actions of the STAR 5.30 Stakeholder Group address strategies for toxic emissions reductions and/or strategies for reducing exposure to toxic emission.

12. **Recommendation:** *The Board should adopt the environmental acceptability goals in section 9.3.1 and 9.3.2 of this Report and Plan of Action as a benchmark for establishing appropriate risk-management programs.*

14.2.1 Stationary Sources

13. **Recommendation:** *The District should require annual perc machine operations training for all perc operators as a part of licensure. The KFA has agreed to provide training opportunities for both members and nonmembers to fulfill a training requirement made by the District.*
14. **Recommendation:** *The District should enhance its enforcement including annual inspection of all perc dry cleaning plants, timely notifications of violation and verification of corrective action. The KFA has agreed to purchase for the District a high quality leak detection sensor (meeting or exceeding minor source requirements) and provide LDAR training at no expense to the District.*
15. **Recommendation:** *The District should regulate perc dry cleaning equipment so that effective July 2008 all installation of perc equipment, including the movement of such equipment, must be at least 4th generation technology.*
16. **Recommendation:** *A deadline should be set for the complete phase out of the use of all less than 4th generation perc equipment in Louisville.*

17. **Recommendation:** *The District should mandate an increase in stack height and removal of a rain cap to effectively change the dispersion of toxic emissions from waste oil furnaces. The committee believes that these changes will reduce the risk from toxics to a level at or below the environmental acceptability goals set by the Health/Risk Committee.*
18. **Recommendation:** *The District should reevaluate the best method of reducing toxic emissions (T-BAT) from stacks of existing area and minor sources, taking into consideration the effect of modified stack height and design.*

14.2.2 Mobile and Nonroad Mobile Sources

19. **Recommendation:** *Increase traffic light signalization synchronization throughout Louisville Metro.*
20. **Recommendation:** *Improve TRIMARC incident management, roadside assistance to reduce idling on the highways.*
21. **Recommendation:** *Encourage significant coordination among the Kentucky Transportation Cabinet, local transportation officials and private fleets during major highway repair or construction, specifically the Louisville-Southern Indiana Ohio River Bridges project, to develop plans to minimize traffic backups and delays to reduce idling and toxic emissions.*
22. **Recommendation:** *Develop an outreach program for public and private schools to discourage vehicle idling during student drop off and pickup at the schools. Provide signs to be posted, where appropriate, in areas where automobiles queue asking the parents to not idle.*
23. **Recommendation:** *The Board should recommend to the Mayor's office a mandate, through executive order, to use biodiesel (ASTM standard) in the Louisville Metro Government's diesel fleets within 1st year.*
24. **Recommendation:** *Expand the use of alternative fuels and technologies by all municipal and transit fleets (on- and off-road) in Louisville Metro in 1st year.*
25. **Recommendation:** *Work in partnership with Kentucky Petroleum Marketers Association to evaluate, develop and achieve goals to provide biodiesel (ASTM standard) blends at retail stations throughout Louisville Metro.*
26. **Recommendation:** *Develop a partnership between rental car agencies and public and private entities utilizing rental fleets, to increase the use of biodiesel (ASTM standard) and/or alternative fuels and technologies in rental fleets.*
27. **Recommendation:** *Create partnerships, tax incentives and other financial incentives to encourage the use of biodiesel (ASTM standard) and/or alternate fuels and technologies by private fleets.*

28. **Recommendation:** *Increase utilization of and incentives for Bike to Work, TARC programs, Ticket to Ride, commuter and other programs aimed at reducing vehicle miles traveled in passenger vehicles.*
29. **Recommendation:** *Provide free tire pressure stations, free air, free onboard diagnostics checks and free gas caps to promote increased fuel economy and reduced toxic emissions at the pump.*
30. **Recommendation:** *Develop a GREEN STAR program to recognize the voluntary efforts of businesses in reducing toxic emissions through employee incentives that encourage alternatives to single-occupancy vehicle commutes.*
31. **Recommendation:** *Work with public and/or private fleets operating in Louisville Metro through incentives and grants to aggressively retrofit equipment with state of the art technology.*

14.2.3 Other Education/Outreach Opportunities and Financial Incentives

32. **Recommendation:** *Educate the community, including citizens, contractors, planners, developers and others, about land use and site planning techniques to minimize exposure to high volumes of diesel particulate and other toxic emissions, with a particular focus on those members engaged in locating facilities for highly sensitive populations such as schools, recreational facilities, and daycares.*
33. **Recommendation:** *Explore the creation of a Louisville Metro Environmental Grant Partnership to aggressively coordinate, apply for, and receive federal and state grants to reduce toxic emissions from on-road and off-road mobile sources. Utilize federal political partnerships to increase success.*
34. **Recommendation:** *Government should provide incentives to businesses to reduce toxic emissions.*
35. **Recommendation:** *Where there may be many minor and area sources in a neighborhood or where there are significant risks from different source categories, i.e., Title V and FEDOOP companies, stationary minor and area sources, mobile sources, non-road mobile sources, and miscellaneous area sources, an assessment of risk at the neighborhood level should be undertaken.*