

# Idling Reduction Working Group Advisory Report

October 15, 2008



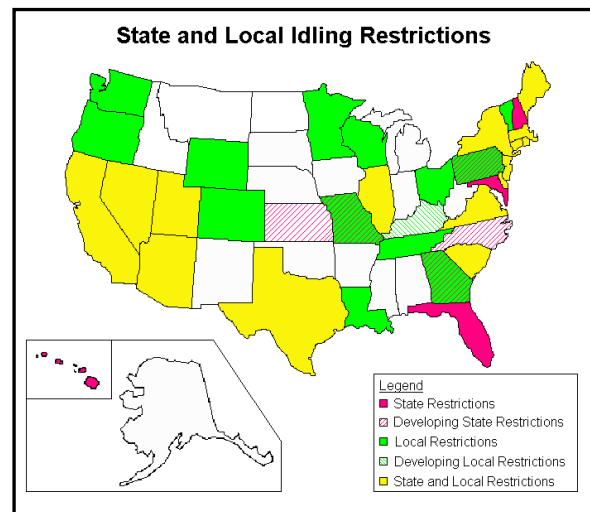
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# Idling Reduction Working Group Advisory Report

## Background

In April 2008, the Louisville Metro Air Pollution Control District (District) convened the Idling Reduction Working Group (IRWG or Group) in response to recommendations by previous stakeholder processes to pursue a vehicle idling restriction to reduce emissions of toxic pollutants, fine particles and ozone precursors in Louisville.<sup>1</sup> The IRWG brought together expertise and experience from across the community to review and discuss the important aspects of a comprehensive, balanced and effective vehicle idling restriction. Members of the IRWG represented a variety of interests including: vehicle fleets, environmental advocacy, public health and safety, industry trade groups, enforcement authorities and government officials.<sup>2</sup>

To frame the stakeholder discussion of idling, the District defined idling as “occurring when a vehicle’s main engine is running, but the vehicle is not moving.” The District also provided the IRWG with a comprehensive regulatory review of idling restrictions in the United States. To date, the District has identified 114 idling restrictions from state, county and local jurisdictions across the country. Each of these jurisdictions has unique political, economic, demographic and environmental characteristics that influenced the need for and structure of an idling restriction. For this reason, the restrictions vary widely in type, scope, exemption, enforcement and penalty. The District’s *Idling Restriction Review* is a comprehensive menu of options that IRWG Members used to develop a stakeholder perspective on the best way to restrict vehicle idling in Louisville.<sup>3</sup>



The *Idling Restriction Review* also served as a framework for the IRWG process, which included a series of active and meaningful stakeholder-led discussions on the important elements of idling restriction: scope, exemptions and enforcement. Stakeholders met monthly from April through August to provide input on these topics before the District began the process of drafting and proposing a vehicle idling restriction. Stakeholders met again in September to discuss options for voluntary compliance assistance, education and outreach programs.

## Discussion of Idling Restriction

The following section of this Report reflects the stakeholder-led discussions, including general agreement reached by the members in attendance. The May, June and July meetings were dedicated to the discussion of idling restriction scope, exemptions and enforcement respectively. The final meeting in September focused on programs for outreach, education and compliance

<sup>1</sup> Additional information on the Idling Reduction Working Group can be found at <http://www.louisvilleky.gov/APCD/Stakeholder/Idling.htm>.

<sup>2</sup> A list of stakeholders is included in this report as Appendix 1.

<sup>3</sup> The IRWG guiding documents, including the District’s *Idling Restriction Review*, can be found at <http://www.louisvilleky.gov/APCD/Stakeholder/IRWGDocuments.htm>.

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assistance. In an effort to help facilitate discussion, the District posed several topic-related questions to be answered by the stakeholders at each meeting. These questions are included below along with general notes from each discussion.

### Scope Discussion

**Q1: What types of engines and/or vehicles should be covered by an idling restriction?**

**Q2: Which categories of mobile sources should be covered by an idling restriction?**

**Q3: What should be the idling time limit?**

The Group discussed the issues of scope found in the *Idling Restriction Review*, including types of vehicles/engines and source categories to be restricted and idling time limits. The Group agreed on the importance of eliminating unnecessary use of all mobile source internal combustion engines. Members noted that the price of fuel alone is not enough to change some drivers' behaviors and agreed that education and awareness will be critical to the success of an idling restriction.

Members noted that there may need to be separate idling time limits for onroad and nonroad vehicles. Also discussed were the benefits of setting one time limit for all vehicles in contrast to multiple limits for specific vehicles/activities. Possible benefits of a single idling time limit include better universal enforcement, improved understanding and increased public awareness of an idling restriction. The Group discussed warm-up times needed for safe vehicle operation and agreed that the warm-up time needed for heavy-duty nonroad equipment was greater than that of other vehicles. The Group generally agreed that a 5 minute limit for onroad vehicles and a 15 minute limit for nonroad vehicles should be sufficient time for engine warm-up and safe operation of the vehicle and onboard equipment. Finally, the Group expressed the importance of exemptions to a restriction with such a broad scope.

### Exemptions Discussion

**Q4: What activities/tasks should be exempt from an idling restriction?**

**Q5: What conditions should be exempt from an idling restriction?**

**Q6: What vehicles should be exempt from an idling restriction?**

The Group discussed the three basic types of exemptions seen in idling restrictions of other jurisdictions, including activities, conditions and vehicles. Reiterating the need to eliminate unnecessary idling, members noted that exemptions for vehicle types would allow for necessary and unnecessary idling activity. Members also noted that restriction language may be simplified through a more specific definition of idling which could reduce the number of exemptions needed. The Group generally agreed that exemptions should focus on activities and conditions for which idling may be necessary. The Group further agreed that

exemptions for activities should generally be limited to work- or task-related activities while exemptions for conditions should generally be limited to issues of health and safety.

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The following exemption categories from the *Idling Restriction Review* were highlighted by the Group for further discussion:

### *Activity Exemptions*

- Operation of power take-off equipment and auxiliary equipment, including transport refrigeration units.
- Emergency vehicles in emergency situations or training mode – Members noted that “emergency situations” may need to be further defined. There are many situations in which police, fire and EMS may need to operate onboard equipment requiring power from the main engine.
- Public utility vehicles and privately-owned equipment that is contracted or licensed to serve a public utility function when required to perform needed work – Members noted that contractors may be used to perform public utility work in some situations. Members also noted that there are vehicles licensed by public entities to serve a public utility function (e.g. private waste haulers in suburban areas). The Group generally agreed that contractors’ equipment and privately-owned equipment licensed to perform public utility functions should be included in an exemption for task-related idling of public utility vehicles.
- Construction and maintenance vehicles when required to perform needed work.
- Armored vehicles when a person remains in the vehicle to guard the contents – Members noted that often at least one person from an armored vehicle unit is required to remain in the vehicle to protect its contents. The Group discussed the safety issues for a person remaining in an armored vehicle, particularly in a separate rear compartment. Members also noted that property-carrying drivers of a bonded load and those carrying hazardous materials should be included in an exemption for armored vehicles as the driver may feel obligated to stay with the load to reduce liability. The Group generally agreed that armored vehicles should be exempt when a person remains in the vehicle to guard the contents.
- Loading and unloading of passengers.
- Maintenance, repair and daily inspection of vehicles.
- Inspection of vehicles by local, state or federal officials.
- Commercial motor vehicles equipped with a sleeper berth<sup>4</sup> during federally mandated breaks<sup>5</sup> in appropriate locations away from residential areas – Members noted that federally mandated breaks for long-haul truck operators should be exempt from an idling restriction for reasons of health and safety. Breaks are required to insure that operators are awake and alert during on-duty hours to maximize safety for the operator and other drivers on the road. Members noted that the quality and effectiveness of a long-haul operator’s rest is directly related to his/her comfort and, for this reason, idling should be allowed during federally mandated breaks to maintain operator comfort. The Group generally agreed that for reasons of health and safety, federally mandated breaks should be exempt from an idling restriction. However, members noted concern that such a broad exemption may allow for unnecessary idling. Several members noted that by exempting federally mandated breaks from an idling restriction, the move toward idling alternatives (e.g. auxiliary power units, shore power, etc.) may be discouraged. Members also noted that long-duration idling during federally mandated

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<sup>4</sup> As defined by 49 CFR 393.76

<sup>5</sup> Federally mandated breaks refer to the breaks required in 49 CFR Part 395–Hours of Service of Drivers

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breaks may be harmful to public health in residential areas. The Group generally agreed a federally mandated break exemption should not allow idling near residential areas. The Group suggested that the District follow the example of other jurisdictions restricting idling in and around residential areas.

### *Condition Exemptions*

- Ambient temperature – Members noted that a temperature exemption may allow for idling that would otherwise be unnecessary (e.g. during a lunch break, waiting to pick up a child from school, etc.) and therefore should be restricted. One member offered its idling policy which restricts idling between 40° F and 80° F as an example. Members also noted that a temperature exemption may limit a property owner’s ability to restrict idling on its property. Members suggested that a temperature exemption should only include on-the-job idling.
- Traffic conditions including, but not limited to, highway congestion or at the direction of an official traffic signal or law enforcement officer.
- Safety or health emergency prevention.

### Enforcement Discussion

**Q7: Who should enforce the restriction(s)?**

**Q8: What should be the method of enforcement?**

**Q9: Who should be responsible for compliance?**

**Q10: What should be the fine and/or penalty for violating the restriction?**

The Group discussed the key role that active enforcement will play in achieving compliance with a local idling restriction that successfully reduces harmful emissions from mobile sources. As with previous restriction topics, members reviewed available information on various enforcement issues of idling restrictions in other jurisdictions.

On the issue of compliance responsibility, several members noted that, in most cases, the driver has control over the operation of the vehicle and should have the sole responsibility for compliance. Members also noted that in cases concerning a vehicle, or group

of vehicles, belonging to a larger vehicle fleet, it may be worthwhile to target both the owner and the operator. The Group also discussed instances when compliance with an idling restriction may be the property owner or property operator’s responsibility. Members noted that drivers must often remain in their vehicles while queuing and loading/unloading at load/unload locations because there is nowhere else to wait. The Group generally agreed that fleet owners bear some responsibility for educating employees who operate fleet vehicles on the importance of idling reduction and compliance with local restrictions. Several members noted that many organizations have implemented vehicle idling policies and driver education programs as a cost-reduction measure.

The Group also discussed the issue of enforcement authority, noting that several communities rely on multiple enforcement authorities in order to maximize the enforcement of an idling restriction and achieve greater compliance. The Group generally agreed that local collaboration between various governmental agencies would provide more effective enforcement. Members

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noted that the enforcement authority should be shared among the Louisville Metro Police Department and the District. Members also noted that other Louisville Metro departments and contractors (e.g. Department of Inspections, Permits and Licenses, Public Health and Wellness and PARC) may be able to provide additional enforcement resources.

The Group generally agreed that compliance was directly linked to the number of officers responding to complaints and conducting active patrols. Members noted that the majority of communities with an idling restriction utilize both complaint- and patrol-based methods of enforcement. The Group discussed the effectiveness of proposing both a Louisville Metro ordinance and a District regulation to restrict vehicle idling. Members noted that idling of nonroad vehicles (e.g. construction equipment, recreational vehicles, etc.) may be more effectively restricted through a District regulation while idling of onroad vehicles (e.g. vehicles licensed to operate on public roadways) may be more effectively restricted through a Louisville Metro ordinance. Information on the Louisville Metro Code Enforcement Board was presented to illustrate the appeals process for Louisville’s noise ordinance. The Group also discussed the enforcement and appeals process for violations of District regulations.

The Group generally agreed upon a tiered penalty structure where fines increase in value with the number of repeat offenses. The Group also generally agreed that a grace period lasting at least six months, and preferably one year, should be observed prior to citations being issued. During this time, only warnings should be issued and strong emphasis should be placed on public education, outreach and compliance assistance.

The Group generally agreed that a “blended mix” approach – utilizing multiple enforcement authorities and various enforcement methods through a combination of District regulation and Louisville Metro ordinance – would be the most effective way to enforce a vehicle idling restriction in Louisville.

### Outreach, Education and Compliance Assistance

**Q11: Who should be the target audience(s) for education and outreach campaigns on the importance of idling reduction?**

**Q12: What media would be best for dissemination of information on idling reduction?**

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Throughout the IRWG process, members expressed the need for strong outreach, education and compliance assistance programs to ensure the success of an idling restriction in Louisville. Using the *Idling Restriction Review* as a starting point, the Group discussed how best to reach the variety of audiences that would be affected by an idling restriction.

The Group discussed key audiences for outreach and education campaigns on the importance of idling reduction. Members noted that educating children in schools on issues such as idling reduction has been shown to be an effective method for educating parents.

Several types of programs aimed at students and parents were discussed, including parent pledge cards, signage at schools and student safety patrol. Jefferson County Public Schools already has a policy to limit idling of school buses.

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**Q13: What venues would be best for dissemination of information on idling reduction?**

**Q14: What types of compliance assistance programs would be most beneficial to the regulated body?**

The Group also identified licensed drivers as a key audience for outreach and education on idling reduction. Members noted that incorporating an idling reduction message into the mandatory driver's education course for new drivers could be an effective way to reach a large audience. Members also noted that distribution of brochures on idling reduction when vehicle registration is renewed and/or driver's licenses are renewed in Jefferson County would reach a majority of licensed drivers. Similarly, members noted that brochures could also be distributed when

commercial driver's licenses are issued and commercial vehicles are registered.

The Group discussed the need for outreach and education of nonroad vehicle operators (e.g. contractors and construction crews). Members suggested that the District could work with local trade organizations such as the Home Builders Association of Louisville, Associated General Contractors of Louisville and others to develop and distribute an idling reduction message for nonroad vehicle operators. Members also noted that architects, engineers and others may be able to incorporate specifications for idling reduction measures in contract language. Finally, members identified several groups that may be able to distribute brochures at construction sites including the Louisville Metro Department of Inspections, Licenses and Permits and the District's compliance officers.

Beyond brochures, the Group discussed other media that could be used to disseminate information on idling reduction. Members noted that advertisements like TARC bus wraps, billboards and inserts in local utility bills could be used to reach most Louisvillians while presentations to groups like the Kentucky Association of Pupil Transport and the Mid-America Trucking Show could be used to reach a more targeted audience. Members also noted that the Traffic Response and Incident Management Assisting the River Cities (TRIMARC) system could be used to warn of congestion and suggest detours to reduce traffic related idling.

The Group also discussed the importance of keeping the idling reduction message positive by focusing on the health and economic benefits of idling reduction. Members noted that the health and safety of citizens is the primary rationale for an idling restriction in Louisville and this point should be emphasized. Members also noted that quantifying the cost savings associated with idling reduction could improve public buy-in for an idling restriction.

Finally, the Group discussed the creation of a compliance assistance program for local fleet owners to achieve idling reduction. Members noted that a compliance assistance programs similar to the one used in Cook County, Illinois could be very helpful for fleet owners. The Cook County program offers violators of the ordinance the opportunity to develop an idling mitigation plan in conjunction with the Cook County Environmental Control Agency to avoid a fine. However, members noted that the opportunity to participate in a compliance assistance program must be applied consistently. Members suggested that multiple methods and authorities for the enforcement of an idling restriction in Louisville may make administration of a compliance



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assistance program challenging. Members also noted that fines collected for idling violations could be used to fund outreach, education and compliance assistance programs. A similar funding mechanism is included in the South Carolina statute that restricts idling statewide.

### **IRWG Recommendations**

The following are recommendations of the Idling Reduction Working Group regarding the restriction of vehicle idling in Louisville.

#### Scope

1. It is important to restrict the idling of all mobile source internal combustion engines, including, but not limited to, those fueled by gasoline, diesel, biodiesel blends, vegetable oil, propane and compressed natural gas.
2. Idling of both onroad and nonroad mobile sources should be restricted.
3. Onroad mobile sources should be limited to 5 minutes of idling and nonroad mobile sources should be limited to 15 minutes of idling.

#### Exemptions

4. The following activities/tasks should be exempt from an idling restriction:
  - Operation of power take-off equipment and auxiliary equipment including transport refrigeration units
  - Emergency vehicles in emergency situations or training mode
  - Public utility vehicles and privately-owned equipment that is contracted or licensed to serve a public utility function when required to perform needed work
  - Construction and maintenance vehicles when required to perform needed work
  - Armored vehicles when a person remains in the vehicle to guard the contents
  - Loading and unloading of passengers
  - Maintenance, repair and daily inspection of vehicles
  - Inspection of vehicles by local, state or federal officials
  - Commercial motor vehicles equipped with a sleeper berth during federally mandated breaks in appropriate locations away from residential areas
5. The following conditions should be exempt from an idling restriction:
  - Ambient temperature
  - Traffic conditions, including, but not limited to, highway congestion or at the direction of an official traffic signal or law enforcement officer
  - Safety or health emergency prevention
6. Specific vehicles (e.g. emergency, public utility, construction, etc.) should not receive blanket exemptions. Necessary idling of these vehicles could be allowed through activity/task and condition exemptions.

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### Enforcement

7. The responsibility and authority to enforce an idling restriction should be shared between Louisville Metro Police Department and the District, utilizing other Metro resources if appropriate (e.g. Department of Inspections, Permits and Licenses, Public Health and Wellness and PARC).
8. A combination of complaint- and patrol-based methods should be used to enforce an idling restriction.
9. Generally, the operator of a vehicle should have the primary responsibility for compliance with an idling restriction. In some cases it may also be appropriate for the vehicle/fleet owner to have responsibility for compliance. Vehicle/Fleet owners should also be responsible for educating and/or training operators on the benefits of idling and compliance with local restrictions.
10. The penalty structure for an idling restriction should be tiered so that fines increase with the number of repeat offenses. There should be a one year grace period where warnings are issued for violations and strong emphasis is placed on public education, outreach and compliance assistance.

### Outreach, Education and Compliance Assistance

11. Target audiences for outreach and education campaigns on the importance of idling reduction include parents of school age children, licensed drivers, operators of commercial vehicles and nonroad vehicle operators.
12. A variety of media could be used to disseminate information on idling reduction, including brochures, billboards, vehicle wraps, TRIMARC signage and District presentations to targeted audiences.
13. A variety of venues could be appropriate for dissemination of information on idling reduction, including schools, trade and professional organization meetings, the mandatory driver's education program and state and local government offices in charge of registering vehicles and licensing drivers.
14. A compliance assistance program that allows violators the opportunity to mitigate idling behavior in lieu of a fine could be beneficial to the regulated body. However, such a program must be administered consistently across enforcement methods and authorities.

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**Appendices**

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### Appendix 1 Idling Reduction Working Group Member List

Name	Association	Alternates
<b>A. J. Borromeo</b>	MV Transit	
<b>Mike Cecil</b>	JBS Swift & Company	
<b>Tim Corrigan</b>	Greater Louisville Inc. Environmental Affairs Committee	Dennis Conniff
<b>Bill Doggett</b>	E.ON U.S.	Steve Ramser
<b>Gay Dwyer</b>	Kentucky Retail Federation	
<b>Liz Edmondson</b>	Kentucky Resources Council	Tom FitzGerald
<b>Jamie Fiepke</b>	Kentucky Motor Transport Association	
<b>Chuck Fleischer</b>	Jefferson County Public Schools	Ike Pinkston Jim Vaughn
<b>Major Glen Gagel</b>	Louisville Fire Department	
<b>Keith Hackett</b>	Public Works & Assets Solid Waste Management Division	Gregory Ogburn
<b>Lauren Hardwick</b>	Greater Louisville Inc. Logistics Network	
<b>Dr. Lauren Heberle</b>	Center for Environmental Policy and Management University of Louisville	
<b>Greg Hicks</b>	Public Works & Assets Operations and Maintenance	
<b>Wayne Hicks</b>	Transit Authority of the River City	Jim Barrett William Harris
<b>Melissa Howell</b>	Kentucky Clean Fuels Coalition	
<b>Robert Lee</b>	National Solid Wastes Management Association	
<b>Ted Mason</b>	Kentucky Grocers Association Kentucky Association of Convenience Stores	
<b>Jesse Mayes</b>	Kentucky Transportation Cabinet	
<b>Judy Nielsen</b>	Louisville Metro Health and Wellness	
<b>Shawn O'Connor</b>	Enterprise Rental Commercial Truck Division	
<b>Dr. Neal Richmond</b>	Louisville Metro Emergency Medical Services	Michael Will Bill Pasel
<b>Bryan Slade</b>	Industrial Disposal	
<b>Dave Vogel</b>	Louisville Water Company	Kate Farrow
<b>Matthew Welch</b>	Jefferson County Attorney's Office	
<b>Lieutenant Ryan Wilfong</b>	Louisville Metro Police Department	