

Dear Mr. Leggett:

On behalf of the Montgomery County Energy Air Quality Advisory Committee (EAQAC), I have attached a memorandum recommending that the County Executive and Council consider a proposal to reduce diesel vehicle idling times as a means to reduce particulate matter pollution in our neighborhoods, save substantial fuel costs, and to reduce greenhouse gases.

EAQAC looks forward to hearing from you on this matter.

Sincerely,

David Faerberg
EAQAC Chair

cc: Mike Knapp, Council President
Nancy Floreen, T&E Committee Chair

EAQAC Proposal to Reduce Vehicle Idling Times

Summary

The Montgomery County Energy Air Quality Advisory Committee (EAQAC) recommends that the County Executive and County Council consider a proposal to reduce diesel vehicle idling times as a means to reduce particulate matter pollution in our neighborhoods, save substantial fuel costs, and reduce greenhouse gases. The EAQAC recommends a two-prong approach: (1) education and outreach, and (2) enforcement. The education/outreach component requires a minimal investment of funds and effort to deploy signs, disseminate information, and direct Ride On bus depot operators and other Transportation Department managers to implement vehicle idle reduction programs. The County Executive and Council should also request that the MCPS School Superintendent implement a similar program with regard to its bus fleet. The Executive should also request Maryland's representatives on the WMATA Board to raise this issue with WMATA managers. The enforcement component requires the Executive and Council's support and recommendations to the appropriate County law enforcement officials encouraging enforcement and/or compliance assistance with the State anti-idling law.

Background

The U.S. Departments of Energy and Transportation and the U.S. Environmental Protection Agency (EPA) have implemented aggressive idle reduction education campaigns to reduce unnecessary engine idling of heavy-duty vehicles (buses, trucks, locomotives, and maritime vessels). The U.S. Government has found that idling diesel engines (trucks and locomotives only) have the following approximate annual impacts¹:

- Consume 1 billion gallons of diesel fuel (at a fuel cost of over \$3.5 billion);
- Emit 11 million tons of carbon dioxide;
- Emit 200,000 tons of nitrogen oxides (precursor to ozone formation);
- Emit 5,000 tons of particulate matter (likely carcinogen) and other air toxics;
- Increase engine maintenance and shorten engine life;
- Create noise pollution; and
- Impact minority and disadvantaged communities in disproportionate numbers (environmental justice issue)

Consequently, idling vehicles have a broad, negative impact on human health, economics, and quality of life.

The U.S. EPA establishes emissions standards for new vehicles, so States are prohibited from establishing their own standards (with the exception of California which must seek an approval from EPA). States and local governments, however, can control the use and

¹ <http://www.epa.gov/smartway/transport/what-smartway/idling-reduction.htm>

behavior of vehicles within their jurisdiction. One area where States and local jurisdictions have taken action is promulgating anti-idling laws. In fact, more than half the country is covered by anti-idling legislation.² State and local anti-idling laws play an important role in reducing engine idling, but without adequate education and enforcement many of these anti-idling measures fail to reduce idling and realize the many benefits of such laws.

Anti-Idling Laws

Maryland has an anti-idling law that prohibits vehicle idling for more than five minutes, with some exceptions.³ Since Montgomery County is prohibited from passing its own anti-idling law⁴, the State law applies within the County. The fine for violation of this provision is up to \$500. As mentioned in the background section above, an anti-idling law is a critical first step, so Maryland has achieved this milestone of recognizing the benefits of reducing vehicle idling. The next steps involve education and enforcement.

Education and Outreach

Many States and local jurisdictions have implemented robust education and outreach campaigns targeting vehicle idle reduction efforts. The education campaigns usually involve posting signs at conspicuous idling locations, such as large transit and school bus depots, transit and school bus pick-up and drop-off zones, popular taxi stands, and truck stops. The most popular anti-idling education campaign, by far, is in schools. As evidenced by the U.S. EPA's *Clean School Bus* program⁵, a comprehensive "Do It Yourself Kit" is available that contains brochures, posters, logos, etc. that assist the school with education and awareness. The single most effective measure of an education campaign is the presence of signs that inform bus operators about the idling law and its associated fine. In the presence of this information, most bus operators comply. The posting of signs is a cost-effective measure that yields results.

Another outreach opportunity is contacting County-controlled fleets with information about idle reduction efforts. This can take the form of a letter to fleet operators informing

² <http://www.epa.gov/smartway/transport/what-smartway/idling-reduction-state-laws.htm>

³ §22-402(c)(3): A motor vehicle engine may not be allowed to operate for more than 5 consecutive minutes when the vehicle is not in motion, except as follows:

- (i) When a vehicle is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
- (ii) When it is necessary to operate heating and cooling or auxiliary equipment installed on the vehicle;
- (iii) To bring the vehicle to the manufacturer's recommended operating temperature; or
- (iv) When it is necessary to accomplish the intended use of the vehicle.

⁴ §25-101.1(b): "...no local authority or political subdivision of this State may... (3) otherwise make or enforce any local law, ordinance, or regulation on any subject covered by the Maryland Vehicle Law."

⁵ <http://epa.gov/cleanschoolbus/antiidling.htm>

them of the County’s campaign to reduce idling, information about the State anti-idling law, and alerting them to potential enforcement of the law.

An important first step to any education/outreach campaign is to identify high priority idling zones. The County should evaluate areas where heavy-duty diesel vehicles idle to determine if, in fact, idling is a concern. High priority zones can include, but are not limited to, the following:

- Transit and school bus depots where buses idle in cold or hot weather to maintain engine warmth and warm their interior compartments;
- Transit and school bus passenger load/off-load locations where buses idle while waiting for passengers, particularly large covered locations and in front of schools.

While a comprehensive evaluation may not be feasible due to its costs, the County can examine a small sampling of schools and bus depots to determine if buses are idling. By targeting only diesel vehicle zones, the County focuses on the areas with the greatest emissions and fuel consumption impacts. While light-duty vehicles (cars) also idle unnecessarily, the impact from cars is less on a per engine basis. However, the presence of signs and idle reduction information will likely have a co-benefit of informing owners of personal cars about the idling law. Another advantage of focusing on diesel vehicles is cost. Since the focus is on high priority *diesel vehicle* idling areas, the number of signs deployed will be fewer than a general education campaign aimed at both diesel and gasoline vehicles. After deploying the signs, the County’s appropriate department should conduct a post-deployment evaluation of the high priority idling zones to determine if vehicles are complying. If the program is successful, the County may consider expanding the program to other areas.

Enforcement

Historically, States and local jurisdictions have not enforced anti-idling laws. The issue is one of priorities – anti-idling laws are simply not a high priority. Recent enforcement campaigns in California, Connecticut, Massachusetts New York, and Pennsylvania have begun to reverse this past trend. The States mentioned above have taken a more measured approach at enforcement. Law enforcement officials have identified various “hot zones” of idling (for example, large transit bus depots) and implemented brief enforcement “blitzes” in these locations. In some cases a toll-free number was posted so citizens could notify law enforcement of problems. These enforcement efforts have lasted from a few days to a few weeks, and included simply warnings or actual tickets. The main thrust of the enforcement campaigns is to send the message that gross violators will be subject to enforcement actions.

Montgomery County can follow this measured approach by working with the appropriate law enforcement officials empowered to enforce the State’s law.⁶ The County should

⁶ The legal entity(-ies) authorized to enforce anti-idling laws differs throughout the country and may include police officers, parking enforcement personnel, and/or department of environment officers.

recommend that the appropriate law enforcement officials conduct brief enforcement campaigns to support and compliment the education/outreach efforts. Further, the County Executive should direct Montgomery County Ride On to comply with the law. In addition, the County Executive should work with the Public Schools to comply with the law, and send a message to WMATA representatives about compliance with the State law.

Recommendations

The EAQAC recommends that the Montgomery County Executive and Council implement a diesel vehicle anti-idling program with the following components:

- Evaluate and identify high priority idling zones for diesel vehicles (for example, transit and school bus depots and load/off-load zones);
- Develop and deploy signs that educate vehicle owners and operators about the State anti-idling law and its fine;
- Disseminate information about idle reduction efforts to County-controlled fleets;
- Contact County-controlled fleets (Ride On, MCPS) to implement vehicle idle reduction programs;
- Contact appropriate County law enforcement officials to begin an enforcement campaign of the State idling law at high priority idling zones targeting gross violators.