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CHAPTER

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Sept 24, 2013

The Honorable William M. Straus
House Chair, Joint Committee on Transportation
State House
Boston, MA 02133

The Honorable Thomas M. McGee
Senate Chair, Joint Committee on Transportation
State House
Boston, MA 02133

Re: Testimony of the Massachusetts Sierra Club In Support of S.1636 related to Reducing the Permitted Idling Limits Enforceable

Dear Chairman Straus, Chairman McGee, and Honorable Members of the Committee,

Thank you for providing this opportunity to offer our comments on S.1636, related to reducing the permitted idling limits. We wish to express our strong support in favor of this legislation.

The Sierra Club is the oldest and largest non-profit, non-partisan organization environmental organization in the country. With over a forty year history in this chapter, the Massachusetts Sierra Club represents about 22,000 members and supporters throughout the state and over one million nationwide. We fight for clean air, clean water, the preservation of the Commonwealth's most precious natural spaces, and healthy, vibrant communities.

This proposed legislation would decrease the amount of time a person may idle the engine of a motor vehicle from in excess of five minutes to two minutes. As such it would significantly help reduce gas emissions and pollution. While vehicle idling is addressed by MGL Ch. 90 Sec 16A, and 310 CMR Sec 7.11, the law is very rarely enforced. In order to enforce this, a police officer would need to be present and monitor an idling vehicle for five minutes. However, five minutes is not only unenforceable, it's also far in excess of what is necessary in all but very few situations. 310 CMR, Sec 7.11 already itemizes these exceptions (lift gate trucks, ambulances, armored vehicles, etc.). The vast majority of current idling is done by those who are unaware of the law.

- Tests show that no more than 30 seconds of idling is needed to circulate the engine oil before you can drive on cold days.¹ Anything more just wastes fuel and produces needless greenhouse gas emissions.²
- Once an engine is at operating temperature, idling causes more pollution by running than by stopping and starting up again. One hour of idling burns almost 1 gallon of gas.³
- Studies indicate that the trade-off for light- and medium-duty gasoline powered vehicles is about 10 seconds (*i.e.*, the vehicle will produce more pollution idling longer than 10 seconds than it will by shutting down and restarting the engine).⁴ The time trade-off on medium- and heavy-duty modern diesel engines is about 30 seconds.⁵
- Idling will not allow the catalytic converter to reach optimum temperature. A catalytic converter does not function at its peak until it reaches between 400 °C and 800 °C. The best way to warm the engine and all other components of all vehicles is to drive the vehicle because the catalytic converter warms up much faster when the vehicle is being driven rather than when idling.⁶ Thus, the U.S. Department of Energy's Argonne National

Laboratory recommends not idling to warm up a vehicle.⁷ A vehicle uses about the same amount of fuel when idling for 2 minutes or driving about one mile.⁸

- Idling can damage a car's engine. Because the engine is not working at its peak operating temperature when it is idling, the fuel does not undergo complete combustion. This leaves fuel residues that can contaminate engine oil and damage engine parts. Fuel residues tend to deposit on spark plugs. As the amount of engine idling increases, the plugs' average temperature drops, and they get dirty more quickly. This, in turn, can increase fuel consumption by four to five percent. Excessive idling can also let water condense in the vehicle's exhaust, leading to corrosion and reduction of the life of the exhaust system.⁹
- Large vehicle fleet operators such as Fedex (worldwide, 48,000 vehicles)¹⁰ and ComEd (Chicago region, 3100 vehicles)¹¹, recognized the need to reduce idling and has instructed its drivers to reduce idling time to zero and has also published tips on their website to do so.
- Idling produces pollution including smog and soot which have been linked to serious health problems including asthma, heart disease, chronic bronchitis, and cancer.¹²
- Prior attitudes about the need to idle a vehicle before driving are a remnant of pre-1990 non-computerized ignition system requirements and do not apply to modern vehicles that have electronically-controlled engines.¹³

The Sierra Club has long been committed to minimizing the negative environmental impact of human activity and because this legislation would significantly reduce such impact from plastic bags we hope this committee will report these bills favorably.

Respectfully,



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¹ California Energy Commission, Consumer Energy Center, Energy Myths and Fallacies, <http://www.consumerenergycenter.org/myths/idling.html> (June 30, 2011).

² ComEd, "Putting the Brakes on Vehicle Idling", https://www.comed.com/sites/newsroom/News%20Room/newsroomreleases_02172011.aspx (June 28, 2011); <http://www.consumerenergycenter.org/myths/idling.html>

³ https://www.comed.com/sites/newsroom/News%20Room/newsroomreleases_02172011.aspx; <http://www.consumerenergycenter.org/myths/idling.html>

⁴ https://www.comed.com/sites/newsroom/News%20Room/newsroomreleases_02172011.aspx; <http://www.consumerenergycenter.org/myths/idling.html>

⁵ <http://www.consumerenergycenter.org/myths/idling.html>
⁶ Linda Gaines, Terry Levinson, and Steve McConnel, U.S. Department of Energy, Argonne National Laboratory, "To Idle or Not to Idle: That is the Question", <http://www.transportation.anl.gov/pdfs/EE/642.PDF> (June 28, 2011).

⁷ <http://www.transportation.anl.gov/pdfs/EE/642.PDF>

⁸ <http://www.consumerenergycenter.org/myths/idling.html>

⁹ <http://www.consumerenergycenter.org/myths/idling.html>

¹⁰ FedEx's Absolutely, Positively, Cleaner Fleet. Clean Fleet Report, March 2008.

¹¹ https://www.comed.com/sites/newsroom/News%20Room/newsroomreleases_02172011.aspx

¹² https://www.comed.com/sites/newsroom/News%20Room/newsroomreleases_02172011.aspx

¹³ <http://www.consumerenergycenter.org/myths/idling.html>