

OTC Annual Meeting

June 3rd, 2016
Philadelphia, PA

Mobile Source Committee Update



Overview

Review of Mobile Source Committee Charge

Status of Committee's Deliverables for the 2016 Annual Meeting

Committee Charge

Goal: To identify potential strategies for consideration at the 2016 Fall Meeting

Strategies Include:

- Sectors of High Emission Reduction Potential
 - Heavy Duty Diesel Trucks
 - Passenger Vehicles
 - Movement of Goods
 - Construction Equipment
 - Pleasure craft
- Ports
- SmartWay
- Diesel I/M & SIP Credit
- VMT Strategies
- Additional Transportation Strategies

Status of Committee's Deliverables

Deliverables for the 2016 Annual Meeting:

1. Report on Aftermarket Catalyst program efforts
2. Idling Best Practices Document
3. Approach to quantify SmartWay benefits
4. Report on status of efforts to reduce emissions from the Heavy-duty sector
5. Summary document on discussions with/need for EPA assistance for mobile source NO_x reductions

Aftermarket Converters

Light duty vehicles remain on the road longer than before

- Slower emission benefit from fleet turnover
- Failure rate of original converter increases over time

Disconnect between useful life of vehicle (120,000 in Tier 2 and 150,000 miles in Tier 3) and converter life (80,000 miles)



When warranties end, aftermarket parts are important

- OEM converters are expensive
- Aftermarket parts provide a more affordable option

Cleaner aftermarket converters provide mobile emission reductions without need for fleet turnover

Aftermarket: Building a Coalition

Why? EPA has not moved forward to improve the broken aftermarket policy despite repeated calls from the Current Partners:

- OTC States
- MECA
- Auto Care
- Colorado
- CARB

By expanding the coalition we hope to push EPA to act.

This coalition could help in the future with other mobile issues such as Heavy Duty NO_x standards.

Overview of Idling Reduction Efforts

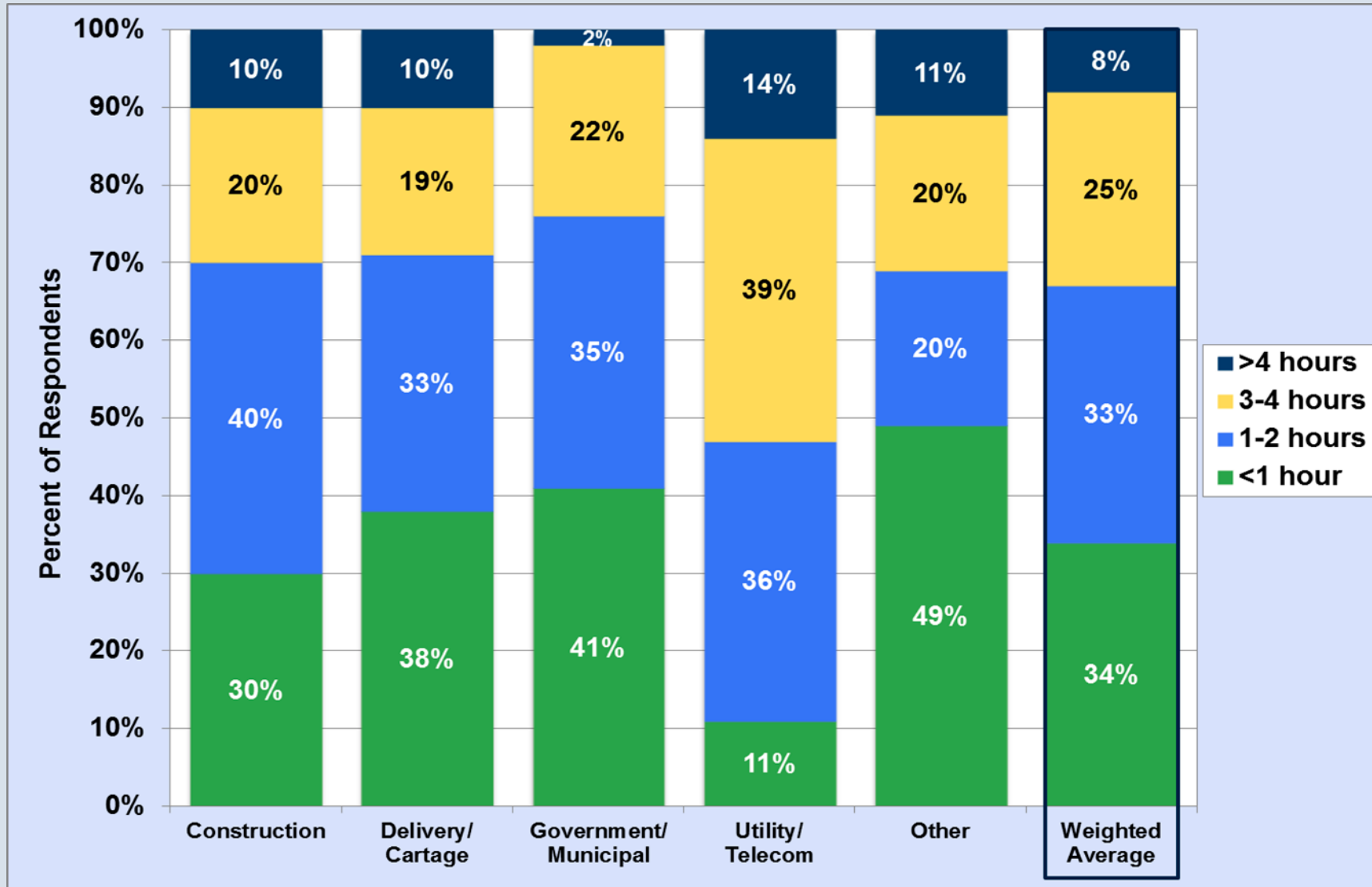
OTC compiled idling reduction efforts in the OTR and looked at:

- **Education**
 - Found education practices throughout the OTR
- **Enforcement**
 - Discussed complaint based enforcement, geographically targeted enforcement, positive reinforcement.
- **Technologies**
 - Provided an overview of the costs/benefits of about 10 idling technologies ranging from truck installation (least expensive) to truck stop electrification (most expensive)
- **Funding**
 - Looked at DERA, CMAQ, SEP, and state funding programs
- **Regulations**
 - Compiled synopses of all of the idling regulations in the OTR

Received no comments through public outreach process

Work Truck Daily Idle Time by Industry

From DoE Truck Idling Survey



<http://energy.gov/eere/vehicles/fact-917-march-21-2016-work-truck-daily-idle-time-industry>

Anti-Idling: Education

Signs



“Tickets”

THE CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION

REGISTRATION: _____ TICKET NO. **A321012**

VIOLATION DATE: _____ TIME: _____

LOCATION OF VIOLATION: _____

EMPLOYEE: _____ INSPECTOR NO.: _____

VEHICLE MAKE: _____

NOTICE OF IDLING VIOLATION

Pursuant to the responsibilities of my office as a representative of the Department of Energy and Environmental Protection (DEEP), I have taken the opportunity to provide you with this informational pamphlet about the environmentally hazardous, unhealthy and surpennery costly effects of idling.

**3-MINUTE LIMIT
IT'S THE LAW**

This pamphlet is not a summons or notice of violation to which you must respond. It's just a reminder that unnecessary idling is illegal everywhere in our state. Why? Because exhaust fumes created by idling pollute the air and create a public health hazard, and because running your motor vehicle while stationary is inefficient and a costly waste of fuel. This law applies to all cars, trucks, taxis, buses and motorized construction equipment.

IDLING REDUCTION IS OUR GOAL IN CT

This is just a friendly reminder to do your part to reduce engine idling, conserve our natural resources and help us all breathe a little easier! Thank you.

DEEP Commissioner
DEEP Commissioner

Children's Books



Posters



Pledge

**No Idling Pledge
for School Districts**

We pledge to protect the health and well-being of the students and staff of our school district. We recognize that buses are the safest mode of student transportation, yet excessive school-bus emissions of soot from idling are a threat to children's health.

To protect students and staff from harmful soot, we voluntarily pledge:

- To turn off engines while waiting to load and to unload students
- To use newest buses for the longest routes
- To maintain buses to eliminate any visible exhaust
- To complete school-bus driver training on eliminating idling

School or School District: _____

Town: _____

School Administrator's Signature: _____

School Administrator's Name (Printed): _____

School Administrator's Title: _____

Signed on this date: _____

State of New Jersey
Department of Environmental Protection

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Anti-Idling: Enforcement

Complaint-Based Response

Geographic and Temporal Targeting

- Mapping High Idling Zones
- Periodic Sweeps

Positive Reinforcement

Anti-Idling: Technology

Affordability



Insulation

Automatic Engine Shut-Down & Start-Up/Electronic Engine Idling Parameters

Fuel Operated Heaters

Auxiliary Power Units (APUs)/Generator Sets

Coolant Heaters/Energy Recovery System

Storage Air Conditioners/Battery Heaters

Vehicle Electrification

Truck Stop Electrification

Anti-Idling: Financing

CMAQ (Congestion Mitigation and Air Quality)

- Program funded through Transportation Bill
- MD & NY have used for idling reduction installations

DERA (Diesel Emission Reduction Act)

- Originally part of the Energy Policy Act of 2005
- Nearly every OTC jurisdiction has used this, but can only be used for:
 - School buses
 - Rail/Marine
 - Truck Stop Electrification

SEP (Supplemental Environmental Program)

- Funding comes from court settlements due to environmental damage

State Funded Programs

SmartWay® Affiliates Program

Goal: States in the OTR to join the SmartWay Affiliates Program

- Affiliates are committed to promoting greater energy efficiency and air quality within the freight transport sector through the SmartWay Transport program
- Actions Affiliates Take:
 - Promote SmartWay
 - Educate their members about the program and its benefits
 - Train members on best practices related to SmartWay and supply chain efficiency

State	Status
CT	Affiliate
DE	App. Submitted
DC	Affiliate
ME	Affiliate
MD	Affiliate
MA	Affiliate
NJ	No Update
NH	Affiliate
NY	No Update
PA	Affiliate
RI	Affiliate
VT	Affiliate
VA	Affiliate

SmartWay Calculations

Goal: Calculate NO_x benefits of SmartWay program in OTR

- Data to show benefits of expanding
- Potentially gain SIP credit for SmartWay

EPA collects good national scale data, but not much that can be applied specifically to the OTR

Examined several sources, but none have been sufficient

- Fuel Tax Data
- Apportioned Registration Data
- 2007 SmartWay SIP Guidance

Next Step: Improve rough estimates from 2014

Reducing Emissions from the HD Sector

Monitoring EPA and California rulemaking and activities

- SCAQMD is submitting a petition and some of the OTC states have joined on, while others due to the short time frame are considering other options

Engaging with EPA Office of Transportation and Air Quality

Keeping track of technical progress

- Southwest Research Institute (SWRI) low emission HDE NO_x study (currently expected late summer)

Questions & Input

