STATE & LOCAL IDLING LAWS

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Overview

- Understanding Idling
  - Why Do Vehicles Idle?
- State Choices
  - Why Should States Restrict Idling?
- Deciding to Reduce Idling
  - Is an Idling Law the Answer?
- Effective Laws
  - What is an Effective Law?
Understanding Idling
Understanding Idling

Why Do Vehicles Idle?

- Cars: waiting to load/unload; traffic/congestion, custom, warm-up/cool-down
- Trucks: waiting to load/unload; traffic/congestion; cab comfort while sleeping in truck, custom
- Construction Equipment: power on-board equipment (for ex., cement mixer); warm-up; custom
- Locomotives: maintain engine warmth
Discretionary vs. Non-Discretionary

- **Non-Discretionary Idling (no choice)**
  - Traffic/Congestion
  - Emergency/Safety
  - Powering On-Board Equipment
  - Inspection/Maintenance/Mechanical

- **Discretionary Idling (alternatives exist)**
  - Cab Comfort
  - Load/Unload
Alternatives for Discretionary Idling

**Trucks**
- Auxiliary Power Units/Generator Sets *(bottom right)*
  - $7,000-$10,000; AC/Heat; heavy; grants and loans available
- Fuel Operated Heaters *(bottom left)*
  - $1,000-$1,500; heat only; light; grants/loans
Alternatives (cont)

- **Trucks**
  - **Battery HVAC Systems** (bottom right)
    - $5,000-$7,000; AC/Heat; heavy; grants and loans
  - **Thermal Storage** (bottom left)
    - $6,000; AC; grants and loans
Alternatives (cont.)

- Electrified Parking Spaces
  - $1-$2/hour; $10K-$18K capital cost per space; AC/Heat; grants available
Idling Impacts: Fuel

Total Annual Fuel Consumption for Idling (Gallons)

- Truck: Series 1
- School Bus: Very Low
- Light Duty: Moderate

Gallons (Billions)

- 0
- 1,000,000,000
- 2,000,000,000
- 3,000,000,000
- 4,000,000,000
- 5,000,000,000
- 6,000,000,000

Mobile Sources
Idling Impacts: Annual Barrels

Annual Barrels of Oil Consumed for Idling

- Truck: 600,000,000 barrels
- School Bus: 0 barrels
- Light Duty: 50,000,000 barrels

Mobile Sources

Series 1
Idling Impacts: Health/Environmental

- Long Haul Trucks (500+ miles/trip):
  - CO2: 11 million tons per year
  - NOx: 200,000 tons per year
  - PM: 5,000 tons per year

- Other Impacts
  - Air toxics (formaldehyde and trace metals)
  - Increased in-cab concentrations of pollution
  - Pollutants in environmental justice areas
  - Noise pollution
  - Increased maintenance on engines
  - Decreased engine life
8.0% of the national daily oil consumption is attributed to idling
6.0% of the national CO2 impact
State Choices
Choices

- Do nothing
  - 36 states have no state-wide law
- Pass a law
- Implement voluntary idle reduction projects
- Change existing law
- Enhance idling law enforcement
Why Pass an Idling Law?

- **Environmental Benefits**
  - CO2, NOx, PM, air toxics, noise

- **Economic Benefits**
  - Save fuel, save money

- **Health Benefits**
  - Drivers and Communities

- **Laws Can be Effective**
  - States with idling laws and active enforcement and education have reduced idling rates
Voluntary Idle Reduction Projects

- Examples
  - Funding installation of electrified parking spaces at truck stops, rest areas, and distribution centers
  - Funding installation of mobile idle reduction technologies (APUs) on fleets
- Both are excellent tools to demonstrate to trucking industry the effectiveness of alternatives
- $25 million in Federal grants (EPA, DOT, and DOE) have already demonstrated the effectiveness of these technologies
  - Now is the time for industry to adopt these technologies
Why Change an Existing Law?

- We need consistent state laws so truck drivers understand what is expected of them.
- We need practical state laws so truck drivers will comply with them.
Why Educate and Enforce?

- Educating truck drivers and facility owners where truck drivers park and idle is critical
  - Ensures they understand the purpose of the law (health, economics, environment)
  - Fairness: warning first, then tickets

- Law without enforcement is a missed opportunity
  - Truck drivers talk constantly to each other, so they all know if an area enforces the law.
DECIDING TO PASS AN IDLING LAW
What’s an Effective Idling Law?

- EPA published a “Model for State Idling Laws”
  - [http://www.epa.gov/smartway/idle-state.htm](http://www.epa.gov/smartway/idle-state.htm)
  - This model was developed with input from truck owners and drivers, state air quality and enforcement officials, and community and health groups.
  - Addresses truck cab sleeper exemption with fairness: if state provides some kind of financial assistance, then it should not exempt sleeper berth idling
- State with an Effective Idling Law
  - California
    - Requires engine shut down device; no sleeper berth exemption
    - [http://www.arb.ca.gov/rgact/hdvidle/frorev.pdf](http://www.arb.ca.gov/rgact/hdvidle/frorev.pdf)
Effective Laws

- Recognize need for non-discretionary idling via exemptions (traffic/congestion, emergency/safety, powering equipment, maintenance, inspections, and mechanical)
- If you provide any type of financial assistance (grants, loans), do not exempt sleeper berth idling
- Educate
- Enforce
Federal Advantages

- Place your idling law in the Federal State Implementation Plan or Transportation Conformity
  - Get air quality credits for NOx and PM
  - Makes law Federally enforceable, so EPA can assist with enforcement
For More Information

Contact

- Paul Bubbosh, EPA
  - 202-343-9322; bubbosh.paul@epa.gov
- List of Idle Reduction Technologies
  - http://www.epa.gov/otaq/smartway/idlingtechnologies.htm
The New Jersey Idling Experience

Spreading the word about why idling stinks...

Peg Hanna, NJDEP
Diesel Risk Reduction Program
History of NJ’s Idling Regulations

- Regulations since 1986 but limited enforcement
- NJ’s Diesel Risk Reduction Program created in 2004 to reduce diesel emissions and exposure, Diesel Retrofit Law and public ballot question were passed in 2005
- Early focus was school bus idling
- Program expanded to target other diesel sources
NJ Idling Model: Educate, then Enforce

- Educate public about health risks: “Diesel exhaust causes more deaths than homicides and vehicle accidents combined”
- Extensive outreach to targeted sectors
- www.StopTheSoot.org
Outreach Effort

- “Compliance Alerts”
- Mailings to affected groups
- Press releases and events
- No Idling Pledge
- No Idling signs
Sample Signs

- No Idling Zone
  - It's the Law
  - Report Violations: Call 1-877-WARN DEP

- No Idling Zone
  - It's the Law

- Prohibido
  - Mantener Vehículo Prendido Cuando Estacionado
  - Informe Violaciones: Llame 1-877-WARN DEP
  - WWW.StopTheSteal.org
“Idling Stinks” campaign

- EPA grant to conduct outreach targeted at the general public
- Marketing campaign used billboards, advertising in newspapers, baseball stadiums, train stations
- “Only 10 seconds of idling uses more fuel than turning the engine on and off”
- Campaign increased web traffic and complaints
IDLING STINKS
AND IT'S AGAINST THE LAW!
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SAVE MONEY
SAVE LIVES
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Promoting Alternatives

- Truck idling alternatives including truckstop electrification and alternate power units are being funded
Idling Enforcement

- Idling sweeps by enforcement target locations with frequent idling
- Respond to specific complaints with inspection
- Vehicle owner receives $250 penalty
- Property owner where idling occurs receives $250 penalty, which is mitigated if owner installs No Idling signs
- Most inspections delegated to County Health officers
How does NJ know idling regs are working?

- Press coverage in 2004 was absent or negative (doesn’t DEP have better things to do?)
- Press coverage in 2007 was extensive and all positive
- “Yield” of violations has dropped, showing more compliance
- Increased public awareness has led to increased complaints of idling
2007 Survey Results

- 60% of Paterson residents said it was definitely or probably true that there was a 3 minute state idling law.
- 86% supported strict enforcement, including fines.
- 82% supported strict enforcement, including fines, against personal cars and trucks.
- 88% said they would not idle their own vehicles past 3 minutes in the future.
What can be done better?

- Best enforcement vehicle is local police, who need additional training
- Complaint system needs to be more responsive
- Continued efforts to enlist parents at schools