

# State/Local Idle Reduction Regulations

State	Applicability	Idling Time Limit
TX (Houston / Galveston)	Diesel/gasoline motor vehicles (> 14,000 lbs GVW)	5 min* April 1 – Oct 31 30 min* for heat/AC transit/school buses
UT (Salt Lake City)	Diesel vehicles	15 minutes*
VA	Buses when unattended, parked, or stopped	10 minutes*

# DOE Idle Reduction Demonstration

- **Goal: To gather objective in-use information on the performance of available technologies by characterizing:**
  - **Specifications and Costs: system descriptions, capital and installation costs, payback periods**
  - **Vehicle Operations: fuel consumption (truck idling and IR systems), engine oil consumption and changes, maintenance (truck and IR systems)**
  - **Other Evaluation Information: engine and component wear, resale value, user impressions**

# DOE Idle Reduction Demonstration

- **Reduce 800+ million gallons of annual fuel use during idling periods**
- **Reduce average of 2,000 hours of idling**
- **Fleet/component demonstration/data collection project partners:**
  - **Caterpillar, International Truck, Cox Trucking**
  - **Schneider National, Freightliner, Webasto Thermosystems**
  - **Espar, Wal-Mart Transportation, Truck manufacturer TBD**

# DOE Idle Reduction Demonstration – Caterpillar Team

- **Team: Caterpillar, International Truck, and Cox Transfer**
- **Five new idle reduction trucks, five control trucks**
- **Trucks idle about 1840 hours/year**
- **MorElectric™ Technology**
- **Electrically driven accessories**
- **Three main components**
  - **HVAC unit, generator, and APU**
  - **IR uses 0.2 gallons fuel/hour versus 0.9 gallons fuel/hour for C13 engine**
- **Duration - FY03 4 Quarter – FY05 4 Quarter**



# DOE Idle Reduction Demonstration – Schneider National Team

- **Team: Schneider National, Freightliner, Webasto Thermosystems**
- **100 trucks with heating and 20 trucks with cooling systems**
- **Trucks idle approximately 480 hours/year**



# **DOE Idle Reduction Demonstration – Schneider National Team (cont'd)**

- **Webasto Air Top 2000 cab heater**
  - Self contained diesel fueled air heater
  - Offered as standard installation option from Freightliner
- **Webasto Cab Cooler**
  - New product that utilizes phase change cooling storage technology
  - Medium is charged during normal tractor operation using existing air conditioning system
- **Duration - FY03 4 Quarter – FY05 2 Quarter**

# DOE Idle Reduction Demonstration – Espar Team

- **Team: Espar, Wal-Mart Transportation, truck manufacturer TBD**
- **20 trucks with combined heating / cooling systems**
- **At least two control trucks**
- **Espar Airtronic Bunk Heater**
  - Diesel fueled coolant heater for engine pre heat
- **D.C. Airco**
  - Rooftop mounted electric air conditioning unit
  - Operates on starting or auxiliary batteries
- **Duration - Award expected FY04**



**All vehicle testing reports and fact sheets available  
via:**

**<http://avt.inel.gov>**