

Proposed Heavy Duty Diesel Idle Reduction Regulations

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Presentation Overview

- Air Quality Concerns from Diesel Exhaust
 - Constituents of Diesel Exhaust
 - Impacts of Idling
 - NAAQS Concerns in Missouri
- Benefits of Idle Reduction
- Specifics of the Draft Idle Reduction Rules
 - Applicability
 - Idle Restrictions
 - Exemptions
 - Current Status
- Questions

Air Quality Concerns – Constituents of Diesel Exhaust

- Nitrogen Oxides (NO_x)
- Volatile Organic Compounds (VOCs)
- Carbon Dioxide (CO₂)
- Carbon Monoxide (CO)
- Sulfur Compounds
- Formaldehyde
- Benzene
- Particulate Matter and Other Gasses

Air Quality Concerns – Impacts of Idling

- The average heavy duty diesel engine consumes 0.8 gallons of diesel fuel per hour while idling
- Annually, long duration idling from trucks consumes more than 960 million gallons of diesel fuel and generates
 - 11 million tons of CO₂
 - 180,000 tons of NO_x
 - 5,000 tons of PM

Air Quality Concerns – NAAQS Issues in Missouri

- The St. Louis and Kansas City metropolitan areas both monitored violations of the 8-hour ozone standard
- Kansas City Maintenance Plan committed to an idle reduction regulation if violations occurred
- St. Louis Ozone Nonattainment SIP discusses investigating an idle reduction rule
- St. Louis is also a nonattainment area for the particulate matter (PM_{2.5}) annual standard

Benefits of Idle Reduction

- Reduces emissions that contribute to ozone formation, PM2.5, global warming, and air toxics exposure
- Reduces driver's exposure to diesel exhaust
- Saves fuel (and money) for drivers
- Reduces the demand for diesel fuel which should help reduce the price

Draft Rule - Applicability

- Rule 10 CSR 10-5.385 - applies to the City of St. Louis and the counties of Franklin, Jefferson, St. Charles, and St. Louis
- Rule 10 CSR 10-2.385 - applies to the counties of Clay, Platte, and Jackson

Draft Rule - Applicability

- Owners/operators of commercial, public and institutional heavy-duty diesel vehicles which are designed to operate on public streets and highways
- Owners/operators of locations where commercial, public, and institutional heavy-duty diesel vehicles load or unload

Draft Rule - Applicability

- Heavy duty diesel vehicles are vehicles that:
 - Have a gross vehicle weight rating $> 8,500$ pounds
 - Is powered by a diesel engine
 - Is designed primarily for transporting persons or property on a public street or highway

Draft Rule - Idling Restrictions

- Owners/operators of loading/ unloading locations shall not cause or allow vehicles covered by this rule to idle for more than 30 minutes in any 60 minute period.
- Owners/operators of heavy duty vehicles shall not idle for more than 5 minutes in any 60 minute period except when loading/unloading or operating in accordance with one of the other exemptions in the rule.

Draft Rule - Exemptions

- Vehicles in traffic
- Operating defrosters, heaters, air conditioners, etc to prevent a health or safety emergency
- Emergency, law enforcement, and military vehicles in emergency or training capacity, not just for convenience of vehicle operator
- Primary propulsion engine idling for maintenance, servicing, repairing or diagnostic purposes if required

Draft Rule - Exemptions

- As part of a state or federal inspection
- Necessary to power work related mechanical or electrical operations other than propulsion
- An armored vehicle when occupied to guard contents or being loaded or unloaded
- A passenger bus idling for fifteen minutes out of sixty with passengers onboard

Draft Rule - Exemptions

- Occupied vehicle with a sleeper berth compartment idling for purposed of heating or cooling during government mandated rest periods
- Idling due to mechanical difficulties over which the driver has no control
- Vehicles used exclusively for agricultural operations and only incidentally on public roads
- Operating an auxiliary power unit as an alternative to idling the main engine

Draft Rule - Status

- Draft rules 10 CSR 10-2.385 and 10-5.385 are currently on public notice
 - Comments will be accepted until May 13, 2008
 - Rules and the draft Regulatory Impact Reports can be reviewed at <http://www.dnr.mo.gov/env/apcp/RulesDev.htm>
- Proposed rules are tentatively scheduled to be filed around August 1, 2008
- Current effective date of the rule would be March 31, 2009

Questions / Comments?

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