Clean Diesel Fuel Implementation Workshop Misfueling Panel

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AMERICAN

Trucking

ASSOCIATIONS



Misfueling Incentives

★Unintentional Misfueling

- Mistake
- Contamination (higher than 15 ppm)
- No verification at the pump

Intentional Misfueling

- ULSD is unavailable (80/20 rule)
- Price savings
- Rental industry





ATA's Perspective Misfueling Problems

- ★ Misfueling will cause problems with the Emission Control Device
- ★ Consequences are not yet understood, because ECDs are not yet invented
- There may be a difference between misfueling with 30 ppm sulfur and 500 ppm sulfur or splash bending 5000 ppm kerosene:
 - One tank of slightly contaminated ULSD may compromise the performance of the catalyst for a period of time
 - One tank of highway fuel may destroy the NOx adsorber permanently.

★ Misfueling falls on the shoulders of the end user

- Void the emissions control device warranty
- Trucker pays, unless you can prove that misfueling was someone else's fault
- **★** Cost of a muffler \$50 (every 3 years)
- The new mufflers with NOx adsorbers are likely to cost \$4,000 to \$5,000 making misfueling a very expensive mistake.





Imperfect Solutions

Color-coded nozzles/scuffguards

- Could limit mistakes, but doesn't solve contamination or intentional misfueling
- No standard colors would require pump retrofits

Unique size/shape/length nozzles and filler pipes

- Flow restrictions / productivity
- Compatibility with existing fleet
- Retrofit all trucks and pumps
- Redesign and test of all fuel tanks (\$\$\$)
- **★** Electronic pump/vehicle interface (transponders)
 - Not invented
 - Auto industry abandoned the idea with ethanol
 - Retrofit all trucks and pumps





The Solution

★ ONE NATIONAL DIESEL FUEL STANDARD

★ Require ULSD for all on-road and off-road applications where safety is not compromised

