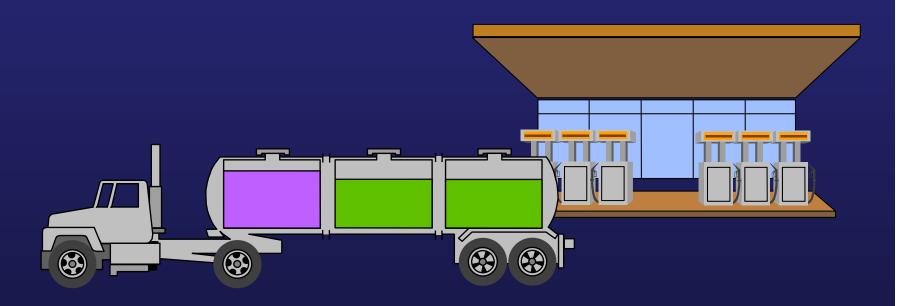
### Misfueling Panel Discussion

#### Clean Diesel Fuel Implementation Workshop

US EPA Office of Transportation and Air Quality
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### What is Misfueling?



- Misfueling is the use of 500 ppm sulfur diesel fuel in 2007 and later model year heavy-duty diesel engines/vehicles
- However, 15 ppm sulfur diesel fuel may be used in pre-2007 model year engines/vehicles
  - In fact, 15 ppm sulfur fuel provides immediate benefits for existing trucks (reduced wear in rings/liners/exhaust systems, less frequent oil changes) and their PM emissions
- Misfueling can be accidental or intentional



# Misfueling Concerns and Rulemaking Provisions

- Use of high sulfur diesel fuel in engines that require 15 ppm diesel fuel
  - could irreversibly damage emission control equipment
  - may impact engine operability, durability, and fuel economy
  - eliminates the environmental benefits of the new emission standards
- We designed the highway diesel fuel program to minimize this potential
  - 80/20 credit program should cause prices for 15 ppm and 500 ppm fuel to be similar
  - 15 ppm fuel will be the dominant fuel in the market beginning in 2006
  - 500 ppm fuel will have limited availability (geographically and temporally)
  - Rule contains labeling requirements for diesel fuel pumps and vehicles to help prevent accidental misfueling
  - Owners and operators of trucks will not risk voiding the warranty



## Future Commitments and Potential Solutions

- The program does not eliminate all potential for misfueling
- In the final rule, we committed to working with industry to evaluate whether additional measures to prevent misfueling are appropriate
- If a consensus is reached that additional measures are needed, we will explore with industry simple, cost-effective approaches to further mitigate misfueling potential
- Some of the possible technical solutions that have been put forward include:
  - Color-coded nozzles
  - Unique size/shape/length nozzles and matching filler pipes
  - Electronic pump/vehicle interface



#### Panel Discussion Purpose

- Discuss the need for additional measures to minimize the potential for accidental or intentional misfueling
- Evaluate the viability of potential solutions
- Determine if any consensus exists among the affected stakeholders
- Identify action items / next steps

