

vehicles, boats, or airplanes is exempt from this requirement. EPA intends to make future rule changes to clarify that: (1) The 10 gpm refueling requirement also applies to ethanol pumps; and (2) the exemption does not apply to pumps used to refuel heavy-duty vehicles which meet ORVR emissions standards (that is, the exemption only applies to heavy-duty vehicles above 10,000 lbs GVWR).

Inconsistency Between FMCSA and EPA Fuel Tank Fill Rate Requirements

The changes in the EPA regulation created an inconsistency between the fuel tank fill rate requirements of FMCSA and those of the EPA. As discussed above, § 393.67(c)(7)(ii) of the FMCSRs requires a CMV fuel tank of 25 or more gallons capacity to accept fuel at a fill rate of at least 20 gpm. That is twice the maximum nozzle flow rate of 10 gpm for gasoline and methanol fuel pumps allowed by EPA regulations at 40 CFR 80.22(j). Ford and GM brought this inconsistency to the attention of the FMCSA as it applies to vehicles defined at 49 CFR 390.5, which are subject to the FMCSRs, and, by extension, State regulations compatible with Part 393. It is also twice the maximum fill fuel dispensing rate specified by the EPA at 40 CFR 80.22(j), and twice the fuel fill rate specified for the various fuel spitback tests at 40 CFR 86.1246–96.

The EPA regulations concerning gasoline dispensing rates have already been implemented, and pumps subject to the regulations (*i.e.*, all pumps except those dedicated to heavy-duty vehicles, boats, or planes) were required to comply with the 10 gpm (37.9 L/m) maximum dispensing rate requirements by January 1, 1998. Furthermore, depending upon the vehicle class, many of today's vehicles are already designed to meet ORVR and spitback emissions standards based on the EPA 10 gpm fuel fill rate requirements. Considering both of these issues, the 20-gallon per minute fill rate required under the FMCSRs is incompatible with the EPA regulations for those vehicles. It is possible that some of the gasoline- or methanol-fueled vehicles with GVWRs above 8,500 lbs GVWR might be fueled at facilities not subject to the EPA regulation on fuel dispensing rates. However, as noted in the agency's August 10, 1999 notice concerning the original Ford petition, Ford believed the 20-gpm rate:

“ * * * to be more a subject of convenience. With virtually all filling stations using the industry standard automatic shut-off nozzles, it is unlikely that fuel will be spilled even while using a high flow rate delivery system. These standard

nozzles substantially reduce any potential safety risk introduced by filling an Econoline vehicle at a rate above its capacity of 17 gallons per minute.”

Ford also noted that the 17-gpm rate is only 15 percent less than the FMCSA requirement at § 393.65 (64 FR 43417, at 43418).

The original applications for exemptions from Ford, and subsequently from GM, sought temporary solutions to the inconsistency between FMCSA safety regulations intended to prevent potential injuries from the spillage of fuel during the refueling process, and EPA regulations intended to protect against environmental harm resulting from fuel spillage and the release of fuel vapors into the atmosphere. This rulemaking is intended to provide a long-term resolution to the inconsistency between these safety and environmental regulations, while ensuring that the respective goals of FMCSA and EPA are not compromised.

As stated in the August 10, 1999 notice (at 43418), the gasoline-fueled Ford Econoline Series light-truck-platform vehicles in question were and continue (during the 2-year exemption) to be built with the fuel tanks mounted between the frame rails. They use a fuel pipe system routed to minimize exposure in the event of a crash. The maximum filling rate does not exceed 17 gpm. Thus, as far as those Ford vehicles for the exempted series were concerned, the agency subsequently determined the intent of the FMCSR safety requirement was satisfied because the fill rate was only slightly less than the FMCSR-mandated rate (December 20, 1999; 64 FR 71184, at 71185). That is, for those vehicles not fueled at facilities dispensing gasoline at the EPA-mandated limit of 10 gpm, *i.e.*, those vehicles that might be fueled at locations used exclusively for refueling heavy-duty vehicles, the agency determined that the level of safety would be equivalent to the level of safety that would be obtained by complying with § 393.67(c)(7)(ii).

As stated in the FMCSA December 20, 1999 notice (64 FR 71186, at 71187), the GM G and C/K vehicles were and continue to be equipped with fuel tanks mounted between the frame rails. They use a fill pipe system conforming to EPA requirements. Furthermore, for those vehicles with a GVWR of less than 14,000 lbs (6,400 kilograms (kg)), the EPA requires the vehicle to pass its Fuel Dispensing Spitback test (40 CFR § 86.099–10(b)(2)(C); §§ 86.1811 through 1815 paragraphs (d)(1)(iv) (in each case),

and § 86.1816–05(d)(4)).⁵ Thus again, for the duration of the 2-year exemption, FMCSA determined that safety concerns associated with different fill rates are addressed by the requirement that these vehicles must successfully comply with the spitback test.

In the original December 20, 1999 notice concerning the GM petition (at 71187), GM agreed with Ford that the 20 gallon per minute fill requirement is a matter of convenience. The GM vehicles that were the subject of its petition for a 2-year exemption were and continue to be equipped with fuel systems similar to those of the Ford vehicles, that is, with fuel tanks mounted between the frame rails, and designed to conform to FMVSS 301 requirements.

GM also suggested that the applicability of the FMCSA's fuel fill rate regulation should be restricted to vehicles equipped with side-mounted fuel tanks. GM contended that many of the FMCSR requirements were developed for heavy-duty vehicles, rather than the type of vehicles that were the subject of its petition. Many heavy-duty vehicles with side-mounted fuel tanks have fill openings directly on the fuel tank. Heavy-duty vehicles are also likely to be fueled at a location where the fuel fill rate exceeds 10 gallons per minute. (As noted earlier in this document, only pumps used exclusively to fuel heavy trucks, boats, and airplanes are exempt from the EPA's fuel dispensing rate requirement.)

The FMCSA agrees with the assessment that the current FMCSR 20 gpm minimum fuel tank fill-rate has become a customer convenience requirement rather than a safety requirement for all vehicles. FMCSA further believes the EPA design constraints the vehicles must comply with for emissions and fuel spitback testing adequately address any problems such vehicles could encounter during refueling.

Proposal Concerning Fuel Fill Rate Requirements

As discussed in the FHWA's August 10, 1999 Notice of Application from Ford Motor Company (64 FR 43417, at 43418), FMCSA believes the fill pipe capacity criterion, when applied to gasoline-powered vehicles, is inconsistent with EPA regulations

⁵ In a final rule concerning evaporative emissions test procedures (40 CFR 86, published March 24, 1993 [58 FR 16002]), EPA noted that heavy-duty vehicles over 14,000 lbs (6,400 kg) GVWR are typically designed with filler necks so short that fuel can be dispensed directly into the fuel tank. These vehicles would therefore not be expected to experience spitback. Therefore, they are exempt from the spitback test requirements (58 FR 16002, at 16006).