

As previously stated, petitioners contend that they could design a vehicle that would fall under wheels back exception. However, petitioners say that such a vehicle would not be able to perform its intended function because the rear axle would not allow the RCC horizontal discharge trailer to extend over the paving machine.

In sum, petitioners contend that due to the impracticability of installing underride guards on RCC horizontal discharge trailers, not amending the FMVSS No. 224 would effectively eliminate production of RCC horizontal discharge trailers. We note that, in applying for temporary exemptions and subsequent renewals for exemptions from FMVSS No. 224, petitioners put forth the same arguments for grant of temporary exemptions as they did in this petition for rulemaking.

IV. Proposed Amendments

After careful review of the information submitted by the petitioners, NHTSA tentatively agrees with the petitioners and proposes to amend FMVSS No. 224 to exclude RCC horizontal discharge trailers from the standard.

We recognize the unique issues associated with installing underride guards on RCC horizontal discharge trailers. The current petition for rulemaking, as well as earlier petitions for temporary exemptions, outlined petitioner's efforts to bring RCC horizontal discharge trailers in compliance with FMVSS No. 224 for the past 5 years. The agency believes that petitioner's contention that no practicable solution exists may have merit.⁸

We note that when prescribing a motor vehicle safety standard, NHTSA

removed by the owners of the trailers, since the standard applies only to new vehicles. However, such a solution is inconsistent with the overall intent of the standard, which is to reduce the likelihood of underride collisions on U.S. highways.

⁸E.D. Etnyre & Co. (Etnyre), the only other manufacturer of horizontal discharge trailers, has built a horizontal discharge trailer with a "combination of retractable chutes, and wheels back configuration" to meet FMVSS No. 224 (see NHTSA Docket No. 2001-8827-19). According to the petitioners, however, field experience demonstrated insurmountable real world practicability issues that compromised any potential safety benefits. As a result, Etnyre is no longer offering trailers with retractable underride guards. Instead, they redesigned their product to fall under wheels back exception (NHTSA Docket No. 2001-8827-25). Furthermore, in a letter dated August 8, 2002 (Docket No. NHTSA-2003-14396-1), Etnyre, along with Dan Hill and Red River, noted that the complex retraction mechanism requires operator interaction to reposition the guard after each offload cycle, thereby compromising the potential safety benefits of the retractable underride guard.

is required by 49 U.S.C. 30111(b)(3) to ensure that the standard is reasonable, practicable, and appropriate for the particular type of motor vehicle equipment for which it is prescribed. As discussed above, petitioners have raised several arguments that the application of FMVSS No. 224 to RCC horizontal discharge trailers is impracticable. Given the difficulties experienced in manufacturing a compliant discharge trailer, we are proposing to exclude such vehicles from the standard.

The agency examined possible safety consequences of excluding RCC horizontal discharge trailers from FMVSS No. 224. We note that the geometry of an RCC horizontal discharge trailer is very similar to that of a wheels back trailer. The risk of a severe underride collision is reduced by the fact that the rear-most axle of the RCC horizontal discharge trailer is located between 24 and 33 inches from the rear extremity of the vehicle. Although this falls short of the 305 mm (12 inches) exemption for wheels back trailers, the likelihood of PCI intrusion is nevertheless reduced by the proximity of rear axle to the rear extremity of the trailer. It appears that the distance between the rear axle and the rear extremity of the trailer cannot be shortened any further, if the floor conveyor that delivers the asphalt is to fit over the paving machine.

Additionally, we note that RCC horizontal discharge trailers travel on U.S. highways only infrequently, to deliver the hot asphalt mix to the construction sites. These vehicles spend most of their time in a controlled environment of a construction site, surrounded by other paving equipment and construction traffic control equipment (e.g., traffic cones, safety signs), where a risk of underride collision is virtually nonexistent.⁹

In light of our findings, this NPRM proposes to amend FMVSS No. 224 by adding RCC horizontal discharge trailers to the list of excluded vehicles in S3 of the Standard. We are proposing to include a precise definition of a road construction controlled horizontal discharge semitrailers to the standard,

⁹Neither Fatal Analysis Reporting System (FARS), the National Automotive Sampling System (NASS), nor the General Estimates System (GES) data files that we have examined include crash information pertaining specifically to horizontal discharge trailers. We have examined underride and horizontal discharge trailer information from hard copies of police accident reports (PARs) for 74 selected 1999-2001 FARS cases and 75 cases from the 1999-2001 NASS on-line summary files. A careful examination of photographs (where available) and other related information yielded no indication of rear end collisions involving horizontal discharge trailers.

in order to ensure that the standard excludes only the type of the vehicle discussed in this notice. The proposed definition of a road construction controlled horizontal discharge trailer is "a trailer or semitrailer that is equipped with a mechanical drive and a conveyor to deliver asphalt and other road building materials, in a controlled horizontal manner, into a lay down machine or paving equipment for road construction and paving operations."

V. Estimated Costs and Benefits

If RCC horizontal discharge trailers are excluded from FMVSS No. 224, petitioners would realize financial gains associated with ability to continually manufacture and market their product. Currently, their ability to offer RCC horizontal discharge trailers depends on temporary exemptions. Further, those manufacturers who may have suffered sale volume losses as a result of offering a wheels back design unpopular with typical RCC horizontal discharge trailer purchasers, may once again gain market share by offering a product that is more suitable to the industry needs. The actual costs savings are difficult to estimate because petitioners have not been able to produce a viable underride guard for the equipment in question.

There would be no safety benefits associated with this proposed rulemaking. As discussed previously, we anticipate that due to very limited production figures and limited highway use exposure, there is minimal safety disbenefits associated with the proposed rulemaking.

VI. Request for and Submission of Comments

The agency requests comments on today's proposal. Specifically, NHTSA is interested in comments on the following questions.

1. Is a wheels back design a practical vehicle design alternative for RCC horizontal discharge trailers? Please provide data and information to support your response.

2. What is the maintenance and performance history of RCC horizontal discharge trailers with wheels back design?

3. Is a retractable underride guard design a practical solution for RCC horizontal discharge trailers? Does such a design create a risk of injury to workers operating or working near the trailer? Please provide data and information to support your response.

4. What is the maintenance and performance history of RCC horizontal discharge trailers with retractable underride guards?