

## DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety  
Administration

## 49 CFR Part 571

[Docket NHTSA-98-3342, Notice 1]

RIN 2127-AA43

Federal Motor Vehicle Safety  
Standards Rear Impact Guards; Rear  
Impact Protection

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION:** Final rule; response to petitions for reconsideration; technical amendment; denial of petition to extend the effective date.

**SUMMARY:** On January 24, 1996, NHTSA published a final rule establishing an equipment standard for underride guards and a vehicle standard which requires the installation of guards meeting the equipment standard on the rear end of heavy trailers and semitrailers. In response to petitions for reconsideration, NHTSA is amending that final rule to: clarify the 100 mm (4 inch) height requirement for the horizontal member of an underride guard, explicitly exclude from having to meet the energy absorption requirements all cargo tank motor vehicles manufactured with rear end protection complying with the high strength requirements of 49 CFR part 178 (to protect hazardous material) that occupies the area specified for NHTSA's underride guard, and increase the acceptable range of force application rates during testing. The agency is also excluding pulpwood trailers from the application of the vehicle standard and denying a petition from the Truck Trailer Manufacturer's Association (TTMA) for an extension of the effective date of the final rule.

**DATES:** The amendments made by this rule will become effective on January 26, 1998. Petitions for reconsideration of this rule must be received no later than March 12, 1998.

**ADDRESSES:** Any petitions for reconsideration should refer to the docket number and number of this notice and be submitted in writing to: Administrator, National Highway Traffic Safety Administration, Room 5220, 400 Seventh Street, SW, Washington DC, 20590.

**FOR FURTHER INFORMATION CONTACT:** The following persons at the National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC, 20590:

*For non-legal issues:*

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**SUPPLEMENTARY INFORMATION:****I. Background**

On January 24, 1996, the National Highway Traffic Safety Administration (NHTSA) published a final rule promulgating two new Federal Motor Vehicle Safety Standards (FMVSS) to require upgraded rear impact guards (underride guards) on trailers and semitrailers (61 FR 2004).<sup>1</sup> The first standard (No. 223, *Rear impact guards*) specifies performance requirements for strength and energy absorption for the underride guards themselves. This standard also contains a configuration requirement that the horizontal cross member of the guard be at least 100 mm (4 inches) high at any point across the guard width.

As issued in January 1996, the standard requires testing the guards for strength by pushing with a 203 mm by 203 mm (8 inch by 8 inch) force plate at specified points along the horizontal member of the guard. The test continues displacing the force plate at a constant rate of between 1.0 and 1.5 mm/sec (0.04 and 0.06 inches/sec) in a forward direction, as the guard is oriented on the trailer, until the guard resists a specified force, or until 125 mm (5 inches) of displacement occurs. To pass, the guard has to resist the specified force within the first 125 mm (5 inches) of displacement.

The standard's test for energy absorption is conducted by applying a force in the same way as in the test for strength, but only at one specified test point. The force is recorded at least ten times per 25 mm (1 inch) of displacement until the 125 mm (5 inch) displacement is reached and the force plate is completely withdrawn from the guard. The guard energy absorption is calculated from a force vs. deflection diagram plotted using the recorded measurements. Only plastic deformation (permanent deformation) is counted toward meeting the required amount of energy absorption—elastic rebound of the guard does not count.

The second standard (No. 224, *Rear impact protection*) requires most new

<sup>1</sup> Although both trailers and semitrailers are equally affected by the rule, they will sometimes be referred to simply as "trailers" in the remainder of this document.

trailers and semitrailers with a Gross Vehicle Weight Rating of at least 4,536 kg (10,000 pounds) to be equipped with a rear impact guard meeting the requirements of the equipment standard. This standard also specifies requirements for the location of the horizontal member of the guard relative to the rear end of the trailer or semitrailer, including a requirement that the rearmost surface of the member be located no more than 305 mm (12 inches) forward of the trailer's rear extremity. Certain types of trailers, including pole trailers and "wheels-back" vehicles, are excluded from the application of this rule.

The January 1996 final rule on truck underride protection specified an effective date of January 26, 1998 and a March 11, 1996 deadline for receiving petitions for reconsideration on this rule.

**II. Petitions for Reconsideration**

NHTSA received five petitions for reconsideration of the final rule from companies in the trailer and semitrailer equipment and manufacturing industries. In addition, one letter was received from an insurance group.

The Insurance Institute for Highway Safety (IIHS) did not request any change to the rule. IIHS's letter sought to clarify what IIHS considered a misunderstanding (i.e., undercounting) on NHTSA's part regarding the potential number of lives saved as a result of the final rule. IIHS stated that this clarification was needed if the agency is to decide on future rulemaking actions on rear underride for single-unit trucks or side underride for large trucks. NHTSA has met with IIHS staff to discuss their views on how best to estimate potential lives saved, and made adjustments in its data collection efforts to improve the quality of its data on underride crashes. The letter was not labeled as a petition and will not be addressed further.

One of the petitioners was Rite-Hite Corporation which manufactures "dock locks," safety restraint equipment that is mounted on loading docks to secure trailers to the docks during loading and unloading. Rite-Hite requested that the agency modify the configuration and strength specifications of the guard to be compatible with its dock locks. It stated that the requirements of the final rule directly affect the ability of its dock locks to safely engage and hold trailers to the loading docks. The Rite-Hite loading dock device uses a hook that wraps around and over the rear protection guard to help prevent guards from riding up and over the restraining barriers, and to help prevent incidents

that can result from trailer tip-over and landing gear collapse. Rite-Hite estimates that 100,000 of these dock locks currently exist.

Rite-Hite asked NHTSA to comment on the role of its final rule with regard to limiting civil tort liability. Rite-Hite states that some vehicle manufacturers and others in the industry consider the final rule to be the sole factor to be considered in designing underride guards. It requested that the agency clarify that compliance with the final rule does not by itself insulate any manufacturer of rear impact guards from all civil tort liability. It also urged NHTSA to state that guard and trailer manufacturers must also take into account other safety issues, such as loading dock uses of rear impact guards, in making appropriate and reasonable design choices that are consistent with the final rule.

Rite-Hite also petitioned for several changes to specific provisions of the final rule. It requested NHTSA to change the minimum cross sectional vertical height requirement in S5.1 of Standard No. 223, which currently specifies that "[t]he horizontal member of each guard shall have a cross sectional vertical height of *at least* 100 mm [4 inches] at any point across the guard width" (emphasis added). Some manufacturers are manufacturing guards with horizontal members that are 100 mm (4 inches) high on *both* the front and back sides of the horizontal member. Rite-Hite is concerned because the vehicle restraint may not engage properly in certain circumstances (e.g., abnormally high horizontal member, guard located forward of the rear extremity, poor alignment of the vehicle with the dock, and bumpers affixed to the horizontal member). It is also concerned that the restraint's warning light may not indicate the failure to engage without being modified.

To address this potential problem, Rite-Hite petitioned NHTSA to either: (1) Specify 4 inches as the maximum height, (2) change the regulatory language to restrict the height specification to the rear-facing side of the horizontal member, or (3) insert an interpretation that the existing language applies only to the rear-facing side of the horizontal member and an advisory that some vehicle restraint manufacturers recommend forward-facing surfaces be about 1.25 inches high.

Rite-Hite also requested NHTSA to modify S5.2.1 of Standard No. 223 to increase the minimum guard strength at location P2 (in the center of the guard, where Rite-Hite's dock locks attach). It stated that, because many vehicle

restraints will provide 2–3 times more holding power than the guard strength requirement of the rule (50,000 N, or 11,240 lb), guard strength is not sufficient to withstand the forces encountered during premature trailer pull-out from loading docks. Therefore, Rite-Hite petitioned the agency to increase the minimum force at test point P2 (where dock locks typically attach) to approximately 150,000 N (33,370 lb).

Rite-Hite requested that the test procedures of S6.6 of Standard No. 223 be amended so the guard would have to meet similar strength requirements when pushed in a rearward direction (i.e., in the opposite direction from the striking vehicle) as it has to meet when it is pushed forward.

Rite-Hite requested that NHTSA delete the exclusion from Standard No. 224 for "wheels-back vehicles." These are vehicles on which the rear tires are fixed at a position within 305 mm (12 inches) of the rear extremity of the trailer. Rite-Hite suggested that there will be an increase of loading dock incidents without an underride guard to secure the rear of the trailer to the dock. It also argued that wheels-back vehicles with wide-spaced single tires and no underride guard would increase the chance of passenger compartment intrusion, presumably by allowing the striking vehicle to penetrate between the tires.

Rite-Hite also requested that the horizontal member of the guard, and of hydraulic guards in particular, not be permitted, as it currently is, to extend rearward of the rear extremity of the vehicle. The company is concerned about damage to the dock locks, the dock walls, the underride guard itself, and with the dock lock not properly engaging. It is also concerned that rear-extending guards will prevent the trailer from backing up flush with the dock, creating a gap between the trailer bed and the loading dock, even with a dock lock engaged. Rite-Hite states that this gap could cause loss of "lip purchase" of loading dock levelers on the bed of the trailer, and personal injury to loading dock employees. Rite-Hite also asked that NHTSA clarify that hydraulic guards must meet the dimensional and guard strength requirements for non-hydraulic guards.

To ensure adequate engagement with dock locks, Rite-Hite also requested that the horizontal member be restricted to a position no more than 2 inches forward of the trailer rear extremity, rather than the currently permitted 305 mm (12 inches).

Rite-Hite wants the agency to specify a minimum horizontal guard member height of 457 (18 inches) above the

ground. It is concerned that lower heights might not adequately engage the dock locks and might increase the chances of the guards being damaged by road surfaces and falling off.

Finally, Rite-Hite requested NHTSA to prohibit a sloped surface on the forward side of the rear impact guard and require a vertical surface there instead. Rite-Hite states that the sloping surface will depress all kinds of vehicle restraints designed to hold on to the underride guard, thus causing disengagement.

TTMA petitioned the agency to define "cargo tank motor vehicle" and make it clear that any vehicle so constructed would not have to meet the energy absorption requirements of the rule. It stated that the "present definition of a special purpose vehicle defines a cargo tank motor vehicle excluded by Standard No. 224 by its operational characteristics, namely, hazardous material held in transit, instead of by its construction characteristics." It noted that cargo tank motor vehicles are required by 49 CFR 178.345–8(d)<sup>2</sup> to have very strong rear end protection to protect the cargo tank and its piping in the event that another vehicle impacts it from the rear. TTMA argued that a manufacturer cannot design a guard to meet both the extreme rigidity requirements of 49 CFR 178.345–8(d) and the energy absorption (yielding) requirements of S5.2.2 of Standard No. 223.

Great Dane Trailers, Inc. (Great Dane) petitioned the agency to increase the permissible range of force application during the strength and energy absorption tests. It stated that the current requirement to maintain a constant rate of between 1 mm and 1.5 mm per second (60 mm and 90 mm per minute) "may require expensive and sophisticated equipment" and that the rate of displacement is not a significant indicator of the performance of the guard. Great Dane suggested changing the requirement to specify a rate that "averages not less than 1 mm and not more than 25 mm per second over each 25 mm of displacement."

Great Dane also requested that the minimum energy absorption test be amended to double the displacement of the horizontal member of the guard. Great Dane stated that its current guards do not respond by plastic deformation until 75 mm (3 inches) of displacement has been achieved, and that stopping the test at 125 mm (5 inches) of displacement, as currently specified,

<sup>2</sup> These rules are administered by the Department of Transportation's Research and Special Programs Administration (RSPA).

will require it to weaken the guards to meet the requirements. Great Dane petitioned to displace the guard to 250 mm (10 inches), thus ensuring more plastic deformation of the guards and increasing the energy absorption to 2–3 times the desired minimum. Great Dane subsequently forwarded test data that it believed supported its request.

STRICK Corporation (STRICK), a trailer manufacturer, also expressed concern over the need to purchase expensive precision testing equipment to replace their current devices. In its testing, STRICK found it “impossible to determine the exact displacement for each and every second over the time of the test.” STRICK petitioned to change the requirement from maintaining a constant rate of displacement between 1 mm and 1.5 mm per second band to a requirement of “displacement rate of the force is approximately constant over a time of 1 to 5 minutes”. STRICK is basically requesting a slower force application (i.e., more time, which would be required with a slower pump) to reach the 125 mm (5 inch) required displacement. STRICK also argued that the “displacement requirement” in the final rule was inserted without adequate notice and represents a major change from the proposal.

Finally, James King & Co. (King) petitioned the agency to amend the rule to require that rear truck underride guards protect from damage the reflective conspicuity markings required by Standard No. 108, *Lamps, reflective devices, and associated equipment*. King has observed that few manufacturers have provided the protective measures that NHTSA had suggested that manufacturers could take (e.g., mounting the reflective material in a steel channel or placing small metal beads above and below the reflective stripe). As a result, King believes that, contrary to the agency's assumptions, the majority of markings are damaged after a short time in use. King did not suggest a particular solution.

### III. Response to Petitions

NHTSA agrees with Rite Hite that mere compliance with NHTSA's vehicle safety standards does not insulate any guard or trailer manufacturer from civil liability. 49 U.S.C. 30103(e) explicitly states “[c]ompliance with a motor vehicle safety standard \* \* \* does not exempt a person from liability at common law.” NHTSA's standards are minimum standards that specify a floor, not a ceiling, for performance. They are intended to allow manufacturers flexibility in the selection of means of compliance. Designers of underride guards and trailer manufacturers that

install them are free to consider the non-highway safety implications of their designs, including the functioning of the guards with existing dock locks.

The agency also agrees with Rite Hite that the standard currently does not specify where, within its longitudinal cross section, the horizontal member of the guard must have a vertical height of 100 mm (4 inches). Some guard manufacturers are apparently misinterpreting that provision as requiring a 100 mm (4 inch) height across the entire longitudinal cross section, from front to back.

However, this reading is more design restrictive than the agency intended, and is not necessary for safety purposes. The 100 mm (4 inch) minimum height is intended to assure adequate engagement with and crushing of the frontal vehicle structure by preventing “knife-edging” by a guard that is too thin. In the final rule, the agency concluded that this objective would be achieved by any guard with a 100 mm (4 inch) cross sectional height that is forward of the rear extremity by not more than 305 mm (12 inches). The requirement in S5.1 of Standard No. 223 for a cross sectional vertical height of 100 mm (4 inches) does not need to be met in any specific transverse vertical plane. The important relationship is the distance between the trailer rear extremity and the forwardmost point at which at least 100 mm (4 inches) of guard height would be engaged by a colliding vehicle.

Given the preceding statement, Rite Hite's proposed changes to the regulation would unnecessarily restrict guard configuration. For example, it would be too design restrictive to require that the 100 mm (4 inch) cross section be measured at the rearmost point on the horizontal member, as Rite Hite suggests. This would be equivalent to saying that the guard must have a 100 mm (4 inch) vertical face at the rear. Although this design is common and probably the best at assuring immediate engagement, some manufacturers might prefer to use tubular designs for the horizontal member. Tubular designs would not comply with Rite Hite's suggested amendment, because the rearmost surface would be a line rather than a 100 mm (4 inch) high plane. Nevertheless, a tubular horizontal member would assure adequate engagement. It would also be too design restrictive to require that the cross section be vertical. Some shapes without vertical transverse cross sections of the required height might provide superior engagement or crash dynamics. For example, some guards might be shaped with sloped rear

surfaces to account for the guard pivoting during a crash. As long as the horizontal projection of the horizontal member on a vertical plane presents a 4-inch high profile, then the desired objective will generally be achieved.

The agency is concerned about the development of certain untested guard shapes, however. As previously stated, most current guard designs have a vertical face with a 100 mm (4 inch) minimum height at the first point of contact for an underriding vehicle. This configuration provided good protection for passenger vehicle occupants in the NHTSA's tests. The non-design-restrictive requirements should not imply encouragement of the development of horizontal members with convex cross sections at the rear. For example, some manufacturers might want to design guards with angular, or lens-shaped, cross sections to achieve better aerodynamic properties. The quality of engagement of such guard shapes with the underriding vehicle has not been evaluated.

The agency is also concerned that portions of the horizontal member necessary for adequate engagement might be located more than 305 mm (12 inches) forward of the vehicle's rear extremity. For example, on a guard with a 100 mm (4 inch) high tubular horizontal cross member whose rearmost surface is located the full 305 mm (12 inches) forward of the trailer rear extremity, a full engagement of the guard's horizontal member will not occur until it has advanced 305 mm (12 inches), *plus* the 25 mm (2-inch) radius of the tube. In some cases, engagement might come too late to prevent passenger compartment intrusion. The purpose of the requirement in S5.1.3 of Standard No. 224 regarding the location of the guard's rearmost surface is to assure that full engagement is achieved as early in the crash event as possible, but in any case before the passenger vehicle has penetrated more than 305 mm (12 inches) under the trailer. Therefore, NHTSA is amending S5.1 to require that the vertical height requirement be met by the horizontally projected height of the horizontal member of the guard on a transverse vertical plane, and that the guard manufacturer's installation instructions or procedures specify that the forwardmost part of the horizontal member necessary to meet this requirement must be located no more than 305 mm (12 inches) forward of the rear extremity of the vehicle.

The agency denies Rite-Hite's request to eliminate the wheels back vehicle exclusion in S3 of Standard No. 224, as it applies to the single-tire wheels back

trailers, because the agency does not have enough information on these vehicles at this time. However, NHTSA is concerned with the possibility that some smaller passenger vehicles could fit between the tires of these trailers. In this case, the passenger vehicle might advance past the rear extremity of the trailer by 305 mm (12 inches) before reaching the rearmost point on the rear tires, and then advance an additional distance approximately equivalent to the radius of these large tires, before contacting the axle. This distance, combined with the subsequent crush of the front end of the passenger vehicle, might allow passenger compartment intrusion. The agency appreciates Rite-Hite's concern about the lack of guards leading to an inability to engage dock locks. NHTSA notes that the rule does not prohibit "partial" guards in between the wheels of wheels back trailers. Manufacturers of excluded vehicles may install partial or full underride guards if they consider it essential to engage loading dock restraint devices.

NHTSA requested data from TTMA on trailers and semitrailers with single rear tires. TTMA was able to confirm that these vehicles exist and provided a picture of one, but had no further information on hand. The agency also has little information on these vehicles, their tire-to-tire spacing, or their uses. Therefore, NHTSA currently has insufficient information to determine whether the wheels back exclusion should continue to apply to these vehicles or whether partial guards might be appropriate. The agency is planning to begin collecting data within the National Automotive Sampling System starting in the summer of 1998 to define the scope of this potential problem. When NHTSA has gathered the appropriate information, it will consider whether a rulemaking is warranted to address the issue of single-tire wheels back vehicles.

NHTSA denies the remainder of Rite-Hite's requests. These requests appear to be intended to ensure that guards are required to be compatible with Rite-Hite's particular dock lock design. Although NHTSA is also interested in ensuring the safety of loading dock workers, the requested changes all tend to restrict underride guard design and reduce manufacturer flexibility that NHTSA considers essential to the practicability of the rule. Not all trailers and semitrailers use loading docks. Further, NHTSA understands that there are dock lock designs that do not require underride guard design restrictions. If trucking companies want maximum compatibility with all types of dock locks, including Rite-Hite's, there is

nothing in NHTSA's rule to prevent them from ordering, or to prevent manufacturers from designing, underride guards exactly as Rite-Hite suggests.

For the same reason that NHTSA is granting Rite-Hite's request to clarify that the cross-sectional vertical height requirement need not be met at the forward-facing surface of the horizontal member of the guard, the agency denies Rite-Hite's request to prohibit sloping surfaces or to require a maximum height of 1.25 inches on that surface. Because there are no vehicle safety benefits related to the shape and size of the forward-facing surface, it would be unnecessarily design restrictive to impose certain geometries or height requirements on that surface. Regardless of the geometry, Rite-Hite's petition indicates that manufacturers can adapt the forward-facing surface to be compatible with dock locks by attaching a  $\frac{3}{4}$  inch metal bar to the bottom of the forward-facing surface. Standard No. 223 does not prohibit this approach.

The agency also denies Rite-Hite's request to modify S5.2.1 of Standard No. 223 to require the guard's strength at location P2 be increased to approximately 150,000 N (33,370 lb). A guard strong enough to withstand the forces encountered when drivers attempt to pull out while still locked to the dock is not necessary for crashworthiness. This request pertains to the strength of the guard in the opposite direction (i.e., rearward) from the one specified in the final rule. The rule specifies a minimum strength to withstand forces in the forward direction, such as would result from an underriding vehicle. The rule does not regulate the requested aspect of performance, and regulating it would not serve the purpose of the rule. For the same reasons, the agency denies Rite-Hite's request that S6.6 of Standard No. 223 be amended so there is a rearward direction force application test in addition to the specified forward direction test. NHTSA again notes that there is nothing in the rule to prevent guard manufacturers from designing guards as Rite-Hite suggests, with 150,000 N (33,370 lb) strength in the rearward direction.

The agency denies Rite-Hite's request to amend the language of S5.1.3 of Standard No. 224 to prohibit the horizontal member of the guard from extending rearward of the transverse vertical plane tangent to the rear extremity of the vehicle. NHTSA expects that manufacturers will not design, and trucking companies will not order, underride guards for uses that will damage loading docks, dock locks,

loading dock levelers, and the guards themselves. NHTSA is aware of some trailer and semitrailer applications for which a guard extending rearward of the trailer rear extremity is useful. These applications do not use loading docks. In addition, rearward mounting is useful in preventing underride and passenger compartment intrusion by the rear of the passenger vehicle. The agency does not want to prohibit these benefits for the sake of regulating the unlikely occurrence of excessively rearward guard location. For the same reasons, Rite-Hite's request that "hydraulic guards not hinge rearward of the transverse vertical plane tangent to the rear extremity of the vehicle" is denied. NHTSA notes that hydraulic guards are already required to meet the same dimensional and strength requirements as non-hydraulic guards.

NHTSA denies Rite-Hite's request to prohibit positioning the guard more than 2 inches forward of the trailer rear extremity. This would eliminate nearly all of the fore-aft flexibility that the agency believes that manufacturers need in positioning their guards, merely because a distance more than 50 mm (2 inches) will not be compatible with Rite-Hite's restraint. NHTSA emphasizes that the final rule specified mounting the guard within a range of 305 mm (12 inches) or less, and as close to the rear extremity as practical. This requirement is probably sufficient to ensure that the vast majority of trailers and semitrailers are compatible with Rite-Hite's needs. Nearly all guards are currently being mounted flush with the trailer rear extremity. NHTSA does not believe that the final rule will change that practice. If a certain kind of guard is needed for safely docking with dock locks, trucking companies will presumably specify such guards in their orders for new vehicles. This would be an additional factor making change unlikely.

NHTSA denies Rite-Hite's request that S5.1.2 of Standard No. 224 be amended to prohibit mounting guards with the horizontal member lower than 457 mm (18 inches) from the ground. The possibility of guard damage, along with the extensive comments received from the public on ground clearance, were discussed at length in the preamble of the January 1996 final rule. The comments indicated that it would be impractical to mount the guards much lower than the maximum clearance of 560 mm (22 inches) anyway. The agency does not expect vehicle manufacturers to mount guards at heights at which the guards or the vehicles would be damaged due to operational restrictions (e.g., railroad crossings). In addition,

higher costs of lower guards and the difficulty of meeting the strength requirements at lower heights are additional factors that will keep most manufacturers from producing guards that are lower than the maximum height. Therefore, setting a minimum clearance requirement is unnecessary. Assuming manufacturers did want to produce them for uses with fewer operational restrictions, lower guards would be safer in a crash. NHTSA has no evidence that loose guards are falling off and creating a highway hazard. Regulation is not necessary in this area.

The agency agrees with TTMA that the current language of Standard No. 224's definition of "special purpose vehicle" might be interpreted to exclude cargo tank motor vehicles due to their operational use, rather than their construction characteristics. The rule defines special purpose vehicles as having "work-performing equipment (including any pipe equipment that would hold hazardous materials in transit \* \* \*) that, while the vehicle is in transit, resides in or moves through the area that could be occupied by the horizontal member of the rear impact guard \* \* \*". The phrase "that would hold hazardous materials" might, in the case of a cargo tank motor vehicle, imply that the exclusion depends on the intentions or subsequent actions of the purchaser of the cargo tank motor vehicle. Although manufacturers generally know that trailer owners willing to pay for a trailer certified to RSPA's standards are planning to transport hazardous materials, the manufacturer of a cargo tank motor vehicle should not be charged with the responsibility for determining what its use will be after it is out of the manufacturer's control.

Therefore, as the TTMA requested, the agency is deleting the phrase in the definition of special purpose vehicle that explicitly recognized pipe equipment that would carry hazardous material as work performing equipment. Piping that carries hazardous materials would still be considered work-performing equipment, as would any other piping that needs to occupy the area of the guard while the vehicle is in transit. However, piping carrying hazardous materials would probably not be located in such an exposed location, because RSPA's regulations (e.g., 178.345–8, 178.338–10) generally require that such piping be protected by RSPA's vehicle rear end protection device or rear bumper.<sup>3</sup>

The standard still needs to be revised to prevent conflict with RSPA's rule. The high strength requirements for cargo tank motor vehicle rear end protection devices or rear bumpers in RSPA's regulations are incompatible with NHTSA's energy absorption requirement. NHTSA intended to apply only the configuration and strength requirements, but not the energy absorption requirements, to vehicles meeting RSPA's requirements with rear-end protection device or rear bumpers in the area specified by NHTSA for the underride guard. NHTSA's strength requirements are far lower than RSPA's, so meeting NHTSA's strength requirements will not be a problem for hazardous materials cargo tank motor vehicles. The agency stated in the final rule (at 61 FR 2023) that:

RSPA's rule for underride guards on hazardous materials tankers (49 CFR Part 178.345–8) is generally compatible with this rule, and this rule applies to hazardous materials tankers. However, to prevent any confusion as to the relationship between RSPA's rule and NHTSA's rule, this rule explicitly recognizes that piping that carries hazardous materials while in transit needs the special protection that is provided by RSPA's rule.

Explicitly recognizing vehicles with the pipe equipment in the area of the guard as special purpose vehicles did not capture within the exclusion all the vehicles that must be excluded. Any tanker built to conform to RSPA's regulations with a rear-end protection device or rear bumper in the area specified for NHTSA's underride guard cannot practically comply with NHTSA's energy absorption requirement, regardless of whether it has pipe equipment in the area of the guard or whether the pipe equipment passes through the area where the guard could be located.

Therefore, NHTSA is adding a paragraph to the Application section of Standard No. 224 explicitly excluding all cargo tank motor vehicles built to RSPA's standards, including insulated cargo tanks and tanks that carry compressed gases, from the requirement to meet the energy absorption requirements of S5.2.2 of Standard No. 223, if the rear-end protection device or rear bumper is in the area specified for NHTSA's underride guard.

The agency is stating the exclusion more broadly than the TTMA suggested.

<sup>3</sup> "rear bumper" is used in 49 CFR 178.337 and 178.338. These terms are used below when discussing cargo tank motor vehicles, both to avoid confusion and to emphasize the different primary purpose they serve—protecting hazardous material in the tank, rather than protecting colliding vehicle occupants with crash protection.

The TTMA petitioned to add a definition for a cargo tank motor vehicle, which referenced some (but not all) of RSPA's tanker specifications. In NHTSA's view, the benefits of energy absorption for the striking vehicle are outweighed by the additional danger to that and other vehicles from spillage of hazardous cargo, so that all tankers that might be carrying hazardous materials should be excluded from the energy absorption requirement. RSPA occasionally adds cargo tank motor vehicle specifications and may also add vehicle rear end protection device or rear bumper specifications to its regulations. If the rule referenced RSPA's regulations for every specific tanker and guard type, every change to the RSPA regulations would necessitate a corresponding change to Standard No. 224's application section. Due to the difficulty of coordinating interagency rulemakings and effective dates, the rule simply references the part of RSPA's regulations that specifies cargo tank motor vehicles and rear end protection devices or rear bumper requirements, and excludes from the energy absorption requirements of this rule all cargo tank motor vehicles that comply with that part and have a rear end protection device or rear bumper in the area specified for the underride guard. Any future changes by RSPA to its tanker guard requirements will likely be made to this part, and would be automatically incorporated by reference in Standard No. 224.

The agency notes that this exclusion from the energy absorption requirements for RSPA guards on cargo tank motor vehicles applies only when the RSPA rear end protection device or rear bumper occupies the space specified for the horizontal member of the NHTSA guard and meets the configuration and strength requirements specified for the NHTSA guard. For example, many cargo tank motor vehicles have a rear end protection device or rear bumper located several feet off the ground. The guards on these trailers are not excluded from NHTSA's energy absorption requirement of Standard No. 223.

The requests of Great Dane Trailers and STRICK Corporation regarding the rate of force application in the tests for strength and energy absorption can be treated together. NHTSA agrees that changing the displacement rate requirements in S6.6(a) of Standard No. 223 to accommodate concerns about the practicability of the test procedure would not affect the intent of the rule or the determination of the guard's strength. The objective of the requirement is to assure that the guard

<sup>3</sup> Both terms are used to refer to underride guard-type devices in RSPA's regulation. "Rear-end protection device" is used in 49 CFR 178.345, while

is being tested quasi-statically because the specified test procedure is not a dynamic test.

The specified rate of displacement during force application (1.0 to 1.5 mm/s) may be narrow and too restrictive to accommodate slow-pumping force application equipment. NHTSA accepts Great Dane's and STRICK's assertions that new and expensive equipment would be required for those companies to achieve this rate. More powerful hydraulic pumps are required to achieve higher rates of displacement during the test, especially with stronger guards. The agency has no information on how powerful STRICK's pumps are, but NHTSA chose the quasi-static test procedure at least in part to accommodate small trailer manufacturers that presumably have less sophisticated equipment. For steel, the most common guard material, the rate of force application, within reasonable bounds, should not make a significant difference in the test results.

For reasons that seem inconsistent with the basis for their requests, both companies asked for an increase in the permitted displacement rate. The agency denies these requests. Great Dane requested an increase in the upper limit of the specified range from 1.5 mm/sec to 25 mm/sec, and STRICK requested an increase to 2.08 mm/sec. At a displacement rate of 25 mm/sec, a 125 mm (5-inch) test displacement would be completed in a very short duration of about 5 seconds. This is a very fast force application and conflicts with the intent of the rule to specify a quasi-static, not a dynamic, test procedure. Moreover, Great Dane's proposed rate of 25 mm/s would require high precision and sophisticated computer-controlled test equipment as well as powerful and efficient pumps—potentially representing upgraded equipment that both companies state they want to avoid. The agency notes that NHTSA's Vehicle Research and Test Center (VRTC) successfully performed its testing program for the subject final rule using manually-controlled test equipment with no special instrumentation. Less sophisticated equipment with lower pump capacity requires more, not less, test duration. The current upper limit on the rate of displacement during force application of 1.5 mm/sec is being retained. This should not present a problem for Great Dane or STRICK, because lower displacement rates can also be selected on more capable equipment.

Regarding the lower bound for displacement rate, the agency believes that 6.3 minutes is adequate time to

achieve the required displacement without the need for sophisticated control equipment and powerful pumps. No petitioner has requested a longer period and, unless the agency is presented with evidence of a problem with this rate, it will consider longer periods as unnecessarily prolonging certification and compliance testing. As explained earlier, reasonably slower displacement rates will probably not make a significant difference in test results anyway. Therefore, NHTSA is granting part of STRICK's request and widening the specified displacement rate range to allow displacement rates as low as 0.33 mm/sec. Testing at this rate will allow a 125 mm (5 inch) test displacement to be achieved in a period of about six minutes.

The range of force displacement rate will now be specified in centimeters and minutes rather than in millimeters and seconds, i.e., as 2.0 cm/minute to 9.0 cm/minute. This range replaces the currently specified range of 1.0 to 1.5 mm/sec (6.0 to 9.0 cm/minute). The larger distance per time period is easier for most people to visualize. It is NHTSA's understanding that the displacement rate on most modern test equipment (and on all the equipment NHTSA would use for compliance testing) is controlled by a computer with a feedback system capable of quickly and automatically adjusting the displacement rate. However, for purposes of certification testing on non-computer controlled equipment, precise adjustment is impractical. Specifying the distance on a per-minute time scale will allow for practical adjustments of the rate of displacement within each minute. This change would result in a more practical test procedure and should not compromise the performance requirements of the rule. The language of section 6.6(a) of Standard No. 223 is changed accordingly.

The word "constant" has been eliminated from the test procedure as a modifier of the displacement rate. As Great Dane pointed out, the term "constant" is confusing because it is so absolute. The concept of tolerance, for purposes of compliance testing, has been introduced as explained below.

Normally, when NHTSA specifies a range in the test conditions of its standards, the equipment being tested is expected to meet the specified performance requirements when testing at any point within the range. In this case, the agency is allowing a broader range of displacement rates (with a significantly slower rate of displacement at the lower end of the range) than was allowed originally, to accommodate the manufacturers' desire to conduct

certification testing with their existing equipment. Applying the usual procedure, NHTSA could test and expect compliance at any rate within the wider displacement rate range. However, this would have the effect of making it more, not less, difficult for manufacturers to certify compliance, because the same requirements would have to be met under a wider range of conditions. The agency notes again that tests within the new range of displacement rates should yield similar results to tests within the old range because the performance of most current guard materials is not rate sensitive even over this broader range of load application rates.

Because merely granting the petitioner's request would not achieve the petitioner's objective of making certification testing easier, NHTSA will allow the guard manufacturer to designate the displacement rate, within the range of 2.0 to 9.0 cm/minute, on which it based its certification. If compliance tests are conducted by the agency, the manufacturer's designated rate, plus or minus 10 percent, will be used. The practical effect of this is that the guard must comply at the designated rate as well as any rate within 10 percent above or below that rate. As noted above, having to maintain a "constant" designated displacement rate would make it practically impossible for the agency to conduct compliance testing. For the same reason, NHTSA will not attempt to duplicate during compliance testing the deflection/time curve that the manufacturer experienced during certification testing. As long as the agency stays within the 10 percent tolerance during the entire test, the compliance test will be valid. If the manufacturer, for whatever reason, does not designate a displacement rate, NHTSA may pick any rate within the specified range.

NHTSA denies Great Dane's request to amend the energy requirement to require twice as much displacement for the purpose of the energy absorption test. The petitioner stated that the "current limit of 125 mm will require guards which are weaker (less stiffness) be installed merely to meet the energy absorption level of 5650 J." This amendment would have the effect of allowing stiffer guards by displacing the guard 250 mm (10 inches) instead of 125 mm (5 inches) before measuring to determine whether the guard absorbed the minimum 5,650 joules (4,170 ft-lbs) of energy. The greater displacement would make it easier for the required plastic deformation of the guard to occur. However, the point of the energy absorption requirement is to *prevent*

overly stiff guards. It would enhance crash safety if manufacturers weaken guards that are too stiff, because this will allow a softer "crash pulse" for the colliding passenger vehicle by "riding down" the speed over a short distance during the crash.

Moreover, NHTSA notes that the data that Great Dane submitted in support of this request does not indicate that any change is needed in the standard. The test data provided by Great Dane show that the guards they tested displayed more than twice the required energy absorption when tested according to the current requirement of 125 mm (5 inches) of displacement.

Finally, the agency denies King's request to amend the final rule to include requirements that rear underride guards protect conspicuity markings from damage. The Federal Highway Administration (FHWA) has jurisdiction over trailers after the first sale for purposes other than resale and regulates the maintenance of required safety equipment. Section 393.11 of the Federal Motor Carrier Safety Regulations (FMCSRs) requires that commercial motor vehicles meet the requirements of Standard No. 108 in effect at the time the vehicle was manufactured (49 CFR 393.11). Since December 1, 1993, Standard No. 108 has required new trailers to meet conspicuity requirements. Accordingly, motor carriers are currently required under FHWA regulations to maintain the conspicuity treatments on these trailers. This includes maintaining the conspicuity treatment on the horizontal member of the underride guard.

On April 14, 1997, FHWA issued an NPRM (62 FR 18170) that would amend the FMCSRs at 49 CFR 393.11, *Lighting Devices and Reflectors*, to make certain that all motor carriers operating trailers subject to the FMCSRs are aware of their responsibility to maintain the conspicuity treatments in all locations required by Standard No. 108. However, FHWA requested comment on whether an exemption from the maintenance requirement for the tape on the underride guard should be provided due to practicability problems.<sup>4</sup> NHTSA has forwarded King's comment to FHWA for

consideration. Irrespective of whether FHWA continues to require motor carriers to maintain the conspicuity treatment on the guards, NHTSA encourages manufacturers to design the treatment to be as durable as practicable to ensure that the safety benefits of applying the treatment to that location are realized.

If FHWA requires the conspicuity treatment on the horizontal member of the guard to be maintained, and sufficiently durable conspicuity treatments are not available, NHTSA assumes that manufacturers would design guards with channels or other protective features for the conspicuity treatment. There is nothing in Standard No. 223 that would prevent such designs. NHTSA will consult with FHWA on whether NHTSA rulemaking to mandate physical protection for conspicuity treatment is needed after FHWA completes its rulemaking.

#### **IV. Response to TTMA Petition on Extension of Effective Date**

In an April 18, 1997 letter, TTMA petitioned NHTSA to commence rulemaking to extend the effective date from January 26, 1998 to a date at least nine months after this response to the petitions for reconsideration is issued. It stated only that trailer manufacturers were reluctant to complete the designs of their guards and test these guards until the petitions were answered.

TTMA's petition for an extension of the effective date is denied. NHTSA does not see any reason why manufacturers can not complete and test their guard designs in the allotted time. Except for a few of Rite Hite's requests, all the petitions dealt with relatively minor issues of testing and clarification. Manufacturers should have been planning to comply with the rule as it was published in January of 1996.

The guards that will be required on January 26, 1998 are very similar to guards currently being produced. NHTSA made no amendments requiring configuration changes in its responses to the petitions. The change to the regulatory text relating to vertical cross-sectional height is basically a clarification of the current requirements. There were only two minor changes to the test procedures (allowing a more flexible force application rate and allowing the manufacturer to designate the force application rate on which it based its certification). These changes will make it easier for manufacturers to test the guards and to comply with the requirements. The guards that manufacturers will be required to produce after this rule is issued will be essentially the same guards that NHTSA

required in the January 1996 final rule. NHTSA notes that the TTMA's Recommended Practice, "Rear Impact Guard and Protection" is virtually identical to the NPRM, except for the energy absorption requirement of Standard No. 223. This Recommended Practice is designated RP No. 92-94, and was originally issued in April of 1994 and revised in November of 1994. Apparently it has been adopted as an industry standard, so little reengineering should be necessary to meet Standard No. 223. Therefore, NHTSA believes that the manufacturers have had sufficient time to complete their designs prior to the January 26, 1998 effective date. A general extension is not warranted.

However, the agency will consider petitions for temporary exemption from Standard No. 224. The agency has received a number of these petitions from small-volume trailer manufacturers within the past few months. Under 49 CFR 555.6(a), a manufacturer whose yearly production is not more than 10,000 units may ask for a temporary exemption from a Federal motor vehicle safety standard for up to three years on the basis that compliance would cause it substantial economic hardship and that it has attempted in good faith to comply with the standard from which it has asked to be excused. Part 555 requires the agency to publish a notice in the **Federal Register** seeking public comment on each exemption petition before a decision can be made on such a request, and then publish a second notice either granting or denying the petition. NHTSA expects to issue final decisions on these petitions approximately three to four months after the date of submission of the petition.

#### **V. Technical Amendment on Logging Trailers**

The Application section (S3) of Standard No. 224 currently excludes "pole trailers" from the application of the rule. Pole trailers are trailers with a single, longitudinal telescoping pole, rather than a normal trailer chassis, connecting the front wheels to the back wheels. Pole trailers are predominantly used by the logging industry to transport logs. They spend a great deal of their time off-road at logging sites and on rough logging roads. NHTSA proposed to exclude these vehicles in the January 8, 1981 NPRM (46 FR 2139), stating:

the proposed rule does not apply to pole trailers. The agency believes that requiring underride guards on such vehicles would provide little benefit to car occupants. Since the poles carried by these trailers normally overhang the back end of the vehicles for a considerable distance, the danger of

<sup>4</sup> "The [FHWA Notice of Proposed Rulemaking] does not, however, include an exemption to the requirement that motor carriers maintain the conspicuity material on the rear underride device. The agency requests comments from motor carriers on the durability of the conspicuity material located on the horizontal member of the rear underride protection devices. Commenters are asked to identify the specific types of trailers and operating conditions that they believe are associated with the durability problems cited in addition to providing color photographs of the damaged conspicuity materials." 62 FR 18172-73.



underride is due not to the structure of the trailer but to the structure of the cargo.

This was not a controversial exclusion and it was retained in the 1992 Supplemental Notice of Proposed Rulemaking (SNPRM) and the 1996 final rule without comment.

Changes in the trailer design and in the logging industry since 1981 have led to a decline in the popularity of pole trailers and the emergence of "pulpwood trailers" to take their place. Pulpwood trailers are similar in use and structure to pole trailers, but they have more structure (often two poles or beams) connecting the front wheels to the back wheels. NHTSA has recently become aware, through an April 25, 1997 letter from Mr. Buck Ford, that some manufacturers of pulpwood trailers are deciding how to install underride guards to comply with the January 1996 final rule, but that other manufacturers are completely unaware of the rule. Pulpwood trailers are not currently excluded because they are not technically pole trailers. According to Mr. Ford, there may be a shortage of pulpwood trailers in 1998 due to few manufacturers being able to meet the requirements.

NHTSA intended to exclude all trailers that, like pole trailers, lack structure for attaching guards and that would carry loads likely to overhang the rear of the trailer substantially when it published the January 1996 final rule. Pulpwood trailers do not differ significantly from pole trailers in their construction or use. They also carry overhanging logs that would negate the value of the underride guard and operate on rough logging roads on which an underride guard would be a serious impediment. Due to the lack of controversy regarding the exclusion of pole trailers, and due to the lack of comment from pulpwood trailer manufacturers, the agency assumed that the language of the exclusion covered all trailers of this type.

Because this appears to have been an incorrect assumption, NHTSA is adding pulpwood trailers to the list of excluded vehicle types. This is being done by technical amendment because the agency's intent to exclude vehicles that carry this kind of load was clear from the 1981 NPRM's rationale for the exclusion. This technical amendment will also avoid a shortage of pulpwood trailers needed by the logging industry in 1998. NHTSA is adopting the pertinent part of the language contained in Standard No. 121, *Air Brake Systems*, which defines "pulpwood trailer" as "a trailer that is designed exclusively for harvesting logs or pulpwood and

constructed with a skeletal frame with no means for attachment of a solid bed, body, or container \* \* \*".

#### VI. Effective Date

The agency finds that there is good cause to make this rule effective immediately. These amendments do not impose any new requirements. Instead, they relieve some of the testing burden imposed on the manufacturers by the January 24, 1996 final rule. It will be slightly easier for manufacturers to test using the new load application rates specified in these amendments. These amendments also make it clear that pulpwood trailers are an excluded category of vehicle, and that cargo tank motor vehicles built to RSPA's standards with a rear-end protection device or rear bumper in the area specified for NHTSA's underride guard do not have to meet the energy absorption requirements of Standard No. 223. A delayed effective date would impose a needless compliance burden on the trailer industry, including many small businesses that manufacture trailers.

#### VII. Rulemaking Analyses and Notices

##### A. Executive Order 12866 (Federal Regulation) and Regulatory Policies and Procedures

This rulemaking action was reviewed under Executive Order 12866. The action has been determined to be "not significant" under Executive Order 12866 and under the Department of Transportation regulatory policies and procedures. The Final Regulatory Evaluation (FRE) for the January 1996 final rule describes the economic and other effects of that rule in detail.

The responses to these petitions for reconsideration and this technical amendment do not alter the costs or benefits of that rule significantly. They merely clarify the intended application of the rule and provide more flexibility in the test procedures. They do not change the requirements enough to significantly alter the performance or the price of rear underride guards. Therefore, a regulatory analysis is not warranted.

##### B. Regulatory Flexibility Act

NHTSA analyzed the potential impacts of the January 1996 final rule on small entities under the Regulatory Flexibility Act and certified that it would have a significant economic impact on a substantial number of small entities. NHTSA has described those possible impacts in the FRE to the January 1996 final rule, which was, in part, a regulatory flexibility analysis.

The responses to these petitions for reconsideration and this technical amendment slightly increase manufacturer flexibility in testing, but NHTSA certifies that the changes made by today's rule do not have a significant economic impact on a substantial number of small entities. Most of the changes are interpretations and clarifications of the existing language, not changes in requirements that impose new burdens. The changes in requirements are designed to make the guards easier for manufacturers, especially small businesses, to test their guards, not to change the guard performance. As a result, some businesses that otherwise would have had to buy sophisticated testing equipment or change their guard designs unnecessarily will not need to do so. Therefore, there will be no new significant impact on small businesses.

##### C. Executive Order 12612 (Federalism)

NHTSA has analyzed this rule in accordance with the principles and criteria contained in E.O. 12612, and has determined that this rule will not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

This rule makes only minor changes to the January 1996 final rule which had only minimal federalism implications. Nearly all States require underride protection guards for heavy trailers and semitrailers. Further, most states require that the guards meet certain configuration requirements, or that they be positioned in a certain location relative to the rear and sides of the vehicle. The January 1996 final rule will preempt State requirements for rear impact protection. However, the agency believes that federalism implications will be minor because the guards required by that final rule are not fundamentally different from those required by State law. Several States, including Michigan, North Carolina, New York, and New Jersey, already require trailers longer than 15 m (50 ft) to have guards with the configuration required by that rule. For practical purposes, the only effect that that rule will have in these States is to require the guards to be tested and certified for strength and energy absorption.

NHTSA believes that effective rear impact protection measures can be implemented only at the national level. Only vehicle manufacturers can produce trailers and semitrailers with improved rear impact protection. The improvements required by the January 1996 final rule will cause vehicle manufacturers and operators to incur costs that could affect their competitive



position if compliance were voluntary and attempted by some, but not all manufacturers. That rule applies uniformly to all manufacturers and will ensure that the competitive position of the manufacturers will not be significantly affected by the required safety improvements.

#### *D. Preemptive Effect and Judicial Review*

Under 49 U.S.C. § 30103(b), whenever a Federal motor vehicle safety standard is in effect, a State may not adopt or maintain a safety standard applicable to the same aspect of performance which is not identical to the Federal standard. 49 U.S.C. § 30161 sets forth a procedure for judicial review of final rulemaking establishing, amending, or revoking Federal motor vehicle safety standards. That section does not require submission of a petition for reconsideration or other administrative proceeding before parties may file suit in court. This final rule does not have any retroactive effect.

#### *E. Paperwork Reduction Act*

In accordance with the Paperwork Reduction Act of 1980 (P.L. 96-511), there are no new requirements for information collection associated with this response to petitions for reconsideration and technical amendment.

#### **List of Subjects in 49 CFR Part 571**

Imports, Incorporation by reference, Motor vehicle safety, Motor vehicles, Rubber and rubber products, Tires.

#### **PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS**

In consideration of the foregoing, 49 CFR part 571 is amended as follows:

1. The authority citation for part 571 continues to read as follows:

**Authority:** 49 U.S.C. 322, 30111, 30115, 30117 and 30166; delegation of authority at 49 CFR 1.50

2. Sections S5.1 and S6.6(a) of 49 CFR 571.223 are revised to read as follows:

##### **§ 571.223 Standard No. 223; rear impact guards**

\* \* \* \* \*

**S5.1 Projected Vertical Height.** The horizontal member of each guard, when viewed from the rear as it would be installed on a trailer pursuant to the installation instructions or procedures required by S5.5 of this standard, shall have a vertical height of at least 100 mm at each point across the guard width, when projected horizontally on a transverse vertical plane. Those installation instructions or procedures

shall specify that the guard is to be mounted so that all portions of the horizontal member necessary to achieve a 100 mm high projected vertical height are located not more than 305 mm forward of the vehicle's rear extremity, as defined in S4 of 49 CFR 571.224, Rear Impact Protection. See Figure 1 of this section.

\* \* \* \* \*

##### **S6.6 Force Application.**

\* \* \* \* \*

(a) Using the force application device, apply force to the guard in a forward direction such that the displacement rate of the force application device is the rate, plus or minus 10 percent, designated by the guard manufacturer within the range of 2.0 cm per minute to 9.0 cm per minute. If the guard manufacturer does not designate a rate, any rate within that range may be chosen.

\* \* \* \* \*

3. In § 571.224 section S3 is revised and section S4 is amended by adding a definition of *pulpwood trailer* and revising the definition of *Special purpose vehicle* to read as follows:

##### **§ 571.224 Standard No. 224; rear impact protection**

\* \* \* \* \*

**S3. Application.** This standard applies to trailers and semitrailers with a GVWR of 4,536 kg or more. The standard does not apply to pole trailers, pulpwood trailers, special purpose vehicles, wheels back vehicles, or temporary living quarters as defined in 49 CFR 529.2.

If a cargo tank motor vehicle, as defined in 49 CFR 171.8, is certified to carry hazardous materials and has a rear bumper or rear end protection device conforming with 49 CFR part 178 located in the area of the horizontal member of the rear underride guard required by this standard, the guard need not comply with the energy absorption requirement (S5.2.2) of 49 CFR 571.223.

##### **S4. Definitions.**

\* \* \* \* \*

*Pulpwood trailer* means a trailer that is designed exclusively for harvesting logs or pulpwood and constructed with a skeletal frame with no means for attachment of a solid bed, body, or container.

\* \* \* \* \*

*Special purpose vehicle* means a trailer or semitrailer having work-performing equipment that, while the vehicle is in transit, resides in or moves through the area that could be occupied by the horizontal member of the rear

underride guard, as defined by S5.1.1 through S5.1.3.

\* \* \* \* \*

Issued on: January 20, 1998.

**Ricardo Martinez,**  
Administrator.

[FR Doc. 98-1783 Filed 1-21-98; 2:18 pm]

BILLING CODE 4910-59-P

#### **DEPARTMENT OF TRANSPORTATION**

#### **National Highway Traffic Safety Administration**

#### **49 CFR Part 571**

[Docket No. NHTSA-97-3191; Notice 2]

RIN 2127-AF66

#### **Federal Motor Vehicle Safety Standards; Occupant Crash Protection**

**AGENCY:** National Highway Traffic Safety Administration (NHTSA), DOT.

**ACTION:** Final rule.

**SUMMARY:** This document amends the requirements for seat belts at forward-facing rear outboard seating positions of police cars and other law enforcement vehicles to facilitate the transporting of prisoners. It does so by permitting those belts to be equipped with manual adjustment devices instead of emergency locking retractors, and excluding them from requirements for the accessibility of belt latch plates, the simultaneous release of the lap and shoulder belt portions of a lap and shoulder belt, and the release of the latch mechanism at a single point. This action was initiated in response to a petition for rulemaking submitted by Laguna Manufacturing, Inc.

**DATES:** Effective Date: The amendments made in this rule are effective February 25, 1998.

Any petitions for reconsideration must be received by NHTSA no later than March 12, 1998.

**ADDRESSES:** Any petitions for reconsideration should refer to the docket and notice number of this notice and be submitted to: Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** For technical information: Mr. John Lee, Light Duty Vehicle Division, Office of Crashworthiness Standards, NPS-11, National Highway Traffic Safety Administration, 400 Seventh Street, SW., Washington, DC 20590. Telephone: (202) 366-4924. FAX number (202) 366-4329. Mr. Lee's e-mail address is: jlee@nhtsa.dot.gov. For legal information: Mr. Otto Matheke, Office of