commenters stated that requiring a lamp to be visible through the rearview mirrors would make it necessary for such a lamp to protrude from the dolly structure, thereby making it susceptible to damage. They recommended that a dolly be required to indicate an ABS malfunction only at the ECU mounted on the dolly's frame, on the presumption that it would be visible during a walk-around inspection.

NHTSA concludes that the proposed requirement for specifying the location for an ABS malfunction lamp on a dolly must be different from the requirement proposed for trailers. The agency agrees with TTMA's comment that there is "no good, practical location for an ABS malfunction lamp on a dolly," from which the lamp could be viewed by a driver looking through the side rearview mirrors.

Based on the available information, NHTSA proposes that the ABS malfunction lamp on dollies be located on a permanent structure of the dolly so that it would be visible, with or without a trailer attached to the dolly, to a person in a standing position during a walk-around inspection. By permanent structure, the agency means a fixed portion of the vehicle that is inherently part of the dolly as opposed to something that is easily removed. To accomplish this goal, the proposed requirement is specified in objective terms by stating that the lamp must be located on a permanent structure of the dolly and positioned at a height of not less than 15 inches above the road surface. In addition, the malfunction lamp would have to be visible when viewed by a person standing erect and located no more than 10 feet from the dolly. The proposed height of not less than 15 inches for the location of the dolly ABS malfunction lamp coincides with the lower height limit for side marker lamps on the lower edge of a trailer, as specified in Standard 108. Given the differences in dolly configurations and sizes, that proposed minimum lamp height is expected to provide dolly manufacturers with the flexibility to locate the ABS lamp in a protected location. The agency expects that dolly manufacturers would locate the lamp below the fifth-wheel to reduce the potential for damage to the lamp when the dolly is being connected to a trailer.

NHTSA believes that locating the malfunction lamp on the ECU of the ABS would decrease the ability of the driver or inspectors to see the lamp. The ECU is typically placed in a protected location where it would not be easily damaged. Such a location would not be conspicuous enough to ensure that the ECU, and hence the malfunction lamp, is easily seen during a walk-around inspection of the towed vehicle.

B. Color

TTMA requested that NHTSA require the use of a green lamp for the external ABS malfunction lamp on the trailer and the dolly, and that the lamp be lit continuously whenever the ECU is powered, but be extinguished when there is a malfunction.

Standard No. 101, Controls and displays, currently requires that invehicle ABS malfunction lamps be yellow. This color requirement has been harmonized with the vehicle standards of other countries. NHTSA and regulatory agencies in other countries have historically used a red lamp to indicate a critical system failure and a yellow lamp to indicate a non-critical malfunction. The International Organization for Standardization (ISO) and the Economic Commission for Europe (ECE) recently harmonized European braking requirements with American requirements, agreeing to specify red to indicate brake failure and yellow to indicate ABS malfunction. NHTSA recognizes that these color requirements are applicable to instrument panel lamps and do not address ABS malfunction indicator lamps on the exterior of a vehicle. However, the desirability of having a uniform protocol in this regard is clear. The agency concludes that the same requirements should be applied to external ABS malfunction lamps since they perform the same function as invehicle ABS malfunction lamps.

NHTSA notes that Table I of Standard 108 includes a requirement for two amber clearance lamps at the front of a trailer and two red clearance lamps at the rear of a trailer. In addition, Standard No. 108 references the Society of Automotive Engineers (SAE) Recommended Practice J592e (July 1972), Clearance, Side Marker, and *Identification Lamps*. A recent update of this Recommended Practice (SAE J592 JUN92) states in Section 5.1.7 that "the color of light from front clearance lamps * * * shall be yellow." The agency believes that the color of external ABS malfunction lamps should be the same as that used for clearance lamps.

Based on these considerations, NHTSA concludes that the use of a green lamp on the exterior of the trailer for indicating a trailer ABS malfunction would violate the already established convention for ABS malfunction lamps and, therefore, could create confusion among drivers. However, there would be no prohibition against supplementing the required yellow external malfunction lamp on a trailer with a green lamp on the ECU to indicate the status of the trailer ABS. The supplemental lamp would not have to conform to any of the color or protocol requirements specified for the external ABS malfunction lamp.

C. Lamp Protocol

TTMA requested a change in the lamp protocol, which would allow the lamp to be lit continuously when the ABS is functioning properly and to be extinguished when there is a malfunction in the ABS. NHTSA has addressed this issue in detail in previous Federal Register notices and in the final rule on heavy vehicle ABS rulemaking. In the final rule, the agency decided to require that the ABS malfunction lamp be lit when a malfunction exists and that it not be lit when the antilock system is functioning properly.

Under the requirement for an external ABS malfunction indicator in S5.2.3.3 of Standard 121, NHTSA requires that the trailer ABS malfunction lamp be lit during the check-of-lamp function only when the vehicle is stationary and power is first supplied to the antilock system. This allows the ABS lamp on a trailer that is moving to undergo the check of lamp function, without the lamp cycling on and off whenever the brakes are applied. This requirement will eliminate any potential distractions for the driver or for drivers of other vehicles nearby, which might be created by the ABS lamp cycling on and off with every brake application. The agency emphasizes that in the event of a malfunction in the trailer antilock system, the malfunction indicator lamp would be lit whenever power is supplied to the trailer antilock system, regardless of whether the vehicle is stationary or moving. Accordingly, the agency has decided to deny TTMA's request for a change in the ABS malfunction lamp protocol and proposes no change to the protocol included in the ABS final rule.

D. Intensity and Photometric Requirements

AAMA and TTMA petitioned the agency to require that the external ABS malfunction lamp have the same photometric requirements as those specified in Standard No. 108. Photometric values specify the amount of light emitted by a lamp, when measured from a specified distance.

NHTSA agrees with the petitioners' recommendation, and proposes that the ABS malfunction lamps meet the requirements specified by the SAE Recommended Practice J592 JUN92 for