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BILL ANALYSIS

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Senate Bill 788 (as introduced 9-29-05)
Sponsor: Senator Ron Jelinek
Committee: Agriculture, Forestry and Tourism

Date Completed: 10-26-05

CONTENT

The bill would amend the Michigan Vehicle Code to require an implement of husbandry to meet certain national standards regarding a slow-moving vehicle identification emblem and lighting and marking while operating or traveling on a highway.

Beginning January 1, 2007, the bill would prohibit a person from selling or offering for sale an implement of husbandry that did not comply with the bill, unless it were manufactured before that date.

The bill would require an implement of husbandry manufactured on or after January 1, 2007, to comply with the following standards approved by the American National Standards Institute (ANSI) and the American Society of Agricultural Engineers (ASAE):

- ANSI/ASAE S276.5 FEB03: Slow-Moving Vehicle Identification Emblem (which establishes specifications that define a unique identification emblem to be used only for slow-moving vehicles when operated or traveling on highways).
- ANSI/ASAE S279.12 DEC02: Lighting and Marking of Agricultural Equipment on Highways (which provides specifications for lighting and marking of agricultural equipment whenever it is operating or is traveling on a highway.)

(The standards are described in more detail under **BACKGROUND**.)

The standards would be incorporated by reference. The Secretary of State could, by rule, adopt any future changes to the standards.

Implements of husbandry manufactured before January 1, 2007, would have to meet the current requirements in the Code: either display red lighted rear lamps plainly visible from a distance of 500 feet to the rear; or be accompanied by a vehicle that follows the implement of husbandry at a maximum distance of 50 feet, illuminates the implement with the vehicle's headlights, and displays lighted rear lamps plainly visible from 500 feet.

The Code also requires that every vehicle with a maximum speed of 25 miles per hour, implement of husbandry, farm tractor, or special mobile equipment be identified with reflective triangles of certain proportions and specifications. Under the bill, this would be subject to the requirement that an implement of husbandry comply with the ANSI/ASAE standards specified in the bill.

Under the Code, every vehicle on a highway at any time from a half hour after sunset to a half hour before sunrise, and at any other time when there is not sufficient light to see 500 feet ahead, must be equipped with at least one lighted white lamp visible from 500 feet to the front of the vehicle, and with a red lamp visible from 500 feet to the rear. The bill would retain this requirement for implements of husbandry manufactured before January 1, 2007. Those manufactured on or after that date would be required to comply with the ANSI/ASAE standards specified in the bill.

MCL 257.685 et al.

BACKGROUND

ANSI and ASAE

The American National Standards Institute is a private, nonprofit organization that coordinates the development and assessment of voluntary, open national standardization systems. The American Society of Agricultural Engineers is a professional and technical organization dedicated to the advancement of engineering applicable to agricultural, food, and biological systems, now the American Society of Agricultural and Biological Engineers (ASABE). The groups work cooperatively to develop national standards.

ANSI/ASAE S276.5 FEB03: Slow-Moving Vehicle Identification Emblem

The standard requires that an identification emblem consist of a fluorescent orange equilateral triangle, positioned pointing up, with a red retroreflective border. The emblem manufacturer must place its name and address on the face of the emblem in the lower center or lower right corner, and certify that it complies with the standard.

The emblem must be visible as a hollow red triangle from between 100 and 600 feet from the rear when directly in front of lawful vehicle low beam headlights. The retroreflective backing material must be at least as large as the emblem. (Additional dimensional specifications are identified in the standard.) The backing material must meet color and reflectivity specifications, and must undergo an exterior durability test with no cracking, crazing, blistering, loss of adhesion, or dimensional change. The material must show no corrosion or edge fading, and must meet adhesive requirements.

The fluorescent material must be visible in the daylight as a red-orange fluorescent triangle from between 100 and 600 feet. The material must be of sufficient thickness and strength to withstand an exterior durability test with no cracking, crazing, blistering, loss of adhesion, or dimensional change. The color, purity, luminance and peak reflectance of the material must be able to withstand the durability test. The color of the material must fall within a specified range, as measured by spectrophotometric color values. The material must be applied with a pressure sensitive adhesive with a certain minimum adhesive value.

The backing material for movable identification emblems must be of a specified minimum thickness, depending on the material. The edges of the backing material must be shaped to minimize personal injury during handling or when mounted. The backing material must be weatherable, semirigid, and have a surface receptive to a durable bond.

A movable emblem must undergo drop tests from a height of six feet onto a smooth, hard surface, at both 75°F and -10°F. The emblem must undergo a corner drop, an edge drop, and a flat surface drop. After the drop test, the emblem still must meet the requirements of the standard. The backing material also must undergo an impact resistance test conducted at about 75°F.

The emblem must be mounted with the point of the triangle upward, in a plane perpendicular to the direction of travel and $\pm 20^\circ$ from the vertical. The emblem must be visible from the rear of the vehicle and must be as near to the rear and centered, or as near to the left of center as is practical. The lower edge of the emblem must be between two and 10 feet from the ground. The emblem must be securely and rigidly affixed to the equipment. The reflectivity and fluorescence of the emblem must be unobscured so that the triangular shape is readily identifiable both day and night.

ANSI/ASAE S279.12 DEC02: Lighting and Marking of Agricultural Equipment on Highways

The standard requires that tractors and self-propelled machines have at least two headlamps mounted at the same height and spaced laterally as widely as practicable. Work lamps or general service lamps must be aimed downward to provide illumination close to the machine, and if they are projecting to the rear, must not be illuminated during highway travel.

Two red rear lamps must be symmetrically mounted to the rear of the machine and spaced as widely as is practicable, but not more than five feet to the left and right of center, and between 3.3 and 10 feet high.

At least two amber flashing warning lamps conforming to the standard must be mounted symmetrically and as widely spaced laterally as practicable, visible from both front and rear. The lamps must flash in unison at a rate of 60 to 85 flashes per minute. If the machine is wider than 12 feet, two amber flashing warning lamps must be mounted within 16 inches of the extremities of the machine. These may be in addition to, or in place of, the warning lamps specified above.

The standard also sets specifications for turn indicators, retroreflective devices, and strips of conspicuity material on the front and rear of the machine. The standard requires equipment to be marked for width and for length with conspicuity material. The equipment also must display a Slow-Moving Vehicle identification emblem.

Any equipment that obscures the illumination of any flashing warning lamp, tail lamp, or extremity lamp must be fitted with additional lamps on the obscuring equipment. The standard requires and gives specifications for amber flashing warning lamps, red tail lamps, and turn indicators for the lighting of equipment length and width.

The machine must be equipped with a seven-terminal receptacle conforming to certain specifications (for the powering of lights illuminating towed or non-self-propelled equipment).

Legislative Analyst: Curtis Walker

FISCAL IMPACT

The bill would have no fiscal impact on State or local government.

Fiscal Analyst: Stephanie Yu

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.