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REVISE LOG HAULING TRUCKS' TIE-DOWN RULES; EXTEND ALLOWABLE LENGTH

House Bill 4154 as enrolled
Public Act 142 of 2003
Second Analysis (9-9-03)

Sponsor: Rep. Tom Casperson
House Committee: Transportation
Senate Committee: Transportation

THE APPARENT PROBLEM:

Pulpwood (logs whose diameter is less than 10 inches) and saw logs (logs larger than 10 inches in diameter) are transported from the forest to the mill by trucks and trailers. The logs are cut in 8 foot 4 inch lengths, or 100 inches, as specified by the mills.

Generally when loads of unprocessed logs are transported to the mill, they are cross-hauled, or stacked in a way that the load runs horizontally, the ends of the logs facing the edges of the roadway. The cross-hauled stacks of logs, called decks, are bound by chain to the bed of the truck. Arranging the decks and securing the chains poses hazards for the timbermen who load the trucks.

During the winter months when the logs and the chains that bind them to the truck-bed are ice-covered, a log can slip out of the deck as the ice melts while the product is being transported to the mill. Once out of the deck, a log can bounce off the truck, and create a serious safety hazard on the highway. In fact, in 1998, and under similar circumstances, a mother and her two-year old daughter were killed when a log hauling truck lost its load on a roadway in the west end of the Upper Peninsula. According to committee testimony, there have been nearly 50 log spills from trucks since that time, none of which caused serious injury or death.

In order to haul logs more safely, some timber industry representatives are pioneering a new log truck design called a crib truck. They have suggested that logs should be hauled in crib trucks so they can be loaded lengthwise (rather than be cross-hauled), arranged in a manner so that the ends of the logs are perpendicular in relation to the cab of the vehicle, thereby giving the load far greater stability. In a crib truck, the sides of the log-hauling truck are staked—generally, a minimum of two stakes on each side of the vehicle per tier of logs—and the truck is fitted

with headboards and bulkheads at the front and back of the trailer, forming a kind of cage.

According to committee testimony, there are currently two crib trucks operating in Michigan, the result of a waiver from federal regulations issued about three years ago by the U. S. Department of Transportation. The waiver was issued on the condition that a study be undertaken to determine the safety of the new design. That study, managed by Lt. Tom Ranta of the Upper Peninsular Motor Carrier Division of the Department of State Police, is now underway at Michigan Technological University where engineers are testing the dynamics and structural integrity of the crib trucks, as well as their ease of movement given the turning radiuses at intersections, and the width of the streets upon which they travel. According to a Michigan Department of Transportation spokesperson, a preliminary report of study results is expected later this year.

Under current federal and state laws, the maximum length for a truck and semi-trailer or trailer that is used to transport saw logs, pulpwood, and tree length poles is 70 feet. Generally, the overall length of the crib trucks is longer, at 75 feet, after the safety devices, or cages, are added at both ends.

Legislation has been proposed to allow longer log trucks and also to reduce the load tie-down requirements when the load is arranged lengthwise on a crib truck.

THE CONTENT OF THE BILL:

House Bill 4154 would amend the Michigan Vehicle Code to extend the allowable length of log hauling trucks, and revise the tie-down requirements under certain circumstances.

House Bill 4154 (9-9-03)

Currently the law specifies that the normal maximum length of a single vehicle is 40 feet, and any single bus or motor home, 45 feet. Under the bill these provisions would be retained, and in addition the bill would specify that the normal maximum length of a crib vehicle on which logs were loaded lengthwise would be 42.5 feet. Further, the law currently specifies that certain vehicles and combinations of vehicles cannot be operated on a designated highway in excess of certain lengths. In particular the law specifies that truck and semi-trailer or trailer combinations cannot exceed 65 feet, except that a person can operate a truck and semi-trailer or trailer that does not exceed an overall length of 70 feet if it is designed and used to transport saw logs, pulpwood, and tree length poles. House Bill 4154 would retain these provisions, but specify that a crib vehicle and semi-trailer or trailer designed and used to transport saw logs could not exceed an overall length of 75 feet. The bill also specifies that a crib vehicle and semitrailer or trailer designed to and used to transport saw logs could not exceed a gross vehicle weight of 164,000 pounds. However, the bill specifies that the provision concerning the length of a crib vehicle on which logs were loaded lengthwise would not apply unless section 127(d) of title 23 of the United States Code, 23 U.S.C. 127 were amended to allow crib vehicles carrying logs to be loaded as described in the bill.

House Bill 4154 also would add a section to the code to prohibit a person from operating a crib vehicle carrying logs in which the logs were loaded lengthwise of the vehicle, unless the logs were loaded and secured as follows:

- the vehicle had sides, sideboards, or stakes; a front headboard, bulkhead, or frontgate; and a rear headboard, bulkhead, or endgate, each of which was strong enough and high enough to assure that the load would not shift or fall from the vehicle;

- the sides, sideboards, headboard, bulkhead, or front- or rear-end gate that were in direct contact with the ends of the logs did not have an aperture large enough to permit logs to pass through it;

- there were a minimum of two stakes on each side of the vehicle per tier of logs;

- vehicles with steel stakes and pockets had cross chains for each tier if the load extended more than five feet above the loading surface (however, vehicles with permanent steel gusseted bunks would not be required to have cross chains);

- three additional lights were on the upper rear of the vehicle;

- vehicles over 102 inches wide had lights placed at each stake along the longitudinal length of the vehicle; and,

- not more than one-half the diameter of the top logs extended higher than the stake tops when loaded.

House Bill 4154 specifies further that tie-downs would not be required if the following loading procedures were used:

- the distance between a tier of logs and a headboard, bulkhead, front- or rear-end gate, or another tier of logs did not allow a log to lose contact with a side stake if a log were to shift forward or backward; and,

- each tier of logs was loaded to the same height from the stake tops to prevent movement.

Finally, House Bill 4154 specifies that one tie-down assembly that met the requirements of this act and federal regulations would be required for each tier of logs under the following conditions:

- there was a distance large enough between a tier of logs and a headboard, bulkhead, front- or rear-end gate, or another tier of logs to allow a log to lose contact with a side stake if a log were to shift forward or backward; or,

- each tier of logs was not loaded to the same height from the stake tops to prevent movement.

However, the bill specifies that this subsection would not apply unless section 127(d) of title 23 of the United States Code, 23 U.S.C. 127 were amended to allow crib vehicles carrying logs to be loaded as described in the bill, and a waiver of the tie-down requirements under 49 C.F.R. 393.116 were authorized by the U. S. Department of Transportation, Federal Motor Carrier Safety Administration.

MCL 257.719 and 257.720

BACKGROUND INFORMATION:

During the last legislative session a similar bill was reported from the Transportation Committee. At that time, officials from the Michigan Department of Transportation cautioned that the federal government could sanction the state, withholding 10 percent of its federal transportation funds—or \$80 million—if

Michigan law allowed trucks to travel upon its roadways when those trucks exceeded the federal maximum length and weight restrictions. They pointed out that already Michigan allows the heaviest trucks on the continent—exceeding the weight of log trucks in every state and throughout Canada—with a limit set at 164,000 pounds of gross vehicle weight. The department advised that the federal government was unlikely to look away if Michigan enacted that bill into law. Instead, the MDOT officials urged that policymakers await the results of a crib truck safety study then (and currently) underway, and then allow the U.S. Department of Transportation to consider the safety record of crib trucks, as it considers whether they should be allowed, or even encouraged, to work on the state's highways.

In particular, department officials noted that there are currently two crib trucks in operation in Michigan, both equipped with safety devices designed by their drivers. Because the length of the crib trucks exceeds federal regulations by five feet, the crib trucks are the subject of the federal Log Truck Safety Study that is being managed by Lt. Tom Ranta of the Upper Peninsula Motor Carrier Division in Marquette, Michigan. The study was required when the federal government waived the length and weight regulations for the new trucks about three years ago, in an effort to study their design features and records of safety. The study of the crib trucks' structural integrity, and also their ease of movement given both the turning radiuses at the intersections they must negotiate, and also the width of the roadways they travel, is being undertaken by engineers at the Michigan Technological University. Preliminary study results are expected later this year.

FISCAL IMPLICATIONS:

The House Fiscal Agency notes that the bill is similar to one that was introduced at the end of the last legislative session. At that time the Michigan Department of Transportation indicated that the bill, if enacted, could affect the governor's ability to certify to the Federal Highway Administrator that the state is in compliance with the size and weight limitations of Section 658 of Title 23 of the code of Federal Regulations (23 CFR). Annual certifications of compliance are required by 23 CFR Section 657, and the state is subject to federal sanctions for non-compliance, including withholding of federal highway funds. During the last legislative session, the department estimated the sanction could range from \$65 million to \$100 million per year.

This bill has been written to say that if the U. S. Department of Transportation determined that the federal funding sanctions applied, then these provisions of the law would be null and void. (3-13-03)

ARGUMENTS:

For:

The timbermen who are pioneering crib trucks to transport logs in Michigan's northern logging industry have undertaken their mission in the interest of safety—both increasing the safety of the roadways for those who travel upon them together with the log-hauling vehicles, and also increasing the safety of their fellow workers who must chain and secure the decks of logs, often working in hazardous conditions where their loads are unstable. Their efforts to revolutionize log transport within their industry should be supported, despite the fact that the changes in truck design they propose would violate current federal regulations concerning the overall length and weight of log-hauling vehicles. Efforts are underway by safety advocates to change the federal law, in order to allow the new, safer crib trucks. This legislation supports those safety advocates as they work with elected and appointed officials in the federal government to amend the U.S. Code.

For:

If the law is rewritten to allow timbermen to increase the length of wood hauling trucks to 75 feet, then operators of the trucks could equip their trailers or the beds of the vehicles with stronger headboards, bulkheads, and stakes to ensure the product is transported safely. Some timbermen are interested in re-equipping their vehicles with these safety features, even though the cost ranges between \$25,000 and \$50,000 per vehicle to do so. Further, the larger vehicles could be better lit, so passing motorists and those charged with regulating the transport can better see the size of the load.

Response:

The law is voluntary, providing an option for log-haulers to up-grade their truck fleets. There is no certainty that many log-hauling operations would bear the expense to make log transport safer.

Against:

In December 1999, the legislature passed Senate Bill 581, later enacted as Public Act 7 of 2000, which allowed log haulers to increase the *width* of their vehicles. Now, legislation is proposed to increase the *length* of the log trucks. If the length of the trucks increases as this legislation proposes, then there will

be an opportunity for operators to reconfigure the placement of the 11-axles currently allowed. If the axle placement is changed to redistribute the weight of the load, it will be possible to carry a heavier load. Already a fully loaded log truck can weigh as much as 160,000 pounds—80 tons. A truck this heavy takes a great deal of distance to come to a complete stop. And in an emergency situation, stopping in a short distance or making an evasive move is extremely difficult for the driver. And, as all the log-haulers' fellow motorists are well aware, larger vehicles and heavier loads make public thoroughfares less safe for automobile traffic on narrow two-lane roadways. The bill should contain a restriction to prohibit an increase in load weights and axle reconfiguration.

Response:

Although these trucks would be longer and possibly heavier, they would also be safer, since the log load would not be able to shift during the driver's evasive moves or sudden stops. The crib confines the logs, and prevents load spills. There have been nearly 50 spills recorded since two fatalities in 1998. It is only a matter of time before more death or serious injury occurs after a spill. Safety--not vehicle length or truck weight--is the key issue, and this legislation could make the roads safer to travel, without worry of a log spill.

Reply:

Truck weight is an important issue, and to ignore it could well result in Michigan losing federal funds because it allows trucks to operate in violation of federal standards.

Response:

The bill has been amended to ensure that the new length standards could not result in an increase in weight beyond the current limit of 164,000 pounds. Further, the bill also was amended to specify that the new length standard for log hauling crib trucks would not go into effect unless section 127(d) of title 23 of the U.S. Code were amended to allow crib vehicles carrying logs to be loaded as described in the legislation, and a waiver of the tie-down requirements under federal rules [49 C.F.R 393.116] was authorized by the U.S. Department of Transportation, Federal Motor Carrier Safety Administration.

Analyst: J. Hunault

■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.