

*Before the*  
**Committee on Small Business**  
**The United States House of Representatives**

*Statement of Collin Stewart*  
*President, Stewart Transport, Inc.*  
*On behalf of the American Trucking Associations*

*Hearing on*  
**Highway to Headache:**  
**Federal Regulations on the Small Trucking Industry**

November 29, 2017



The American Trucking Associations submits the following comments to the U.S. House of Representatives Small Business Committee in anticipation of their hearing on Wednesday, November 29, 2017 titled *Highway to Headache: Federal Regulations on the Small Trucking Industry*. ATA is a united federation of motor carriers, state trucking associations, and national trucking conferences created to promote and protect the interests of the trucking industry. Directly and through its affiliated organizations, ATA encompasses more than 34,000 motor carriers, both large and small of every type and class of operation in the United States, Canada, and Mexico.

ATA is pleased the Committee is discussing the impact of federal regulation on the trucking industry. In fact, ATA has been working diligently to identify unnecessary or overly burdensome regulations to submit to the Department of Transportation in response to their notice of regulatory review. The substance of these comments, which specifically identifies a host of regulations that should be repealed or adjusted that reduce the regulatory burden on the industry while maintaining safety, are included as an appendix to this statement. With that said, ATA cautions the committee against labeling all regulations as unnecessary and/or burdensome. Specifically, ATA would like to provide a viewpoint counter to those held by other witnesses with regard to the Electronic Logging Device regulation.<sup>1</sup> It is a viewpoint based on facts and real-world experience which support on-time implementation of this important regulation.

ATA is a strong defender of the Electronic Logging Device final rule. As a committed advocate for the safe and efficient transportation of freight over America's highways, ATA believes ELDs will improve safety by ensuring strict compliance with HOS requirements. ATA advocated for the ELD provision in the Moving Ahead for Progress in the 21<sup>st</sup> Century Act and has been working with the Federal Motor Carrier Safety Administration and law enforcement to ensure a full and timely implementation of the ELD requirement.

The ELD rule is a bipartisan effort to improve safety on our nation's highways. Congressmen and Senators from both parties have voted to support this rule several times. First, in 2012, when they passed the Moving Ahead for Progress in the 21<sup>st</sup> Century Act by a 373-52 margin in the Republican controlled House of Representatives and by a 74-19 vote in the Democratic controlled Senate. MAP-21 instructed the Department of Transportation to complete a rulemaking requiring ELDs. In 2015, Congress passed the Fixing America's Surface Transportation Act, which called on FMCSA to complete the work they started pursuant to MAP-21. Here, the Republican controlled Senate voted 83-16 in support, joined by a vote of 359-65 in the Republican controlled House. Since then, Congress included language in the report accompanying the FY 2016 Appropriations Act supporting ELDs and, most recently, voted to reject an amendment to the House FY2018 Transportation, Housing and Urban Development Appropriations Bill which would have delayed ELD implementation.

In the interim, the courts have upheld the constitutionality of the ELD rule, rejecting arguments by opponents that the rule constituted unlawful monitoring and unreasonable search and seizure, and did not provide necessary protections for drivers against possible harassment. In short, all three branches of the federal government have agreed this rule is lawful and necessary.

This rule has been strongly supported by many industry trade groups as well as the Fraternal Order of Police, the National Sheriffs' Association, and the Commercial Vehicle Safety Alliance. Law enforcement

---

<sup>1</sup> 80 Federal Register, 78292 (December 16, 2015)

organizations understand that the ELD gives them the necessary tools to enforce the hours-of-service rules effectively and the trucking industry understands that improved compliance with the hours-of-service rules results in reduced crashes and increased safety.

The ELD rule is all about safety. ELDs reduce accidents by increasing compliance with driver hours of service limits. ELD use has been proven effective. FMCSA's 2014 report titled "Evaluating the Potential Safety Benefits of Electronic Hours-of-Service Recorders" found that carriers using an ELD saw an 11.7 percent reduction in crash rate and a 50 percent drop in hours-of-service violations over carriers using traditional paper logs.<sup>2</sup>

Opponents of the ELD rule make misleading claims about the cost of the rule and its burden on small businesses. One often repeated claim is that the rule will unnecessarily cost the industry \$2 billion. This is an overstatement of the true cost of the rule and completely ignores its benefits to the trucking industry and society at large. In its Regulatory Impact Analysis, FMCSA estimated that the rule will cost the industry \$1.83 billion. Included in that cost is \$790 million in "hours-of-service compliance costs."<sup>3</sup> Essentially, this is how much it will cost carriers who regularly violate hours-of-service rules to gain a competitive advantage. It is, basically, the cost of abiding by the rules to those that have not been. If all drivers currently adhered to the legal limits of the hours-of-service rules, which is a claim of opponents of the rule, the true estimated cost to the industry, absent any benefits, would be just over a billion dollars.

When including benefits in the form of crashes avoided, lives saved, and paperwork savings realized by the trucking industry, which are estimated at just over \$3 billion, the net benefit of the rule, assuming drivers are currently complying with hours-of-service rules, is approximately \$2 billion dollars.

Opponents of the ELD also claim that the use of ELDs will make them less safe by eliminating the flexibility they have by using paper logs. Here it is important to point out, that nothing in the ELD rule changes in any way, the current hours-of-service limits. This is something federal regulators have stated since the beginning. Drivers who claim that ELDs remove their discretion in deciding when to take a break or when to drive either do not understand how the current rules are structured or are willfully ignoring them.

Under the rules, once a driver begins working, they have 14 hours to complete their driving. Referred to as the "14 hour clock," it cannot be paused once a driver begins work for the day according to rules in place since 2004. In addition to time spent actively driving, this on-duty time includes time spent waiting to be loaded at the shipper, stuck in traffic congestion, or unloading at the consignee. Because circumstances like these can limit time spent driving to the destination, some drivers use the "flexibility of paper logs" to inaccurately record working and driving time, allowing them to work and drive longer than currently allowed by the hours-of-service-rules. No matter how a driver logs their hours, the rules remain the same. Additional flexibility cannot legally be gained by changing the method a driver uses to record time spent working.

---

<sup>2</sup> 79 Federal Register 27041 (May 12, 2014)

<sup>3</sup> Federal Motor Carrier Safety Administration, *Regulatory Evaluation of Electronic Logging Devices and Hours of Service Supporting Documents Final Rule*, Nov. 2015, pg iv, available at <https://www.regulations.gov/document?D=FMCSA-2010-0167-2281>

Fundamentally, concerns about reduced flexibility remain an hours-of-service complaint. The ELD rule only changes the method drivers must use to log time spent working and driving, not how time must be accounted for. To be clear, claims that ELD opponents make about a driver losing flexibility to take breaks or account for delays at the shipper, consignee, in congested traffic or due to an unexpected weather event are not about ELDs. They are concerns about the appropriateness of the current hours-of-service rules.

Some claims that motor carrier visibility to a driver's available hours may result in trucking companies or shippers forcing drivers to work up to the legal limit without allowing for needed breaks are also unfounded. The issue of driver harassment was thoroughly addressed in the ELD final rule. In fact, it was a key tenet of the lawsuit the Owner Operators Independent Driver's Association brought against FMCSA following publication of the ELD final rule. Here, the courts found that FMCSA satisfactorily addressed driver harassment in the final rule. Indeed, the final rule contains multiple protections for drivers against harassment and erects an easy and efficient process for drivers to bring complaints against bad actor employees.

Other opponents of the ELD rule claim that it is an ill-conceived, one-size-fits-all solution that cannot accommodate the diversity of the trucking industry. To be sure, the hours-of-service rules are complex and various classes of drivers and companies enjoy specific exemptions and exceptions to the rules based on the needs of their industry segment or company. Fortunately, FMCSA designed the ELD rule with enough flexibility to accommodate these differences. This flexibility afforded to ELDs is nearly identical to how these exemptions and exceptions are handled today. Currently, if a driver is operating under a specific exemption or exception, they notate it on the paper record of duty status and explain their exempted or exempted status to roadside law enforcement. Under the ELD rule, all certified devices are required to have a function that allows the driver to add remarks or annotations to their electronic record of duty status. Though initially, the log, when verified by roadside law enforcement's computer software, may indicate that the driver is in violation of the rules, the remarks and a conversation with the driver would quickly reveal the specialized status of the driver. This is true of the paper logs being used today. If completed honestly, the law enforcement official would quickly surmise that the driver may be in violation of the rules. The remarks on the logs and a conversation with the driver, however, would illuminate the driver's unique driving privileges.

It is also important to note, however, that many ELD providers already accommodate the many possible driver exceptions or exemptions. Indeed, in the crowded field of certified ELD devices, which currently numbers nearly 200, those that have not yet coded their devices to allow for these exceptions and exemptions, are in a rush to do so in order to mitigate the competitive advantages enjoyed by those that have.

In summary, ATA and several other important industry trade groups fully support on-time implementation of the ELD rule. So too does law enforcement, eager to be given another tool with which to monitor hours-of-service compliance and make their jobs easier and more efficient. ELDs are about improving safety and reducing crashes. The estimated benefits of this rule more than outweigh any costs borne by motor carriers large and small. The ELD rule did not change the hours-of-service rules at all and therefore will not reduce productivity or efficiency for those that are currently compliant with the rules. The ELD rule contains strong protections against driver harassment and contains enough

flexibility to accommodate the many hours-of-service rule sets available to drivers. The ELD rule is good for safety and good for the trucking industry.

## Appendix

### ***Other regulations identified by ATA for removal or adjustment:***

#### **Motor Carrier and Driver Safety Regulations**

##### **High Priority:**

1. **Add flexibility to the split sleeper berth rules** – Adjust the regulations to allow for additional flexibility for drivers who utilize the split sleeper berth rules. Specifically, allow drivers to split their sleeper berth period into any two periods of time greater than 2 hours. -- 49 CFR §395.1(g).

**Rationale:** The currently sleeper berth rules are designed to provide flexibility for drivers of trucks equipped with sleeper berths as to when is best to take their required 10 hours off-duty. At the time the rules were most recently modified (2005), it was reasoned that requiring eight consecutive hours off duty for one of the sleeper berth splits was appropriate because the latest research indicated that consolidated sleep of at least 8 hours was more recuperative than a combination of shorter periods of time. Since then, however, new research has indicated while consolidated nighttime rest may be preferable, for drivers whose consolidated rest period occurs in the daytime, allowing them to split their sleeper berth periods into shorter periods of time is more effective.<sup>4</sup>

Changing these rules may benefit fleet efficiency and safety in other ways too. Additional flexibility in the sleeper berth rules could allow drivers to obtain needed rest during rush hour periods, during which truck drivers are slowed by congestion and are exposed to greater crash risk as exposure to casual motorists increases.

2. **Remove regulations requiring motor carriers to verify medical examiner certificate (MEC) using the driver's motor vehicle record** – Delete the regulation that requires that motor carriers verify information contained on the MEC by purchasing a Commercial Driver's License Information System MVR within 15 days of the CDL holder being certified. -- 49 CFR 391.51(b)(7)(ii)

**Rationale:** Motor carriers have long been required to verify that their drivers are medically qualified before allowing them to operate a commercial motor vehicle. In the past, after a driver visited a medical examiner and was cleared to drive, motor carriers were required to place the medical examination certification in the driver's qualification file. New rules implemented January 30, 2015, however, require motor carriers to purchase a CDLIS MVR from the state of licensure and place it into the driver's file instead of the med card.<sup>5</sup> This despite the fact that the information contained on the MVR is virtually identical to that available on the med card. The cost

---

<sup>4</sup> Federal Motor Carrier Safety Administration, *Investigation of the Effects of Split Sleep Schedules on Commercial Vehicle Driver Safety and Health*, December 2012.

<sup>5</sup> 79 Fed. Reg. 2377 (January 14, 2014).

to obtain these reports varies from state to state and range from \$1.25 in Missouri to \$27.50 in Oklahoma. While some drivers receive a new card every two years, many must be recertified every year or more often. This exacerbates costs expended on tracking when new reports need to be obtained for each driver. Additionally, states are allowed up to 15 days to update a drivers CDLIS MVR record, during which time motor carriers are allowed to file a copy of the driver's med card in lieu of the MVR. Unfortunately, it takes some states at least 15 days to update information, meaning a motor carrier might purchase an MVR only to find out the information has not been updated. This requires a subsequent purchase to verify that the driver qualification file is up to date.

The burden increases considerably for carriers who purchase the required MVR pre-hire and then require new drivers to be recertified by a physician they trust. This requires an additional MVR purchase once the driver is recertified.

This regulation provides no safety benefit while significantly increasing carriers' compliance cost and number of violations.

3. **Expand the short haul exception for CDL drivers** – Update the hours-of-service rules to bring the CDL short haul exemption in line with other hours-of-service exemptions. Specifically, change the work day from 12 to 14 hours to mirror current hours-of-service rules<sup>6</sup> and change the 100 air mile radius (AMR) to 150 miles to be consistent with other exceptions.<sup>7</sup> --49 C.F.R. §395.1(e)(1)

**Rationale:** 49 C.F.R. §395.1(e)(1), commonly referred to as the short haul exception, exempts drivers of vehicles requiring a CDL from having to maintain a Record of Duty Status and supporting documents. Instead these drivers can record their hours of service using a simple timecard. Often confused with the short haul exemption for non-CDL drivers, to qualify for this exception, a driver must stay within a 100 AMR of the normal work reporting location and must be released within 12 hours (the non-CDL exemption states restricts driving after 14 hours and allows drivers to operate within a 150 AMR ). Robert Miller, FMCSA Director of Policy, Strategic Planning and Regulations suggested simplifying these rules during the June 12, 2017 Motor Carrier Safety Advisory Committee meeting to make enforcement and compliance easier and to create parity with other exemptions.<sup>8</sup> ATA agrees that it is prudent to extend the AMR to 150 miles and extend the workday to 14 hours to ease enforcement.

---

<sup>6</sup> 49 C.F.R. 395.3(2)

<sup>7</sup> 49 C.F.R. 395.1(e)(2) and 49 C.F.R. 395.1(k)

<sup>8</sup> Presentation to Motor Carrier Safety Advisory Committee, June 12, 2017, slide 6, <https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/mission/advisory-committees/mcsac/81066/mcsac-executive-orders-reg.pdf>

### Medium Priority

4. **Limit onerous Hours of Service Supporting Documents for drivers using Electronic Logging Devices** – Delete some of the regulations requiring motor carriers to collect and retain supporting documents to verify the accuracy of hours-of-service logs generated by an ELD. – 49 CFR §395.11

**Rationale:** Beginning December 18, 2017 all drivers required to maintain a paper log must record their hours-of-service compliance electronically. Doing so will ensure much greater compliance to the HOS rules and eliminates the need for the collection and retention of redundant supporting documents. Currently, drivers and trucking companies are required to collect and retain any document produced in the normal course of business that may corroborate entries made on the driver record of duty status. This allows law enforcement, either at roadside or during a compliance review, to compare the information on the supporting document with information entered on the log to verify its accuracy. Many of the supporting documents expected to be retained, however, are far less precise determinates of a driver's location and duty status than what is stored in the ELD. Therefore, the regulations should be modified to require motor carriers only obtain and retain the first and last qualified supporting document of the day. This is necessary to verify compliance to the 14 hour and 60/70 rules, which monitor on-duty time, not driving time.

5. **Clarify that the FMCSRs are federally approved standards** – Revise the FMCSRs to exclude specific references to the FMCSRs as required “minimum” standards or qualifications.

**Rationale:** Regulations are the result of a process where all safety factors are considered and the regulation is the result of suggestions by all stakeholders. Thus, the regulation represents the negotiated “standard” in the industry. In some cases it could be a “minimum” but in others it could be the “highest” standard. But, by describing all of the regulations as “minimum” requirements, we do a disservice to our efforts in formulating and promoting certain regulations. This disservice is particularly problematic when plaintiff's attorneys point to specific sections of the FMCSRs which sometimes describe rules as “minimum” standards and suggest that even when a motor carrier is in compliance with the FMCSRs, these are only “minimum” standards.

6. **Rationalize FMCSRs to allow out-of-state knowledge testing and CLP issuance** – Remove several relevant regulations that will allow State Driver's Licensing Agencies to administer the knowledge exam to out-of-state students and issue CLPs on behalf of the state of domicile. -- 49 CFR §383.25(a)(2), §383.71(2)(vi), §384.212

**Rationale:** The 2011 CDL and CLP Standards Final Rule<sup>9</sup> has caused significant challenges for the centralized driver training model employed by publicly funded driver training schools, for-profit schools without fleets of their own, and carrier-run schools. These institutions provide compelling incentives for candidates to travel out-of-state to their truck driver training school where focused,

---

<sup>9</sup> 76 Federal Register 26854 (May 9, 2011)

thorough, and consistent instruction can be accomplished through economies of scale. To comply with the new rules, States can no longer issue temporary CLPs or CDLs to out-of-state students. Students must now: 1) travel to the school for classroom instruction; 2) travel back to his or her home to take the written exam and obtain a CLP; 3) return to the training school for behind-the-wheel range and road training and to take the necessary skills test; and 4) finally return to his or her state of domicile to obtain the CDL document. This doubles the travel requirement and creates a significant disincentive for potential candidates. Rationalizing this process will empower these training institutions to continue recruiting candidates nationwide and help shore up the looming truck driver shortage with well-trained, safe drivers.

7. **Revise the definition of a tank vehicle** – Revise the definition of a tank vehicle to exclude the hauling of portable (non-attached) tanks with a rated capacity of over 119 gallons and an aggregate threshold of 1,000 gallons. -- 49 C.F.R. § 383.5, and Guidance Question 13

**Rationale:** In May, 2011 the Federal Motor Carrier Safety Administration finalized new Commercial Driver's License rules. In that rulemaking, FMCSA determined it was necessary to amend the definition of a tank vehicle, which controls whether or not a driver needs a Tanker Endorsement in order to operate the vehicle. The new definition dramatically changed who was required to have a tanker endorsement by counting portable tanks, either permanently or temporarily attached, with a rated capacity of over 119 gallons toward an aggregate threshold of 1,000 gallons, after which a tanker endorsement is required.<sup>10</sup> Previously, as long as the single portable (non-attached) tank had a rated capacity of under 1,000 gallons, a tanker endorsement was not required.

This is especially significant given the relatively common scenario in which a driver is hauling intermediate bulk containers (IBC) on a dry van, which have a rated capacity between 275 and 330 gallons. IBCs and similar containers are almost always shipped completely full, making the impact of slosh, relatively moot. In addition, IBCs shipped on a dry van do not suffer from the increased center of gravity that a typical tanker does. The slosh factor and higher center of gravity are the primary concerns necessitating a tanker endorsement.

In 2012, FMCSA issued guidance on its interpretation of the definition change<sup>11</sup> and in 2013 issued a notice of proposed rulemaking<sup>12</sup> responding to an ATA petition and attempting to codify its previous guidance. It has not yet finalized its rulemaking.

The impact of this change has been significant for LTL carriers. Because of the hub and spoke nature of their business, they have been forced to require all of their drivers, regardless of the equipment type they are expected to drive, to also seek and obtain a tanker endorsement.

---

<sup>10</sup> 76 Federal Register 26866 (May 9, 2011)

<sup>11</sup> 77 Federal Register 30919 (May 24, 2012)

<sup>12</sup> 78 Federal Register 59328 (September 26, 2013)

8. **Allow Emergency Response Information required when hauling hazardous materials to be provided in electronic format provided it is readily accessible if needed.** – 49 CFR §172.600

**Rationale:** The Hazardous Materials Regulations require that Emergency Response Information be printed and kept in the vehicle. In today's digital world, allowances should be made for digital storage and retrieval of this information. In fact, digital storage and transmission of this information could prove more effective in the event of an incident that requires reference of these materials.

**Needed but less urgent**

9. **Delete the regulation that requires the CDL driver applicant to include 10 years of employment history.** – 49 CFR §391.21(11)

**Rationale:** During the hiring process, CDL drivers are required to include 10 years of employment history on their applications. Motor carriers however, are required to verify CDL, violation, accident and drug testing information from the applicant's previous employers from only the last three years. This is because this information is often irretrievable after three years. Motor carriers wanting to verify employment status past the minimum three years should be allowed to do so voluntarily but, given the dearth of information available and the inefficiency of gathering it, review and collection of this data should not be required.

10. **Delete record of violations requirement** – Remove the requirement that drivers annually self-report violations and that motor carriers retain the list in the driver's qualification file. – 49 CFR §391.27

**Rationale:** The regulation (49 CFR §391.27) requires that at least once every twelve months, motor carrier require their drivers to provide a list of violations (other than parking) that the driver has been convicted of in the past year. Motor carriers must then retain this list in the driver's qualification file. 49 CFR §391.25 requires motor carriers to order a driver's Motor Vehicle Record at least annually. The driver's MVR contains the same information that the driver is required to disclose and is also required to be placed in the driver's qualification file. The subject regulation is redundant and should be removed.

11. **End the Blind Specimen Submission Requirement** – 49 CFR §40.103

**Rationale:** The blind specimen submission requirement targets a tiny percentage of the motor carrier industry – those employers of 2000 or more drug-policy covered employees. The regulation transfers the government's responsibility of ensuring the validity of laboratory testing to motor carriers. While ensuring laboratory accuracy is an important aspect of the drug and alcohol testing program, this responsibility should rest with the laboratory or a standards monitoring body, not the motor carrier customer.

## Commercial Motor Vehicle Safety Regulations

### High Priority:

1. **Enforce the existing ATA petition on amending natural gas container inspection intervals –** Change the safety standard for inspection intervals of compressed natural gas (CNG) containers to only a time threshold of 36 months with no mileage limitation. Specifically, amend the safety standard to only a time restriction of 36 months, of which the annual DOT inspection is subjective to regardless. – 49 CFR 571.304

**Rationale:** ATA submitted a petition to NHTSA on April 13, 2016, by the recommendation of its members who operate a substantial amount of natural gas commercial motor vehicles (NGCMVs). The petition's recommendation reflects the report FMCSA released in March 2013 – *Natural Gas Systems: Suggested Changes to Truck and Motorcoach Regulations and Inspection Procedures* and parallel petition of NGVAmerica. Currently, a visual inspection is required for CNG containers on motor vehicles every 36,000 miles or 36 months, whichever comes first. The 36,000 mile distance limitation interval was meant for light-duty vehicles and was never considered for high-mileage heavy-duty trucks. The inspection averagely takes NGCMVs out of service for four days a year at an annual cost up to \$2,500 per vehicle – the U.S. operated 39,500 NGCMVs since ATA submitted the petition.

Over a year has passed since NHTSA received the petition. Fleets required to use NGCMVs for emission regulations or manifesting clean technology are growing and still being operationally and financially burdened by this rule. ATA requests this petition be granted as soon as possible.

2. **Revise the semi-truck rear license plate light standard to delete the installation requirement –** Change the standard for semi-truck lighting to not include rear license plate lamp requirements as the International Registration Plan (IRP) does not require the vehicle to have a rear license plate. This recommended change would make the NHTSA regulations consistent with FMCSA's 2015 regulation change that deleted the requirement. – 49 CFR 571.108

**Rationale:** Most motor carriers purchasing vehicles in the U.S. are forced to purchase rear license plate lamps on their new vehicles even for equipment and jurisdictions that do not require rear license plates. The IRP require carriers to place their single license plates on the front of semi-trucks over 80 inches wide that normally pull trailers. After purchasing these new vehicles, fleets immediately remove the rear license plate light as a repair during pre-delivery inspections. The extra cost of such lighting requirement, vehicle downtime, and aftermarket repair is estimated at \$200 per vehicle. This initial repair may cause additional equipment issues depending how the repair is completed. Also, if the lamp is not removed and becomes inoperable, the enforcement

finances create an additional expense. As semi-trucks are connected to a semi-trailer when operational, and semi-trailers are regulated with corresponding standards to have a rear license plate lamp, the requirement for a semi-truck rear license plate light is an unnecessary burden.

Additionally, the license plate lamp is not a safety device and is not visible to the trailing vehicle in more than 90% of the normal operating environment. Deleting the requirement would also help harmonize differences with regulations in the FMCSR. Therefore, this standard provides no safety benefit while significantly decreasing carriers' compliance cost and number of violations.

3. **Adjust safety standards to use Society of Automotive Engineering wiring standards for all commercial vehicle safety technologies** – Add required language in the standards of commercial vehicle safety systems to maintain the use of SAE wiring standards applicable to their underlying technology systems. Specifically, reference SAE and TMC recommended practices intended to provide safe and reliable electrical performance:
- SAE J1127 Low Voltage Battery Cable
  - SAE J1128 Low Voltage Primary Cable
  - ATA TMC RP110 Low-Voltage Primary Cable for Heavy-Duty Truck-Tractor Wiring Systems
  - ATA TMC RP166 Low-Voltage Primary Electrical Cable Specification for Heavy-Duty Electrical Repair

European vehicle connector manufacturers have begun to use the International Organization for Standardization (ISO) standards and are no longer providing SAE compatible components, forcing motor carriers to use components designed to the ISO standards. ISO wiring standards have lower safety and performance requirements than SAE standards.

SAE standards are developed specifically for components used in vehicles, with an understanding of the operating environment. ATA's Technology & Maintenance Council recommended practices are developed with intention to maintain vehicle systems in a manner that will ensure reasonable durability and reliability. Both SAE and TMC are aware of a growing concern by truck manufacturers and fleet operators over the ISO minimum wiring standards being implemented in U.S. commercial vehicles, which have a higher risk of thermal events and more frequent safety technology failure rates.

**Rationale:** Allowing ISO wiring standards in the U.S. commercial vehicle market lowers the performance and safety standards set and agreed by industry engineers and end-users. Although U.S. auto manufacturers have adopted ISO wiring standards, commercial operations, design, and business applications are much different by vehicle duty cycle and component lifecycle. Additionally, the U.S. economy is dependent on commercial motor vehicles to deliver most of its freight. Therefore, it is important for fleet equipment to stay operational.

Compared with wiring meeting SAE standards, ISO wiring has thinner and poorer insulation wall thickness, leading to increased wear and pinch, and a higher risk of thermal events. ISO wiring also has smaller asymmetrical conductors that are prone to higher field failures from abrasion and wear. ISO wiring also includes aluminum conductors that results in higher circuit resistance, higher voltage drop, less durability, and are non-compliant with current technician wiring repair training.

Use of wiring which meets ISO standards also has increased industry costs due to corrosion vulnerability, longer equipment downtime, more frequent ordering and replacement of parts, and equipment rental fees.

4. **Amend the headlamp safety regulation to use and reference industry recognized practices for lens coating material** – Add required language in the headlamp safety regulation to maintain lens coating durability and reliability. – 49 CFR 393.24; 49 CFR 571.108

Specifically, reference SAE and TMC practices intended to provide performance requirements that will be a predictor of lifetime performance for headlamp lenses on commercial vehicles in the field:

- ATA TMC RP 171 High-Performance Coatings for Forward Lighting on Commercial Trucks
- ATA TMC RP 172 Recommended Cleaning and Maintenance of Headlamps for Commercial Vehicles
- SAE J3086 Performance of Headlamp Lens Systems Durability

**Rationale:** Current regulations require plastic headlamp lenses to satisfy three years of outdoor weathering, which is performed on substrate plaques with coating combinations. Abrasion resistance is also a requirement included in current regulations in order to justify plastic materials as a replacement for glass in headlamp lens systems. These requirements were satisfactory when the average fleet of commercial vehicles replaced vehicles after approximately five years of service. With commercial vehicles now in service for longer periods of time, the aforementioned tests do not accurately predict the durability of the headlamp lens system over its lifetime. Deterioration of the headlamp lens dramatically limits vehicle's primary night time safety system, increases glare toward oncoming motorists, and presents a significant hazard to pedestrians.

Many vehicle platforms are showing signs of significant headlamp coating deterioration after as little as 18 to 24 months in the field. Changing this safety regulation benefits many other technology applications and driver safety areas as well. Furthermore, the elements detailed in FMVSS 108 need to be amended to require a more robust coating for on-road heavy-duty vehicles forward lighting devices.

**Medium Priority:**

5. **Allow camera monitoring systems (CMS) to be optional equipment in place of rearview facing mirrors** – Change vehicle safety standards and regulations to allow commercial motor vehicles to be equipped with either: (1) traditional mirrors; (2) traditional mirrors with CMS; (3) CMS without traditional mirrors. – 49 CFR 571.111; 49 CFR 393.80

**Rationale:** In July, 2016, a UN Global Directive (Regulation No. 46 - Rev.6) was released to allow traditional mirrors for on-road vehicles to be replaced with devices for indirect vision (i.e., camera monitoring systems or CMS). The Directive was adopted by the USDOT with a requirement to keep current mirrors and reflective surface sizes standard. Multiple NHTSA research reports have demonstrated positive results for CMS. ISO has had completed standards for CMS, and SAE is currently developing standards as well. All of the truck manufacturers participating in the

EPA/NHTSA funded SuperTruck programs have used CMS in their designs in place of rearview mirrors for improved aerodynamics and fuel efficiency. Daimler Trucks North America has petitioned NHTSA to allow CMS as an alternative to rear view mirrors on heavy trucks, and Tesla, and the Auto Alliance have petitioned NHTSA to conduct rulemaking to allow CMS for passenger vehicles.

Motor carriers and truck manufacturers recognize the potential of CMS for improving both safe operations and fuel efficiency when compared with traditional exterior mirrors. CMS provide the following functions beyond what traditional mirrors offer: trailer swing video panning view capabilities, wider viewing angles of driver blind spots encompassing multiple mirror locations (i.e. hood spot mirrors) to one vantage point, direct solar glare resistance, and night vision capabilities. CMS can be designed and placed in a way that reduces the chances of damage compared with traditional mirrors, which can improve vehicle uptime, maintenance and operational costs by eliminating traditional mirror repair/replacement and faster driver pre/post trips and technician/officer inspections. Additionally, use of CMS can improve fuel economy and reduce engine emissions through aerodynamic improvements by eliminating the traditional mirrors.

Completed research in reference to this request include:

- DOT HS 811 475 Field Demonstration of Heavy Vehicle Camera/Video Imaging Systems
- DOT HS 811 483 Enhanced Camera/Video Imaging Systems (E-C/VISs) For Heavy Vehicles
- DOT HS 810 960 Development of a Performance Specification for Camera/Video Imaging Systems on Heavy Vehicles
- DOT HS 811 512 Vehicle Rearview Image Field of View and Quality Measurement
- ISO 16505:2015 Road vehicles — Ergonomic and performance aspects of Camera Monitor Systems
- SAE J3155 Camera Monitor Systems Test Protocols and Performance Requirements (WIP)

6. **Allow fleets to design their freight carrying equipment with lowered identification lamps and additional conspicuity tape** – Change the commercial vehicle safety standard and corresponding regulations to allow fleets the option to move identification lamps to the same height requirements as marker and tail lamp specification, and broaden conspicuity tape use in equipment height perimeter areas. Specifically: relocate the forward facing two amber lamps at widest and highest position to the trailer base height, and relocate the rear facing three red lamps equally spaced 6 inches apart at center and highest position to the tail light height requirements. – 49 CFR 571.108; 49 CFR 393.11

**Rationale:** History shows how lighting and reflective device uniformity of commercial trailers and single unit trucks have been segregated by type of freight and fleet operations. Prior to 1999, trailer identification lamps could be positioned at tail light height on some trailer designs based on the manufacturer’s determination of practicability of mounting the identification lights at a higher position. However, in 1999, NHTSA issued an interpretive rule that stated, “manufacturers will be required to satisfy an objective standard of practicability, i.e., if under all the circumstances it would be practicable to locate the identification and clearance lamps above the rear doors, the

manufacturer must do so.”<sup>13</sup> Due to advancements in reflective tape for conspicuity since that time, NHTSA should consider alternatives that would allow for the use of reflective tape above the rear doors and lowering the placement of the identification lamps. Relocating identification lamps to tail light height decreases initial purchase costs, maintenance/repair costs, and can reduce roadside repair costs because repairs are easier and quicker. Additionally, relocating identification lamps to a lower height can decrease work-related injuries by eliminating the need to use a ladder to make repairs on lamps at 13-feet 6-inches high.

Intermodal, conestoga trailers, and flatbed chassis’ operate within the same safety standards and regulations as all commercial trucks and trailers, but do not require lighting positioned highest as practicable. There are also no requirements for trailer vans to have any side clearance lights, only side lower marker lamps as intermodal, conestoga and flatbeds. For conspicuity tape, the replacement of reflex reflectors has been allowed and proven to meet minimum reflective surface standards for showing trailer size in night conditions and lower light visibility.

The amber clearance lamps on the front corners of trailers and box vans are often the first items to make contact with tree limbs and are frequently heavily damaged components in the Northeast and Northwest regions. Expanding the allowable installation of amber clearance lamps will significantly reduce vehicle downtime, while maintaining the effective demonstration on the overall width of the trailer. Additionally, the red identification lamps rear of the trailer and box vans limit the ability to implement aerodynamic technology that may improve fuel mileage and reduce emissions.

Allowing fleets to design their freight carrying equipment with lowered identification lamps is important to technician safety and fleet operations, and would equal requirements for intermodal chassis, conestoga and flatbed trailers.

7. **Allow adaptive driving beam headlamps to be optional safety equipment** – Change safety standards and regulations to allow fleets to design their equipment with ADB headlamps for improved driver vision capabilities. – 49 CFR 571.108; 49 CFR 393.24

**Rationale:** ADB headlamps provide active control of road illumination by allowing portions of the headlamp beam to be dimmed to reduce glare to other drivers or aimed to highlight critical obstacles or sections of the roadway.

Headlamps with ADB technology, as described in the SAE J3069 standard, would allow for increased light on the road while reducing the oncoming glare.

---

<sup>13</sup> 64 Fed. Reg. 16539 (April 5, 1999)

8. **Allow flashing amber warning lighting for emergency braking maneuvers to be optional safety equipment** – Change the safety standard to allow vehicle manufacturers to install amber flashing warning lamp systems on commercial vehicles for emitting strobe “emergency warning lights” when drivers apply the brake pedal in an emergency maneuver. Specifically, alert following drivers with supplemental flashing-amber lighting – which is already permitted by FMCSA – for enhancing conspicuity of the braking vehicle and providing increased warning to other drivers. – 49 CFR 571.108

**Rationale:** Similar supplemental lighting is already in widespread use on commercial vehicles with oversized loads, tow trucks, service vehicles, school buses, and emergency vehicles. Due to uncertainty within the enforcement community and the industry concerning whether installation of such lighting is permitted under FMVSS 108, most such lighting is installed by vehicle owners and fleets themselves, rather than by vehicle manufacturer or third-party repair businesses. Moreover, permitting manufacturers to install flashing amber lamps would harmonize NHTSA’s interpretation of FMVSS 108 with regulations issued by FMCSA, specifically 49 CFR 393.25(e), and enforcement by CVSA.

As noted throughout the Request for Interpretation Letter to NHTSA’s Chief Council Paul A. Hemmersbaugh, Feb. 8, 2016, from the Transportation Safety Equipment Institute and Truck Trailer Manufacturers Association, NHTSA acknowledges the use of such lighting enhances safety and that vehicle owners are permitted to install similar lighting. Allowing manufacturers to install flashing amber warning lighting for emergency braking would not only enhance traffic safety, but add a greater measure of assurance that such lighting complies with applicable SAE standards.

**Needed but Less Urgent:**

9. **Revise the inspection enforcement regulation to not include spare fuses** – 49 CFR 393.95

This regulation specifies that, “Power units for which fuses are needed to operate any required parts and accessories must have at least one spare fuse for each type/size of fuse needed for those parts and accessories.” While rational, this regulation is inconsistently enforced as some enforcement officials lack the understanding necessary to determine which, if any, fuses are necessary. Sometimes this manifests in a driver being cited for not having spare fuses despite the truck not requiring any – relays are now more common in modern motor vehicles rather than fuses.