February 6, 2017

Larry Minor  
Associate Administrator for Policy  
Federal Motor Carrier Safety Administration  
United States Department of Transportation  
1200 New Jersey Avenue SE  
Washington, DC 20590  

RE: Docket No. FMCSA-2016-0443 – Exemption application from Dillon Transportation LLC (Dillon)

Dear Mr. Minor:

On behalf of the Board of Directors of the American Academy of Sleep Medicine (AASM), I am contacting your office to submit comments on the application from Dillon Transportation LLC (Dillon) for an exemption from certain provisions of the Agency's hours-of-service (HOS) regulations.

While the current mandate requires drivers using the sleeper berth to have a minimum rest period of 8 to 10 hours within each 24 hour period, we understand Dillon is proposing to allow its team drivers to split the rest into two separate periods totaling 10 hours. This split can occur as 3 and 7, 4 and 6, or 5 and 5 hours, respectively. We note Dillon would like to mitigate the risk this may incur by reducing drive time by one hour. In effect, this would allow team drivers to operate by taking 3- to 7-hour breaks. The current, well-publicized recommendation for nightly (daily for shift workers) sleep in adults is a minimum of 7 hours. Evidence is lacking that splitting a main continuous sleep period into shorter segments is equally restful.

Variable and split sleep periods also have the potential to contribute to circadian disruption in an already challenged population. Circadian disruption and sleep problems are common among shift workers like team drivers. In fact, sleep problems resulting from circadian misalignment may be a factor influencing team drivers’ employers’ (and perhaps drivers themselves) interest in alternate schedules, as it is well-established that staying asleep for a full 7-9 hour period is difficult for individuals who attempt to sleep when the body clock is entrained to be awake. Little is known about how and when team drivers (in actual practice) trade or switch from nightshift to dayshift driving, which are key factors affecting circadian entrainment and sleep quality and quantity.

We express further concern regarding the paucity of quality scientific evidence to make an informed justification for this proposal, which fragments team driver rest schedules. The brief cited by Dillon in its request seems to support such a
schedule on the surface; however, we note this study was performed in a laboratory setting. Indeed, this information has led FMCSA to initiate the Flexible Sleeper Berth Pilot Program study, which is investigating alternatives to the present regulation. However, results from this investigation are not yet available. Available data suggest that the current hours of service rules, last modified in 2013, resulted in an increase in average total sleep time for drivers. However, we don’t know the specific impact of the new rules on team drivers. An exemption permitting schedules that resemble provisions of the old rules seems to be premature, given limited evidence for the impact of the new rules on teams, and the lack of the Flexible Sleeper Berth Pilot Program data (discussed above).

A prior study, the Impact of Sleeper Berth Use on Driver Fatigue,\textsuperscript{ii} generated data which shows that individuals resting in the sleeper have more fragmented sleep. Researchers concluded that whether stationary or moving, sleep was adversely affected in "quality and quantity when compared to the home sleep data." Furthermore, they concluded that a moving sleeper berth further reduced sleep quality, based on both self-reported and objectively measured data. Specifically, researchers found team drivers experienced about four times as many awakenings during sleep compared to solo drivers when driving over the road.

Dillon also mentions that while their drivers are not required to work more than 5 days, drivers may choose to do so. Given the economic incentives, we suspect some drivers may choose to work more than 5 days. Over time, the same study concluded that team drivers with more fragmented sleep became increasingly fatigued as trip duration increased. A number of studies now endorse a link between fatigue, fragmented sleep, and crash risk,\textsuperscript{iii} and the mechanisms have been well-outlined.\textsuperscript{iv,v}

Given the existing evidence that fatigue plays a role in crashes, we recommend that before approving exemptions to hours-of-service rules, more research be conducted to guide appropriate, evidence-based recommendations. Such studies are currently in progress and may give us much-needed data to help inform this decision.

I thank you for considering our comments, and I look forward to your response. To discuss this issue in more detail, please contact AASM Executive Director, Jerome Barrett, at (630) 737-9700.

Sincerely,
Ronald Chervin, MD
President
49 C.F.R. §395.3 2013


Zhang, Tingru, and Alan HS Chan. "Sleepiness and the risk of road accidents for professional drivers: A systematic review and meta-analysis of retrospective studies." Safety science. 2014;70:180-188.
