



Subpart E – Hazardous Materials Safety Permits

Hazardous Materials Safety Permits (HMSP) Crash Rate

As stated in § 385.407(a)(2)(ii), in order to be eligible for a HMSP, a motor carrier may not have a crash rate in the top 30% of the national average. For the current Hazardous Materials Safety Permit (HMSP) cycle the **Motor Carrier Crash Rate is 0.136 crashes per power unit**. A motor carrier's crash rate must be **less than 0.136 to meet this condition**.

To calculate the fixed crash rate, a MCMIS snapshot was taken. The 8-year period was divided into four 2-year periods reflecting FY 2003-2004, FY 2005-2006, FY 2007-2008, and FY 2009-2010. Qualifying motor carriers had at least 2 crashes in at least one 2-year period. Then the number of power units for each qualifying 2-year period was captured based on snapshots taken immediately after the end of each latter FY. The crash rate for each 2-year period motor carrier was then determined in each time period by taking the number of crashes indicated and dividing by the number of power units times two. Finally, all carrier / time period combinations were ranked based on crash rate, with a resulting crash rate threshold at the 70th percentile of 0.13636.

How to Calculate the Motor Carrier Crash Rate:

Divide the total number of crashes¹ for the previous twelve month time period by the total number of power units. For example, for the previous twelve month time period if a motor carrier had two crashes and 10 power units then the crash rate would be 0.20. ($2 \div 10 = 0.20$)

Hazardous Materials Safety Permits (HMSP) Out-of-Service Rate

As stated in § 385.407(a)(2)(iii), in order to be eligible for a HMSP, a motor carrier may not have a driver, vehicle, or hazardous materials out-of-service percentage rate in the top 30% of the national average. For this Hazardous Materials Safety Permit (HMSP) cycle the Out-of-Service Percentage Rates are as follows:

- **The Driver Out-of-Service Percentage Rate Threshold is 9.68%**
- **The Vehicle Out-of-Service Percentage Rate Threshold is 33.33%**
- **The Hazardous Materials Out-of-Service Percentage Rate Threshold is 6.82%**

A motor carrier's Out-of-Service Percentage Rate for each category must be **less than** the posted rates for the current cycle.²

The rates have been calculated using roadside inspection data in MCMIS for both HM and non-HM inspections for driver and vehicle OOS rates. For the HM OOS rate, only inspections that indicated that HM was present were used. Data from the eight-year period (from 2003 – 2010) was used in all the calculations. FMCSA then determined what the numerical value was that resulted in 70 percent of the carriers having a driver, vehicle, or HM OOS Percentage rate lower than that figure, and 30 percent of the carriers having a driver, vehicle, or HM OOS Percentage rate higher than that figure.

How to Calculate the Motor Carrier Out-of-Service Percentage Rates:

Divide the total number of out-of-service inspections from the previous twelve month time period from the date of HMSP application processing for each category by the total number of inspections for that category for the same twelve month time period. For example, if for the previous twelve month time period a motor carrier had twenty driver inspections and two of these resulted in an out-of-service condition then the Driver out-of-service rate would be 0.10. ($2 \div 20 * 100\% = 10\%$)

The Driver, Vehicle and Hazardous Materials Out-of-Service Percentage Rates are to be calculated separately.

¹ FMCSA does not consider a single crash to be statistically valid. Crash rates are only calculated for carriers with more than one crash in the previous 12 months.

² FMCSA does not consider a single OOS inspection in any category to be statistically valid. Carriers with only one OOS inspection will not be denied a permit based on that category's OOS rate, regardless of the OOS percentage.

The applicant motor carriers needed to have a least three roadside inspections indicated in MCMIS for each of the 2-year rate calculation timeframes. The threshold rate calculation included only carriers that had at least 12 inspections over the 8 years, making this analysis comparable to the 3-inspections-per-cycle method used in previous calculations.