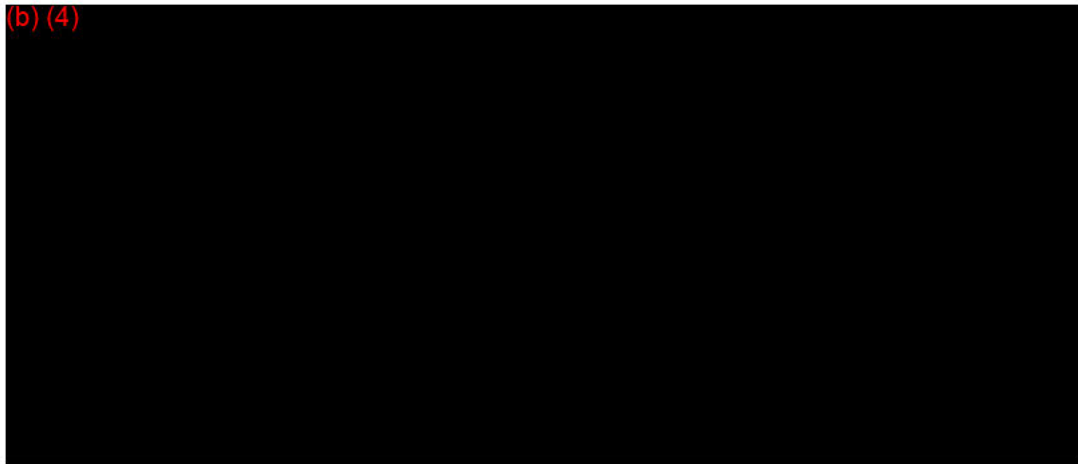


Although the derailment data for train speeds exactly 25 mph was included in the high speed (i.e. 25 – 60 mph) case, Table 13 depicts what the derailment probabilities would look like had the 25 mph data been included in the low speed (i.e. < 25 mph) case. By comparison to Table 11, it is expected that including the 25 mph data in the low speed risk analysis would have a negligible effect on the resulting risk profiles.

**Table 13. Mainline train accident with derailment for train speeds less than and equal to 25 mph. On average, 5 cars are involved in a derailment for this scenario. These derailment probabilities were not used in the analysis but are shown here to illustrate the minimal effect of including the 25 mph data in the low**

(b) (4)



### 3.1.4 Derailment of LPG Rail Cars

LPG (UN1075) was identified as a reasonable comparison HAZMAT commodity to compare against LNG. The risks associated with the shipping of LNG ISO cars were compared to the transportation risks associated with LPG cars. The LPG rail cars were assumed to be DOT-112 pressurized rail cars (nominal volume of 34,000 gallons). The LPG transportation analysis did not include Lift On/Lift On risks since they were inapplicable, but yard movement and mainline movement were applicable. When LNG ISOs were compared to LPG rail cars on an energy-equivalent basis, it was found that approximately (b) (4) 34,000 gallon LPG rail cars have the same energy content as (b) (4) 10,000 gallon LNG ISOs.<sup>28</sup> Thus, (b) (4) LPG cars were used in the derailment probability calculations.

The same base train accident and derailment statistics described in Section 3.1.2 were applied to the LPG cars since the type of rail car was independent of the accident and derailment statistics. The derailment probability for LPG car involvement was calculated similar to the LNG ISO cars

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<sup>28</sup> (b) (4)

