# Useful Life for Trucks that are both Combination Short-Haul and Long-Haul

### **Background**

Under 30 Texas Administrative Code, Part 1, Chapter 101, Subchapter H, Division 1, §101.304(e)(3), the rule states that expected remaining useful life of a mobile source shall be determined based on the assumptions used in the models in the applicable state implementation plan (SIP) revision or on a case-by-case basis approved by the executive director when a type of mobile source is not reflected in these models. Since the Texas Commission on Environmental Quality (TCEQ) uses the United States Environmental Protection Agency's (EPA) Motor Vehicle Emissions Simulator (MOVES) model for on-road vehicles in the SIP development, the EPA's MOVES model was used in the development of the on-road portion of the vehicle useful life guidance spreadsheet, Operational Life for On-Road and Non-Road Mobile Sources, available at

https://www.tceq.texas.gov/airquality/banking/erc\_program.html.

Many combination short-haul trucks, including but not limited to drayage trucks, operating in Texas spend the beginning part of their life as combination long-haul trucks. Some of these trucks transition to operating as combination short-haul trucks, performing drayage type duties, when it is no longer economical\feasible to continue operating as a combination long-haul truck. Since the EPA's MOVES model does not account for this transition, the TCEQ is using a hybrid approach, detailed below, to determine useful life for this unique set of vehicles.

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#### Operational Life for On-Road and Non-Road Mobile Sources spreadsheet

- Annual mileage accumulation rates
  - Short-haul combination trucks: 935,932 miles
  - Long-haul combination trucks: 2,185,471 miles
- Total of 31 years of operation
  - Assign long-haul rates to the first 15.5 years
  - Assign short-haul rates to the last 15.5 years

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- 1,815,305 miles 70% point between 2,185471 and 935,932
- MOVES assumes 5.3% of vehicles go beyond their useful life
  - TCEQ will assume seven remaining years of useful life if the vehicle has exceeded the useful life mileage for Trucks that are both Combination Short-Haul and Long-Haul by 10 percent or less.
  - TCEQ will assume five remaining years of useful life if the vehicle has exceeded the useful life mileage for Trucks that are both Combination Short-Haul and Long-Haul by more than 10 percent.