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EPA's Truck Emissions Rule: How Much Will it Actually Cost?

The U.S. Environmental Protection Agency (EPA) has proposed a new rule to further reduce nitrogen oxide (NO_X) emissions from medium- and heavy-duty vehicles, a goal supported by truck and engine manufacturers who are developing cleaner technologies. However, expert analysis confirms that EPA's overly-stringent regulatory approach would greatly increase new truck prices and cause unintended harm to the U.S. trucking industry, manufacturing jobs, and the environment.

Costs Associated with the Proposed Rule will be Significantly Higher than EPA Predicts

EPA is proposing two regulatory approaches, "Option 1" and "Option 2," and estimates the compliance costs for each option in a <u>Draft Regulatory Impact Analysis</u>. Independent experts at <u>Ricardo PLC</u> and the <u>National Renewable Energy Laboratory (NREL)</u> have analyzed the proposal and reached starkly different conclusions than EPA about the impacts of the rule on new truck costs. The two studies confirm new heavy truck costs would be *five to eight times higher* than EPA predicts:

Additional Per-Unit New Truck Costs			
	EPA	Experts	
Option 1	\$3,931	\$31,246	
Option 2	\$3,215	\$16,091	

The independent experts determined that **EPA** *grossly underestimated* the cost impacts of two critical regulatory requirements that would be responsible for the greatest per-unit truck cost increases:

Greatest Option 1 Cost Increases			
	EPA	Experts	
Emissions Warranty	\$1,227	\$14,655	
Useful Life	\$223	\$11,721	

- Emissions Warranty. Option 1 would dramatically increase the period during which a manufacturer is required to repair any failure of an emissions control component. The manufacturer must increase the up-front price of the vehicle to recoup those estimated warranty expenditures.
- Useful Life. Option 1 would significantly increase the period during which an engine is required to remain compliant to the new emissions standard. The extended useful life period would require the manufacturer to replace expensive and complex aftertreatment components that degrade over time, such as catalysts and sensors, and they must recoup those costs in the price of a new vehicle.

Rising truck prices on the market right now in response to California's new emissions warranty regulation validate the experts' conclusions that EPA's estimates are incredibly low. EPA predicts Option 1 warranty costs that are lower than actual truck price increases prompted by the much shorter new warranty requirements in California Additionally, preliminary results from EPA's NO_X demonstration study are validating concerns that the Option 1 extended useful life period will require manufacturers to replace complicated and expensive exhaust aftertreatment components in service, increasing costs in line with the experts' conclusions.

EPA has a History of Underestimating the Costs of its Heavy Truck Rules

EPA's most recent heavy truck emission rules took effect in 2004, 2007, and 2010. Research by the <u>American Truck Dealers (ATD)</u> analyzed truck prices after the standards went into effect and found that during the rulemaking **EPA underestimated the compliance costs** *by a factor of two to five times*:

Historical Per-Unit Truck Cost Increases			
	EPA Estimate	Actual Price Increase	
2004	\$922	\$4,290	
2007	\$4,214	\$7,743	
2010	\$3,419	\$9,017	

Option 1 Would Depress New Truck Sales, Eliminate Jobs, and Harm the Environment

EPA's new rule will prohibit the sale of new trucks built after the effective date unless they comply with all the associated regulatory requirements. Fleet owners must determine if it makes business sense to invest their limited capital in purchasing expensive trucks built to the new rule, or if it would be more prudent to invest in maintaining their existing trucks longer.

With a per-truck cost increase of more than \$31,000, EPA's Option 1 proposal would compel fleet owners to keep older, higher-emitting vehicles on the road longer, substantially delaying fleet turnover and intended environmental objectives, causing the most harm to disadvantaged communities near warehouses, ports, highways, and other trucking corridors. Medium- and heavy-duty vehicle market forecasters at <u>ACT Research</u> predict the Option 1 proposal would result in several years of very low new truck sales.

EPA's most recent NO_X standard took effect in 2010, and twelve years later only 53% of the trucks on the road have been built to the new standard. The remaining trucks meet older EPA NO_X standards – with up to 30 times higher emission levels. While EPA projects that Option 1 will increase costs along the lines of what they predicted for the 2010 standards, independent experts and real-world truck pricing trends indicate that the proposal will result in *more than three times higher truck prices* than actually occurred following the 2010 rule. Those soaring prices due to the new rule undoubtably would result in an extended period of severely depressed new truck sales, diminished fleet turnover, lost manufacturing jobs, and *increased* NO_X emissions.

Option 2 Could be the Foundation of a Successful Rule

There remains an opportunity to avoid the disastrous effects of Option 1. If EPA carefully crafts the rule to ensure new trucks will be cost-effective for fleet owners to purchase, the environmental objectives are more likely to be achieved. Research from <u>Ramboll Group</u> shows up to 35% lower NO_X emissions under **Option 2**, compared to Option 1, which would *increase* emissions because of delayed fleet turnover.

Truck and engine manufacturers believe that EPA's Option 2 proposal could serve as the foundation of an effective and successful heavy truck NO_x reduction program. We urge EPA to take into consideration real-world data and scientific analysis provided by ACT Research, ATD, Ramboll, Ricardo, and NREL as they develop a workable and implementable final rule.

To learn more about the ways the truck and engine manufacturing industry is working to build clean and affordable commercial vehicles, visit <u>www.cleantruckfacts.org</u>.