Last week, EPA finalized its new rule imposing emission limits on new heavy trucks. The new regulation was clearly a massive undertaking. EPA's formal announcement of the new rule is 1100 pages long. The accompanying summary of comments on the proposed rule and EPA's responses is another 2000 pages. This is partly due to the complexity of controlling emissions from trucks, given that there is no equivalent of the catalytic converter for diesels.

EPA's analysis of environmental justice indicated that its new rule would reduce disparities in pollution levels between whites and people of color. The analysis drew upon numerous published studies, but also included evidence that the agency itself had assembled. To take just one example, to estimate the proportion of students of color near major freight routes, EPA used an Education Department database covering all U.S. public schools, and combined that with a GIS system to map schools together with another database of roadways. EPA also used satellite studies of the effect of the COVID lockdown, with its traffic reduction, on local pollution, which found that the lockdown resulted in the greatest pollution reductions in areas with higher concentrations of people of color. EPA concluded that "non-Hispanic Blacks will experience the greatest reductions in PM2.5 and ozone concentrations as a result of the standards."

This analysis is impressive in its detail. Two other aspects of the analysis are noteworthy. First, it goes beyond simply ensuring that the new regulation will avoid disproportionate harm to people of color. Instead, EPA is clearly taking an interest in whether the new regulation actually remedies existing inequalities, as opposed to simply not making them worse. This seems to go beyond the existing executive order on environmental justice.

Second, the agency was careful to delimit the role of the environmental justice analysis in its actual final decision. The agency specified that its environmental justice analysis was intended to comply with EPA's internal guidance. However, EPA said, the new regulatory standards were set under the statutory requirements (which are primarily keyed to feasibility), not the agency environmental justice guidance.

Environmental justice advocates are unsatisfied by the rule. In particular, according to the *Washington Post*, they had "hoped for a rule that would accelerate electrification by pushing fleet owners to replace their diesel-burning trucks and buses with zero -emission alternatives." The proposed rule did contain a version giving manufacturers credits for selling zero emissions vehicles. EPA left the

creditss out of the final rule.

To find out why, you have to dig pretty far into the comments document. On pages 1034 to 1035, EPA gives three reasons. The first two are relatively comprehensible: (1) the credits aren't necessary to make compliance with the standards feasible, and (2) depending on sales of zero emission trucks, the credits might undermine the incentive to reduce emissions from other trucks.

The third reason is a bit of a puzzler: "Testing requirements to ensure battery and fuel cell performance over the useful life of a ZEV are important to ensure the zero-emissions tailpipe performance for which they are generating NOX credits." The point is a bit unclear since the operation of batteries and fuel cells aren't support to produce NOx. Some later discussion (pp. 1089-1090) suggests that the real concern is the durability of batteries and fuel cells, which might limit adoption or prevent them from reaching the large used truck market. That might keep older, high polluting diesels on the road longer.

Of these arguments, the second seemed most persuasive. If you assume that there will be a surge of zero emissions trucks regardless of this rule, giving credit for those vehicles would serve no purpose and would allow manufacturers to avoid reducing emissions from new diesels.The passage of the Inflation Reduction Act after the notice of proposed rule making may have made this seem like a more important prospect.

Overall, EPA seems to have weakened the proposed requirements a bit. It's hard to know whether the agency found criticisms from industry persuasive, was concerned about raising prices during difficult economic times, or thought that the changes might improve the rules chances of surviving judicial review. Or maybe EPA thought it was O.K. to relax the rules for diesels because intervening developments like the Inflation Reduction Act will shift trucking away from diesels. Even in its final form, the rule does seem to promise large health benefits; whether the benefits could have been made even larger is difficult to know.

California's new truck standards are tougher than EPA's. EPA postponed making a decision on whether to grant a waiver and allow the California standard to go into effect. That will be the next battleground.