

**Written Testimony for the Senate Committee on Environment and Public Works,
Subcommittee on Clean Air, Climate, and Nuclear Safety**

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July 26, 2023

Our union represents thousands of workers in the rail industry; both those who manufacture locomotives and parts, and rail crew drivers who work in rail yards across the country.

We are unequivocally in favor of stricter emission standards for rail. Stricter standards will be good for workers and good for the economy, and can be met using existing technology.

In 1998, the Environmental Protection Agency instituted a tier-based system for regulating the emissions of locomotives. Modern Tier 4 locomotives have been in production since 2014, and became the standard for all newly-built locomotives in 2015. They are estimated to emit 90 percent less particulate matter, and 80 percent less nitrous oxide, than Tier 2 locomotives — those built before 2012.

When the EPA issued the Tier 4 standard, it estimated that by 2023, over 30 percent of the locomotives on the rails would be Tier 4. However, the railroads have been slow to upgrade to this cleaner and greener technology. As of 2021, the most recent date for which Bureau of Transportation Statistics data is available, less than 10 percent of the Class 1 railroad locomotive fleet was Tier 4, while over three quarters was still Tier 2 or lower. Without action by our government officials, the railroads will keep these dirty locomotives running for years if not decades to come.

The intent of the EPA standards was to gradually improve emissions standards across the industry by requiring all new locomotives to meet stricter standards. However, railroads are able to evade this intent because, due to a loophole in the regulations, they are allowed to keep rebuilding their existing fleets, rather than purchasing new, modern and efficient locomotives. Rebuilding a pre-Tier 4 locomotive cannot bring it up to Tier 4 standards.

Rail yards are well-known as hotspots for pollution, and in urban areas they are often located in low-income communities of color. Neighborhoods surrounding high-traffic yards in California have a significantly elevated rate of cancer. When wind carries air from a yard into a residential area, airborne black carbon spikes to twice the normal level for an urban area. Children living near rail yards have twice the incidence of asthma of those living at least four miles away. Hundreds of UE members work in these unhealthy environments on a daily basis. Many of them live there as well. It is unconscionable that we let this go on when existing technology can mitigate the issue, and now commercially-viable technologies like battery locomotives can all but eliminate it.

Setting stricter emission standards for locomotives is not only the right thing to do for workers and communities around the railroads, it will also stimulate American manufacturing, as new requirements for railroads to fully modernize their fleet will spur demand. Essentially all

manufacturing of locomotives for the U.S. market takes place domestically, and much of it is union, with family-supporting wages and benefits, such as at the UE-represented plant in Erie, Pennsylvania.

A recent report by the University of Massachusetts-Amherst shows that, if the Erie plant were to be utilized to its full capacity building clean locomotives, it would create thousands of quality, family-supporting jobs. This is especially important for Erie, a city that has been hit hard in recent decades by job losses from deindustrialization, so-called “free trade” deals, and our economy’s transition away from fossil fuels. Our union believes that workers and communities that suffer job loss because of large-scale economic transitions deserve a “just transition,” rather than being abandoned to poverty. New regulations that require the railroads to purchase new, modern locomotives will help provide that just transition for Erie.

The existing EPA regulations for locomotives are outdated, and there is no mechanism to enforce the adoption of new, green technologies. We need stricter, enforceable standards. We need to allow states to take the lead, as California is attempting to do, in protecting the health and welfare of its residents, but we also need action on the federal level. Federal action will ensure that the benefits of new standards are shared across our nation. Furthermore, climate change is a global process, and carbon emissions in any state affects the climate everywhere. The extreme weather events we are currently seeing all across the country are affecting all of us, regardless of state regulations — in order to meaningfully address the climate crisis, we need the federal government to act.

Tier 4 locomotives have been in production for almost a decade. Zero-emissions, battery-operated locomotives have been in use for years in rail yards. These are proven technologies. Their adoption is not a matter of technological feasibility, but of priorities. What is more important for our country? Clean air, addressing the climate crisis, and good jobs? Or corporate profits, executive bonuses, and payments to Wall Street?

The Class 1 railroads, which own 90 percent of the locomotives on the rails, are enormously profitable. However, we need look no further than the disaster in East Palestine to see an example of how they prioritize profits over the public good. The bottom line is that they will not make this investment in our shared future unless our country requires them to.

Setting stricter emission standards for the rail industry — requiring that they quickly upgrade their cross-country fleets to Tier 4 and use zero-emission locomotives in rail yards — is the right thing for workers, the right thing for the planet, the right thing for working-class communities and communities of color, and the right thing for building greener, cleaner manufacturing in the U.S.