



A bold voice for transportation workers

February 21, 2023

Donald P. Burger
Chief, General Approvals and Permits Branch
Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Avenue SE
Washington, DC 20590

**RE: Hazardous Materials: Notice of Application for Special Permit
Docket No. PHMSA-2022-0081**

Dear Mr. Burger:

On behalf of the Transportation Trades Department, AFL-CIO (TTD), I am pleased to respond to the Pipeline and Hazardous Material Safety Administration's (PHMSA) notice regarding a recent application for a new special permit (21283-N) from Gas Innovations. TTD consists of 37 affiliated unions representing the totality of rail labor, including freight rail workers who transport hazmat daily and fire fighters who are called to respond to dangerous releases of hazardous materials. TTD endorses the comments of our affiliate the International Association of Sheet Metal, Air, Rail and Transportation Workers - Transportation Division (SMART-TD). We ask PHMSA to deny this application until railroads are forced to take responsibility for creating a safer rail system and first responders are provided with adequate resources to safely and effectively respond to emergencies.¹

Norfolk Southern Derailment and Hazmat Release

It is impossible to ignore recent events in East Palestine, Ohio, when discussing an application such as this one to introduce new hazardous materials to the freight rail system. A train derailment occurred at approximately 8:54 PM EST on February 3, 2023, in East Palestine, OH. The railroad, Norfolk Southern, reported the incident at 10:53 PM EST to the National Response Center. At that time, it was reported that an unknown number of the 150 train cars had derailed, but 20 of the cars were listed as carrying hazardous materials. As is being reported by the National Transportation

¹ Attached is a list of TTD's affiliated unions



Safety Board (NTSB) as of this writing, 38 rail cars derailed and a fire ensued which damaged an additional 12 cars. Local officials issued evacuation orders for the surrounding area and there have been reports of residents experiencing effects many miles away from the scene of the derailment.²

The chemicals that train 32N was carrying included Vinyl Chloride, which is highly flammable, can cause frostbite and lung irritation, and can produce toxic fumes and contaminate surrounding areas.³ The fire in East Palestine was not doused until February 8, 2023, a full five days after the incident.⁴ The Environmental Protection Agency (EPA), Ohio EPA, and a multitude of state resources as well as Norfolk Southern are still responding to the crisis in East Palestine as of this writing to assess whether or not it is safe for residents to return home following the extensive environmental contamination that pose hazards to human health. The full human and environmental cost will likely not be known for months or even years.

Decline of Rail Safety Among Class I Railroads

The crisis in East Palestine did not occur due to a random act of God or an unforeseeable flaw. While the NTSB's full investigation will take much longer, rail workers have been warning of safety deterioration in our freight rail system for years because of decisions made by the Class I railroads. The adoption by the Class I railroads of a railroad operating model known as precision scheduled railroading, or PSR, has led to many factors that have eroded the safety of our freight rail system. At its core, PSR seeks to maximize every penny of profit out of the freight rail system by cutting costs wherever possible, no matter the negative effects on safety.

Due to PSR, even before the pandemic, Class I railroads had made it their mission to reduce the workforce beyond what was safe, decreasing the workforce by 30% since 2015. When the pandemic arrived in 2020, railroads further furloughed workers.⁵ Following this unsafe and unsustainable workforce reduction, caused by the railroads' own decisions, many of the railroads at least partially realized their mistake and began sometimes half-hearted efforts to hire additional workers. These efforts have not worked and workforce levels have not recovered to sustainable levels because the railroads have not addressed the underlying quality of life issues that have resulted from PSR that are greatly decreasing the attractiveness of working in the freight rail industry.

Due to these self-inflicted staffing shortages, the railroads have implemented extremely dangerous practices. These practices include reducing inspection times for train cars from three minutes to 30-45 seconds, contracting out mechanical and electrical inspections to less qualified or non-qualified contract workers, shortening the length and quality of training and certification programs

²<https://www.dispatch.com/story/opinion/columns/guest/2023/02/14/east-palestine-norfolk-southtrain-derailment-people-30-miles-away-feel-impact-of-ohio-chemical-spill/69902369007/>

³ <https://cameochemicals.noaa.gov/chemical/1692>

⁴ <https://www.pbs.org/newshour/amp/science/what-we-know-about-the-chemicals-aboard-the-train-that-derailed-in-ohio>

⁵ <https://ttd.org/policy/federal-comments/rail-labor-to-fra-recalling-furloughed-employees-must-come-before-safety-waivers/>

that provide on the job training to new hires, and running longer and heavier trains (which is further discussed below). Workers have also not been given even basic quality of life measures such as sick leave or predictable schedules so they can see their families.

Precision Scheduled Railroading has also led to significantly longer and heavier trains. While the railroads do not report the length and weight of their trains, workers have seen a significant increase in extremely long trains that can be many miles long. Long and heavy trains pose many risks, including additional momentum and increased time to bring the train to a full stop after the brakes are engaged. It also takes longer for an engineer or conductor to identify where on the train a specific mechanical problem is happening because they have to walk the whole length of the train when a mechanical issue arises. Increasing train length also poses difficulty for radio communications. Trains may literally be too long for an engineer at the front of the train to radio a conductor at the back of the train, which raises serious safety concerns when an emergency arises.

In addition to the measures Class I railroads have adopted because of PSR that greatly deteriorate the safety of our rail system, railroads are actively pursuing other ways to undermine safety on a daily basis. Railroads continue to request many waivers from FRA on a frequent basis from time-tested safety procedures such as brake inspections, signal systems, and track inspections and maintenance.⁶ The Class I railroads' actions demonstrate they do not currently care about safety.

All of these factors have led to the increase of a variety of rail accidents and incidents. Per data from the Federal Railroad Administration (FRA), at multiple Class I railroads, yard accidents have more than doubled in the last ten years and the rate of accidents/incidents per train mile has also noticeably increased.⁷

The chemical that Gas Innovations is seeking a new special permit to transport via rail, Cryogenic Ethane, is listed by the National Oceanic and Atmospheric Administration (NOAA) as roughly equally as flammable as Vinyl Chloride, the chemical that was released in East Palestine.⁸ Cryogenic Ethane poses many other similar risks, including frostbite, asphyxiation, and toxic fumes. Workers, including train operators and first responders, are likely to be the most severely affected by any of these risks. Due to the weight of liquid chemicals, tanker cars are often positioned within a few cars of the front locomotive. This would put the operating crew at enormous risk if there was a release.

As our affiliated union, SMART-TD, stated in their comments, "This substance has a boiling point of -88.6 degrees Celsius or -127.48 degrees Fahrenheit. If the rail car was to be penetrated in a derailment or even if a rail car was leaking, the ambient temperature on the coldest of days would

⁶ See e.g. <https://ttd.org/policy/fra-must-hold-railroads-accountable-on-waivers/>, <https://ttd.org/policy/ttd-responds-to-nss-petition-to-operate-without-safety-equipment/>, <https://ttd.org/policy/fra-must-not-accept-harmful-and-unnecessary-redactions-from-railroads-on-critical-safety-information/>, <https://ttd.org/policy/railroads-look-for-any-excuse-to-avoid-required-brake-inspections/>

⁷ <https://safetydata.fra.dot.gov/OfficeofSafety/publicsite/Query/TenYearAccidentIncidentOverview.aspx>

⁸ <https://cameochemicals.noaa.gov/chemical/661>

be high enough that the entire contents of the car would ignite. If water was to be introduced to the Cryogenic Ethane, it would have the possibility of “violent boiling” per the chemical data sheet and depending on the temperature of the water that a “superheat explosion” would occur.”

Following the East Palestine disaster, TTD expects that USDOT, PHMSA, and FRA will take another look at the safety regulations for freight trains, especially freight trains carrying hazardous materials. PHMSA should deny this application, which seeks permission to carry a new potentially hazardous chemical, until such an important review is complete.

Ongoing Federal Agency Dockets Regarding Important Safety Measures

Both FRA and the Transportation Security Administration (TSA) have open dockets regarding rail safety that illustrate the many vulnerabilities in the rail system currently. The FRA is currently reviewing comments regarding a proposed rule that would require a minimum of two people to operate most trains – a requirement that is not currently in place. In fact, at the FRA regarding this docket, Union Pacific unveiled a plan to operate with single-person crews on large freight trains.⁹ TTD commented on the proposed rule to discuss many reasons that a minimum of two-people are necessary for safe train operations, including the fact that trains carry hazardous materials.¹⁰

The TSA has issued an Advance Notice of Proposed Rulemaking regarding surface transportation cybersecurity.¹¹ TTD also responded to this notice, offering common sense suggestions and explaining that workers are not currently trained in recognizing or responding to cyber threats.¹² Hazardous materials obviously pose one of the largest risks and potential targets when it comes to the effects of cybersecurity breaches.

These dockets represent key elements that are needed to begin restoring the safety that railroads have eroded through PSR measures. If PHMSA chooses to allow Cryogenic Ethane to be transported via rail, it should, at minimum, ensure that proposed regulations such as these are part of the conditions required as part of the permit.

Needs of First Responders

When TTD inquired with the fire fighters that we represent about what measures would be needed if additional hazardous materials were transported via rail, they told us that train size and speed – in other words, basic safe operating rules – were some of the most important factors. Fire fighters have the most experience with hazardous chemicals in an emergency situation because it is their job to protect people from the dangers such chemicals pose. According to their direct experience and expertise, other critical factors that must be taken to mitigate risks include prohibiting mixed hazardous materials on trains until it is confirmed that the mixed cargo is not reactive and designating routes of travel that pose the least risk. In other words, all aspects of the hazardous material movement must be considered before a decision can be made regarding an acceptable

⁹ FRA-2021-0032

¹⁰ <https://ttd.org/policy/17470/>

¹¹ TSA-2022-0001

¹² <https://ttd.org/policy/federal-comments/ttd-calls-on-tsa-to-secure-critical-rail-infrastructure/>

level of risk because there are so many factors that contribute to overall safety.

Beyond establishing a basic level of hazard mitigation for the movement of hazardous materials, a plan for response needs to be made before an emergency occurs. The events of East Palestine are a stark reminder of the vital necessity of ensuring our first responders are adequately prepared to respond to emergencies. However, as a country we are still not giving first responders enough resources to adequately prepare to respond to a hazardous material release on a train. Fire fighters are the first boots on the ground at a train derailment, exposing themselves to toxic chemicals in an effort to protect their communities.

Rail companies and regulators have an obligation to ensure that those on the front lines have the tools and training needed to respond to these incidents. Funding and training are necessary for first responders to be able to act knowledgeably and as safely as possible. Training opportunities for fire fighters are currently either web-based training or a limited number of in-person training opportunities. The fire service deserves the attention of the federal government and industry partners to expand training to a nationwide collaborative effort. Additional in-person, hands-on emergency response training for rail-based hazards is desperately needed. Much of the nation's rail network covers remote areas outside of major cities that may have more extensive training and equipment resources. Funding should be provided to national organizations like the International Association of Fire Fighters (IAFF) to develop and deliver training to the emergency responder community. The Hazardous Materials Emergency Preparedness grant program needs additional funds to ensure training is available to affected jurisdictions.

Railroad companies have an obligation and duty to inform first responders of the hazardous chemicals being transported through their communities. Fire fighters must have quick, easy-to-navigate access to rail car inventories as they are being moved across the country. This information should be readily available in a digital format without delay, and too often today it's not readily available.

Conclusion

TTD urges PHMSA to reject this special permit application to transport Cryogenic Ethane via rail. The state of the nation's rail system is simply too unsafe, which is almost entirely the responsibility of railroad companies that have chosen to prioritize profits over human lives – even the lives of their own workers. While railroads bear much of the blame for the state of rail safety right now, there are other stakeholders that must act to proactively address vulnerabilities. TTD calls on FRA to finalize the strongest possible two-person crew rule, which would provide an additional layer of protection against hazardous materials releases by ensuring that there are adequate staff aboard the train to communicate with dispatchers and first responders to mitigate any breaches and prevent releases entirely. Further, TTD calls on TSA to issue a strong rule on surface cybersecurity that would require railroads to involve workers and first responders in their cybersecurity planning process, recognizing that workers and first responders are key stakeholders.

In the aftermath of the Norfolk Southern derailment in East Palestine, Ohio, we have had to confront what catastrophe can look like. And it is worth mentioning that some trains carry significantly larger amounts of hazardous materials than the train that derailed. Workers, first responders, and the public deserve a safer system than what the railroad companies have created through their unfaltering pursuit of profits in the PSR model. Until railroads are forced to take responsibility for creating a safer rail system and first responders are provided with adequate resources to safely and effectively respond to emergencies, we urge PHMSA to deny any new special permits to transport hazardous materials via rail.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Regan", enclosed within a circular stamp or seal.

Greg Regan
President