



The Fertilizer Institute

Nourish, Replenish, Grow

222/25

BEFORE THE SURFACE TRANSPORTATION BOARD

Ex Parte No. 677

COMMON CARRIER OBLIGATION OF RAILROADS

**TESTIMONY OF ROBERT FELGENHAUER
AND SUPPLEMENTAL WRITTEN SUBMISSION
ON BEHALF OF
THE FERTILIZER INSTITUTE**

Pursuant to the Notice of Public Hearing ("Notice") of the Surface Transportation Board ("Board"), served February 22, 2008, The Fertilizer Institute ("TFI") hereby submits its Testimony, and Supplemental Written Submission, on the common carrier obligation of railroads. Mr. Robert Felgenhauer, Vice President of Transportation and Distribution for Potash Corporation, will testify on behalf of TFI at the hearing. PotashCorp is a long-standing member of TFI.

Statement of Interest

TFI is the national trade association of the fertilizer industry. TFI, which traces its roots back to 1883, represents virtually every primary plant food producer, as well as secondary and micronutrient manufacturers, fertilizer distributors and retail dealerships, equipment suppliers and engineering construction firms, brokers and traders, and a wide variety of other companies

and individuals involved in agriculture. Many members of TFI use rail transportation, and thus have a strong interest in the common carrier obligation of the rail industry.

Fertilizers are transported by all modes—pipeline, barge, rail, truck and ocean vessels. Many fertilizers are not hazardous materials. However, anhydrous ammonia, which is the basic building block required to produce all nitrogen fertilizers, is a toxic inhalation ("TIH") commodity. The rail industry transports more anhydrous ammonia than any other TIH commodity. Due to its hazardous nature, many issues pertaining to the railroads' common carrier obligation to haul anhydrous ammonia have arisen in recent years.

The mission of TFI is to represent, promote and protect the fertilizer industry. Fertilizer nutrients provide the "food" plants need to grow, insure there is an adequate supply of nutritious food and animal feed, and a bountiful supply of fiber and biofuels to help meet the nation's energy needs. Without fertilizer, the world would be without forty percent of today's food supply.

TFI is pleased that the Board has recognized the importance of the common carrier obligation by holding this hearing to examine the many issues that impact this obligation in today's transportation markets. TFI's comments reflect the consensus of the fertilizer ammonia industry on these important issues.

THE COMMON CARRIER OBLIGATION

The common carrier obligation is older than railroading itself. It is well-established that "[r]ailroads have from the very outset been regarded as public highways, and the right and duty of the government to regulate in a reasonable and proper manner the conduct and business of railroad corporations have been founded upon that fact.... They are organized for the public interests and to subserve primarily the public good and convenience." *Wisconsin, Minnesota and Pac. R.R. v. Jacobson*, 179 U.S. 287, 296-97 (1900). "Common carriers exercise a sort of public

office, and have duties to perform in which the public is interested." *Munn v. Illinois*, 94 U.S. 113, 130 (1877). Thus, a railroad franchise gives rights of "public concern, which ought not to be exercised by private individuals at their mere will and pleasure, but should be reserved for public control and administration, either by the government directly, or by public agents, acting under such conditions and regulations as the government may impose in the public interest, and for the public security." *California v. Central Pac. R.R. Co.*, 127 U.S. 1, 40 (1888).

Although Congress codified the common law concepts of common carriage in the Interstate Commerce Act, *American Trucking Ass'n v. Atchison T. & S.F. Ry.*, 387 U.S. 397 (1967), it went even further. For example, although only carriers who "held themselves out to the public" were common carriers at common law, the Act expressly included railroads within the definition of common carrier. *Akron, Canton & Youngstown R.R. Co., v. ICC*, 611 F.2d 1162, 1166 (6th Cir. 1979). "[A]t common law, carriers could pick and choose the goods which they would transport in common carriage; but even at common law, railroad companies, 'whose property and facilities are affected with a public interest, (were) ordinarily held to be common carriers of goods delivered to them for transportation....' 13 C.J.S. Carriers § 6." *Id.*

The "holding out" concept has evolved into "a new 'common' law of transportation under which the public duty of railroads has been broadened beyond that extant under the common law of carriers." *Id.* at 1168.

It is not only "common carriage," but transportation which is subject to the Act and to the Commission's statutory powers. See, e.g., *Cincinnati, N.O & T. P. Ry. v. Chesapeake & O. Ry.*, 441 F.2d 483 (4th Cir. 1971); *Republic Carloading Co. v. Missouri Pac. R.R.*, 302 F.2d 381 (8th Cir. 1962) (per Blackmun, J.). A carrier's statutory duties run not to shippers alone, but to the public. *Brotherhood of Ry. Clerks v. Florida E. C. Ry.*, 384 U.S. 238 ... (1966). Therefore, public needs must shape the boundaries of these duties.

Id. According to the Courts, "[t]he Act's declaration of the common-carrier status of railroads is not an unjust one, in view of the governmental largess which railroads have received, and in view of the unique importance to commerce of rail transportation." *Id.* at 1166 [footnote omitted].

In the Staggers Act, Congress expressly retained the common carrier obligation, despite also freeing railroads to enter into contracts with shippers:

The Committee believes that the common carrier obligation must be retained to prevent railroads from having the ability to serve only their most profitable business. If railroads were to contract only with shippers of the most profitable traffic, and there were no common carrier obligation, the burden of poor service and perhaps higher rates would fall on the shipper with low volume or low traffic. The Committee believes that the retention of a common carrier obligation under contract rate making is necessary to protect the smaller shipper with little bargaining power and minimal traffic volumes to offer the railroad.

96 U.S.C.A.N. 4002. The clear intent of Congress was to ensure that railroads are not able to pick and choose which shippers to serve and which commodities to transport based purely upon their self interest.

It is with this background that TFI now addresses the following two issues identified by the Board in the Notice:

1. Cost and safety issues related to the transportation of hazardous materials, especially toxic inhalation hazards;
2. Carrier-imposed requirements for infrastructure investments by shippers; and

COMMENTS

TFI's comments will focus on several of the items identified in the STB announcement. We will discuss (A) the importance of anhydrous ammonia to U.S. agricultural and energy policies and (B) the need to continue the common carrier obligation for this product. We will

also briefly discuss (C) carrier-imposed infrastructure requirements including tank car performance standards and yard expansions.

A. Importance of Anhydrous Ammonia to the U.S. Agricultural and Energy Policies

Anhydrous ammonia is essential to growing food for millions of Americans. It is the least costly and most effective source of nitrogen fertilizer for American farmers. In addition to its direct application as a fertilizer, anhydrous ammonia is the primary ingredient in all other nitrogen fertilizers, such as urea and urea ammonium nitrate solution ("UAN"), and is also used to produce phosphate fertilizers, such as diammonium phosphate ("DAP") and monoammonium phosphate ("MAP"). DAP and MAP are the primary forms of phosphate fertilizer and we would be unable to replace them with a suitable source of phosphate if we could not get the ammonia to the phosphate production facilities. Fertilizers high in nitrogen are essential for crops such as corn, which is the largest consumer of direct applied anhydrous ammonia. A single rail car of ammonia produces approximately 128,000 bushels of corn, which can feed approximately 1600 cattle or produce 345,600 gallons of ethanol. Corn also is used in thousands of basic food products found on your grocers' shelves. There simply is no substitute for anhydrous ammonia in maintaining our nation's food supply.

Anhydrous ammonia is also vital to a variety of industrial applications and is the only raw material available for the production of some consumer goods. For example, anhydrous ammonia is necessary to produce certain pharmaceuticals, adhesives, feed supplements, personal care products and nylon fibers. Coal burning power plants use anhydrous ammonia to comply with Clean Air Act emission standards. For most industrial users, there is no substitute for anhydrous ammonia.

The rail industry has suggested that farmers replace anhydrous ammonia with non-hazardous nitrogen fertilizers such as urea and UAN in order to reduce the volume of anhydrous

ammonia that must be transported. There are several reasons why this is not realistic. First, because anhydrous ammonia is necessary to produce urea, UAN, and most phosphate fertilizers, it still must be available to the production sites for these substitutes. Second, these substitutes must be used in much greater quantities and at much greater cost, which would further burden our nation's capacity-constrained transportation network and increase already rising food and fuel costs. Third, ammonia producers, distributors, and farmers have made extraordinary investments in infrastructure, including production facilities, storage tanks, pipelines, barges, rail cars, tank trucks, nurse tanks and applicators, that would be stranded by switching to alternative sources of nitrogen. Fourth, there is not nearly enough production capacity for these substitutes to replace substantial volumes of anhydrous ammonia. Fifth, unlike anhydrous ammonia, which bonds with soil after application in the Fall, other sources of nitrogen tend to leach out of the ground before Spring, resulting in potential environmental issues. In many Cornbelt states, anhydrous ammonia is typically the only nitrogen source recommended by universities for fall application to spring planted crops (see Illinois Agronomy Handbook [<http://iah.aces.uiuc.edu/>] and Dr. Sawyer, "Managing Nitrogen for High Corn Yields").

The current nitrogen fertilizer distribution and transportation infrastructure is inadequate to allow huge shifts toward Spring applications of nitrogen where anhydrous ammonia has been or is the predominant nitrogen source. Any large shifts away from anhydrous ammonia to alternative nitrogen sources, which would need to be applied in the spring, could prove quite expensive to farmers and fertilizer retailers, could pose risks of sizeable damage to local and state economies, and result in a substantial decline in the crop yields per acre.

Lastly, our industry has an outstanding safety record with ammonia. We have used this product for sixty years and have used it wisely and safely. In the Pacific Northwest, anhydrous ammonia has been the principal nitrogen product used across the 22 million acre Columbia

Platueau by grain farmers and rail shipments are an essential part of the process. More than 900 shipments per year on the short lines serve this wheat growing area.

For the fiscal years 2000 – 2006 (year ending June 30), agricultural use of anhydrous ammonia averaged 3.941 million tons of material. With a concentration of 82 percent nitrogen (N), this quantity of ammonia is equivalent to 3.232 million tons of N. If use of anhydrous ammonia were discontinued, these 3.232 million tons of N would have to be supplied by other nitrogen fertilizers. Other options like urea (46 percent N), nitrogen solutions (28-32 percent N) and/or ammonium nitrate (34 percent N) all contain much lower concentrations of N so significantly more product would need to be applied in order to attain the same amount of N.

For example, if the N in the ammonia that farmers currently apply had to be replaced by urea, an additional 7.025 million material tons of urea would have to be applied annually. This is an increase of 131 percent, or more than twice the urea currently applied (5.37 million material tons in FY2005/06) by U.S. farmers. Use of nitrogen solutions, which stood at 10.104 million tons of material in FY2005/06, would also have to more than double (107 percent) to supplant the N currently supplied in the form of ammonia. Use of ammonium nitrate would have to increase 10 fold from 0.964 million material tons in FY2005/06, because an additional 9.5 million material tons would be required to replace the N currently applied by U.S. farmers in the form of ammonia.

Realistically, the N currently applied in the form of ammonia would be provided by some combination of an increase in the use of all three materials; however, even a scenario which relies on urea, nitrogen solutions and ammonium nitrate to replace 45, 45, and 10 percent of the ammonia-sourced N, respectively, would require an additional 3.16 million material tons of urea, 4.85 million material tons of nitrogen solutions and 0.95 million material tons of ammonium nitrate, or 9 million additional tons of material. Even if these materials were readily available on

the world market, the addition of 9 million tons of material would significantly strain the U.S. agricultural transportation and distribution systems. However, under the current tight U.S. and world fertilizer supply-demand balance, where fertilizer prices have significantly exceeded historic highs, it is doubtful that the quantities of these materials necessary to supplant the N currently supplied by anhydrous ammonia could be sourced at any price.

The problem for the U.S. farmer is further exacerbated by the fact that significantly more tons of non-ammonia nitrogen materials need to be applied to provide the same quantity of N, which increases field costs. More importantly, field and weather conditions already limit the window during which fertilizer materials can be applied. Having to apply significantly more tons of material (9 million in the scenario presented above) to supply the same quantity of N will further constrain field operations and increase the probability of sub-optimal nutrient applications and sub-optimal crop yields. This scenario also doesn't consider that farmers and fertilizer dealers do not have the necessary equipment to make large shifts from anhydrous ammonia to sources like urea or UAN solutions, which would need to be applied only in the spring for crops such as corn.

Furthermore, agricultural use of anhydrous ammonia is only part of the picture. The U.S. industrial market, defined as anhydrous ammonia which is not directly applied in agriculture or used in the manufacture of fertilizer materials, uses an additional 6-6.5 million material tons of anhydrous ammonia annually. While some of this material is imported and used at plants located near port facilities, over 80 percent (5.1-5.2 million material tons) is transported significant distances by barge, pipeline and rail. Approximately 45 percent of this share, or 2.3-2.4 million tons, moves by rail. In some manufacturing processes which use ammonia, product substitution is not even possible. But even when it is, sourcing substitute products for industrial ammonia

use for the 2.3-2.4 million material tons currently transported by rail will be a significant and costly burden to the U.S. industries.

The rail industry also has suggested that anhydrous ammonia could be shipped in a diluted solution known as aqua ammonia (which is 29 percent anhydrous ammonia). This would require three times the current number of rail shipments, with a greater increase in infrastructure investment, such as rail cars and storage facilities that are not currently in place for most shippers. In addition to tripling rail shipments, making costly production modifications, and significantly increasing infrastructure investment, aqua ammonia would require the treatment and disposal of over two billion gallons of water annually.

B. Transportation of TIH Materials and the Need to Continue the Common Carrier Obligation for TIH Materials.

As noted previously, TFI members produce anhydrous ammonia, which is the largest volume TIH commodity transported by the rail industry. However, the rail industry has stated that, due to potential liability risks in the event of an accidental release, it would not transport anhydrous ammonia, or any other TIH commodity, but for the common carrier obligation. Although the rail industry may not refuse to transport anhydrous ammonia, it has taken other actions that undermine its common carrier duties, and in so doing, also undermine the greater public interest in rail transportation of anhydrous ammonia.

The Association of American Railroads ("AAR") has called upon producers of TIH commodities, including anhydrous ammonia, to cease their production and even has urged Congress to enact legislation to require such action. As discussed above, this is an unreasonable request not supported by the facts and based upon an irresponsible, short-sighted, and self-interested attempt to avoid the common carrier obligation to haul these commodities.

Rail is a much safer and often the only alternative to trucks for the overland transportation of anhydrous ammonia. According to the AAR, "In 2005 (the most recent year for which data are available), 99.997 percent of all rail hazardous material shipments reached their final destination without a release caused by an accident." Based on AAR statistics given to TSA, there was an average of 50,860 shipments totaling 4,070,000 tons of ammonia shipped by rail annually between 2000–2005. One tank car can transport as much ammonia as four trucks. Thus, this total rail volume of ammonia equates to almost 203,450 truck shipments. Switching this amount of ammonia to trucks would add enough additional trucks to the highway that, when stretched end-to-end, would extend from Washington DC to the outskirts of Los Angeles, CA (2634 miles). Rail transportation not only is more efficient than trucks, it takes a highly hazardous commodity off of our nation's highways, where the potential for accidents and public release are many times greater. Therefore, it is imperative that the Board remain vigilant to actions by the rail industry that would undermine the common carrier obligation to transport anhydrous ammonia.

The most obvious means of circumventing the common carrier obligation is through rates. Since 2004, rail rates for anhydrous ammonia have skyrocketed to unprecedented levels. TFI members report that their rail rates have nearly tripled over this time, excluding fuel surcharges. My company, PotashCorp, estimates that it is paying a 110 percent premium over other commodities to ship anhydrous ammonia, which amounts to \$6.5 million annually in additional transportation costs. By increasing rail rates to such high levels, railroads are able to discourage rail shipments of anhydrous ammonia without actually having to refuse to transport those shipments. The railroad response is that these rates are necessary to cover the insurance premiums associated with transportation of TIH materials. In other words the shipping

community is paying for the insurance premiums associated with the transportation of TIH materials through rates far exceeding those of other commodities.

These rail rate increases have made trucks much more competitive with rail for transporting anhydrous ammonia at ever greater distances. Historically, truck rates were competitive with rail rates up to about 200 miles. Because trucks are less fuel efficient and typically must return empty on an anhydrous ammonia back-haul, greater distances simply were not profitable. At current rail rate levels, however, that range has expanded to nearly 500 miles, despite record high fuel costs and a longer empty back-haul. This is not because trucks have become more efficient than rail (since they are not); rather, it is indicative of railroad "demarketing" of anhydrous ammonia, which is merely another way to avoid their common carrier obligation to transport this commodity.

Consequently, more anhydrous ammonia that previously moved by rail is now moving by truck, which is not in the public interest. If PotashCorp alone were to shift its entire anhydrous ammonia rail shipments to trucks, that would add over 20 million truck miles to our already congested highways and consume over 3 million gallons of diesel fuel annually. This fuel consumption would be approximately 2 million gallons per year more than rail to haul the same volume of anhydrous ammonia.

The rail industry's overall concern is that its liability is just too great to carry TIH commodities like anhydrous ammonia. AAR has gone on record stating that, but for their common carrier obligation, the railroads would not choose to transport TIH commodities. Most Class I railroads have asserted that there is no rate that could compensate them for this risk. In recent weeks, the Canadian Pacific Railway ("CP") notified many TFI members that, through its tariff provisions, CP intends to transfer full liability and require ammonia shippers to indemnify CP against any liability from all loss, harm, claims, actions, costs, damages or injury that may

arise directly or indirectly from or in connection with the transportation of anhydrous ammonia. After receiving strenuous objections, CP is modifying its tariff, but we do not yet know what that will look like. TFI submits that this shifting of liability for a railroad's own negligence to third parties is another end-run attempt around the common carrier obligation and contrary to the public interest.

The liability issue is very difficult to address and requires a careful balancing of interests. As a common carrier, the rail industry is imbued with a public interest, which by definition is broader than the rail industry's own self-interest. In addition, through its own safety, operating and maintenance practices, the rail industry has the most direct influence over its own risk exposure from carrying anhydrous ammonia. Because anhydrous ammonia is so vital to our food supply and industrial economy, we must have a safe, efficient, and reliable means of transportation, and railroads are a key part of that transportation network. Consequently, to relieve the railroads of their common carrier obligation is not an option. However, shifting or capping railroad liability causes other concerns because any accidental catastrophic release of a TIIH commodity is most likely to be due to railroad negligence. Indeed, the three highly-publicized releases of TIIH commodities in this country over the past decade, at Minot, Macdonald, and Graniteville, have all been attributed to human causes on the railroad.

TFI members have thought long and hard about this dilemma. We have submitted a proposal to the Class I railroads under which we would be willing to search the insurance market to obtain as much excess insurance as possible. Insurance brokers have told TFI that there is approximately \$1 to \$1.5 billion in total liability coverage available. TFI has offered to work with the railroads to share the cost of this insurance and make the maximum amount of insurance available to the rail industry in the event of an accident involving the release of anhydrous ammonia. Under our proposal, TFI is asking the Class I railroads to carry primary insurance

coverage and TFI ammonia shippers would pick up the balance. In return, TFI is asking the railroads to provide a measurable reduction in rail rates and rate stability to reflect the insurance expense assumed by TFI members. Our proposal would ensure that transportation of these materials would remain profitable to the railroads. The Class I railroads have expressed a willingness to explore this proposal and TFI will keep the Board updated on the progress of our discussions.

C. Carrier-Imposed Infrastructure Requirements.

The rail industry has imposed several infrastructure investment requirements upon anhydrous ammonia shippers and receivers that implicate its common carrier obligations. The most significant of these include new tank car investments and the expansion of yard capacity for receivers of anhydrous ammonia.

1. Tank Car Performance Standards.

In 2006, the AAR Tank Car Committee announced new performance standards for tank cars carrying anhydrous ammonia and chlorine to reduce the potential for a release in the event of an accident. The standards, however, were not predicated upon sound science, but instead upon a "bigger is better" philosophy. TFI and numerous others expressed grave concerns that the process was unscientific; failed to consider the countervailing consequences that a heavier car could have for safety and security; was on an unnecessarily accelerated time frame that precluded consideration of a key rail car impact study then being prepared for the Federal Railroad Administration ("FRA"); and failed to consider whether equal or greater safety improvements could be achieved through other means with fewer costs. Although railroads, shippers, and car manufacturers had worked cooperatively to enact tank car standards for decades, the Class I railroads used their majority on the committee to dictate this new standard

over the objections of every shipper member, all but one car manufacturer, and most significantly, the FRA.

On April 1, 2008, the FRA and the Pipeline and Hazardous Materials Safety Administration proposed new tank car performance standards based upon a recently completed scientific study of the forces exerted upon tank cars in a crash. Now that the FRA has issued its own proposal, TFI is hopeful that the AAR will defer the implementation date of its proposal until completion of the rulemaking and ultimately withdraw its new standards entirely. Otherwise, the fertilizer industry faces the bleak prospect of having to replace its fleet of approximately 6,000 rail tank cars twice in a relatively short span of time, and well before their useful life is exhausted. TFI ammonia shippers do not own tank cars; rather we lease our cars on a contract basis. We estimate the cost of replacing current leased cars over the next eight years under the FRA proposal to be somewhere between \$800 and \$1500 more per car per month and could exceed \$100 million per year to TFI members.

By dictating tank car standards without regard to the reasonableness of those standards, the AAR's actions constitute another end-run around the common carrier obligation. Because shippers supply tank cars, the railroads are immunized from the financial and operating effects of their own standard setting decisions for tank cars, which gives them little incentive to consider any interests other than their own. But the common carrier obligation is much broader than just the railroads' interests and thus the AAR's actions must be evaluated for their reasonableness.

2. Yard expansions.

In order to accomplish the delivery of ammonia rail cars immediately upon arrival, the rail industry is requiring receivers to have sufficient yard capacity to receive all loads promptly. Typically, this is being done through punitively high storage charges and penalties for being unable to receive loaded cars upon delivery. In concept, TFI does not object to requiring

receivers to take delivery as soon as possible. In practice, however, the railroads are foisting the cost of their inefficiencies upon the receivers.

In order to maintain sufficient track space to receive ammonia rail cars, shippers and receivers first must be able to plan for orderly and timely deliveries. Despite their best efforts to do so, the railroads frequently "bunch" their rail car deliveries. Instead of receiving the steady stream of ammonia cars that are planned at the time of shipment, receivers often receive multiple cars all at once. In those situations, they often do not have the track capacity to store all those cars. The railroads should not be permitted to assess punitive storage charges when they are responsible for the bunching of cars that makes storage necessary, despite the diligent planning efforts of shippers and receivers. A receiver should not be required to construct and maintain a rail yard that is needed to store ammonia cars that would not be necessary if the railroads provided consistent and reliable service.

Conclusion

TFI commends the Board for getting out in front of the common carrier issue. With so much emphasis upon market forces to regulate rail carriers, we often lose sight of the fact that Congress expressly retained the common carrier obligation for the rail industry. That obligation is accompanied by both privileges and responsibilities that extend beyond those in other industries. The rail industry should not be able to avoid its responsibility of common carrier obligation when convenient or in their own economic interest to do so. Were this to be allowed, it would lead to severe economic disruptions that would be detrimental to every American. The Board should continue to hold the railroads to this standard which has served this country and its citizens so well for over 100 years.

To summarize our position we would like to reemphasize the following points:

- The common carrier obligation is critical to our food, fuel and economic security;
- There is not enough infrastructure in place to handle nitrogen substitutes to anhydrous ammonia for agricultural applications;
- There are no substitute products for industrial applications of anhydrous ammonia that produce everyday consumer goods;
- Conversion of anhydrous ammonia shipments from rail to truck consumes additional fuel and adds to an already congested highway system;
- Higher rail rates have more than offset insurance costs;
- The railroads have an excellent hazardous material safety record; and
- Ammonia shippers are working with the rail carriers on liability concerns.