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COMMON CARRIAGE AND LIABILITY IN THE RAIL TRANSPORTATION OF TOXIC INHALATION HAZARD MATERIALS

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INTRODUCTION

On November 4, 2000, a Burlington Northern & Santa Fe Railway freight train traveling down the North Platte River Valley in western Nebraska derailed as it passed through the town of Scottsbluff.¹ The hulls of three of the train's tank cars ruptured, releasing a vapor plume of benzene and other toxic chemicals into the town, resulting in the evacuation of some 3750 local residents.² Fourteen months later, on January 18, 2002, a freight train of the Canadian Pacific Railway derailed near Minot, North Dakota.³ Eleven damaged tank cars released more than 220,000 gallons of anhydrous ammonia vapor, leading to one death and numerous claims for personal injury and property damage.⁴ Then, on January 6, 2005, a collision on the Norfolk Southern Railway in Graniteville, South Carolina, ruptured a parked tank car and released a plume of chlorine gas, killing nine people and sending more than five hundred others to the hospital.⁵

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1. Peck Hwee Sim, *Derailed Train Spills Benzene in Nebraska*, CHEMICAL WEEK, Nov. 15, 2000, at 12.

2. *See id.*

3. NAT'L TRANSP. SAFETY BD., DERAILMENT OF CANADIAN PACIFIC RAILWAY FREIGHT TRAIN 292-16 AND SUBSEQUENT RELEASE OF ANHYDROUS AMMONIA NEAR MINOT, NORTH DAKOTA, JANUARY 18, 2002, RAILROAD ACCIDENT REPORT NTSB/RAR-04/01, at 1 (2004).

4. *See id.* at 1, 5; *see also* Mehl v. Canadian Pac. Ry., 417 F. Supp. 2d 1104, 1106 (D.N.D. 2006).

5. NAT'L TRANSP. SAFETY BD., COLLISION OF NORFOLK SOUTHERN FREIGHT TRAIN 192 WITH STANDING NORFOLK SOUTHERN LOCAL TRAIN P22 WITH SUBSEQUENT HAZARDOUS MATERIALS

In most cases, a freight train wreck presents no particular danger to the general public. Commodities like coal, grain, and automotive parts, while valuable, do not present the citizens of a nearby town with the danger of illness or death; but commodities like anhydrous ammonia, benzene, and chlorine—known collectively as toxic inhalation hazard (“TIH”) or poison inhalation hazard materials—present that very danger. Where that danger leads, the problem of liability in the event of an accident follows. Who should pay the freight, so to speak, to plaintiffs injured in a railroad accident involving the release of TIH materials? In a case where a railroad’s negligence caused the release, the answer may seem to be simple enough: sue the railroad. However, it may be that a particular accident was not the result of a carrier’s negligence, but rather the negligence of another party in producing the cargo, negligence in maintaining privately owned rolling stock,⁶ or even no negligence at all. In addition, even if a particular accident is the result of a carrier’s negligence, the injuries resulting from the accident will not be entirely the carrier’s fault. What then?

As Judge Richard Posner pointed out in his opinion in *Indiana Harbor Belt Railroad Co. v. American Cyanamid Co.*, it is a simple truism that anything—such as the release of hazardous materials from a rail car without any negligence on the railroad’s part—can happen.⁷ But rather than existing simply as improbable scenarios conceived in the minds of torts professors, such accidents have actually occurred,⁸ leaving various courts to answer the question, “What then?” Some of these courts have held that, in light of their obligation as common carriers to move any and all freight handed to them for shipment, rail carriers should be immune from liability.⁹ Other courts have imposed

RELEASE AT GRANITEVILLE, SOUTH CAROLINA, JANUARY 6, 2005, RAILROAD ACCIDENT REPORT NTSB/RAR-05/04, at 1 (2005).

6. A casual glance at any freight train or rail yard will reveal numerous tank and other freight cars bearing reporting marks ending with the letter “X”; for example, GATX, NATX, or UTLX. The “X” indicates a car that is owned by some third party and not by a railroad company per se. Most of the hazardous materials transported by rail in the United States move in these privately owned tank cars.

7. *Ind. Harbor Belt R.R. Co. v. Am. Cyanamid Co.*, 916 F.2d 1174, 1179 (7th Cir. 1990).

8. *See, e.g.*, HAZARDOUS MATERIALS RELEASE FROM RAILROAD TANK CAR WITH SUBSEQUENT FIRE AT RIVERVIEW, MICHIGAN, JULY 14, 2001, HAZARDOUS MATERIALS ACCIDENT REPORT NTSB/HZM-02/01, at v (2002) [hereinafter RIVERVIEW ACCIDENT REPORT] (finding that the fatal release of methyl mercaptan, a poisonous and flammable gas, from a railroad tank car was probably caused by the recipient company’s failure to properly maintain its cargo transfer equipment).

9. *E.g.*, *Actiesselskabet Ingrid v. Cent. R.R. Co. of N.J.*, 216 F. 72, 77–78 (2d Cir. 1914).

strict liability on rail carriers for accidents, openly acknowledging the carriers were not negligent, but holding nonetheless that the rail transportation of hazardous materials was precisely the type of ultrahazardous activity strict liability theories were developed to address.¹⁰ Still others have avoided answering the question altogether.¹¹ Regardless of the answers they have given, however, these courts have all framed the question in terms of strict liability and whether or not a rail carrier's obligations as a common carrier exempt it from such liability.

These courts have taken the wrong approach. The courts taking the *right* approach cannot frankly admit a defendant rail carrier was not negligent¹² and fail to account for the unique characteristics of TIH materials—as opposed to the characteristics of explosive or inflammable materials—which render strict liability theories ineffective in fairly determining liability for a TIH accident. The combination of rail carriers' obligation to move TIH materials and the unique dangers these materials present creates a distinct problem, calling for an approach diverging from that historically taken in assessing rail carrier liability for hazardous materials accidents.

Discerning the right approach requires an answer to two questions: First, are rail carriers actually obligated to move TIH materials? Second, if such an obligation exists, should a rail carrier be fully liable for the TIH accidents that will occur in executing it? The answer to the first question is "Yes"; the answer to the second, though perhaps not as clear, is "No." Part I of this Note provides background on TIH materials, the common carrier obligation, and the unique problem their combination creates. Part II reviews the approach courts have taken toward rail carrier liability in hazardous materials accidents by examining, in detail, the leading cases in the field. Part III offers some thoughts as to how these precedents are detached from industry realities, considering the nature of TIH materials. Finally, Part IV offers some thoughts as to the route the approach to rail carrier liability in TIH accidents should follow.

10. *E.g.*, Chavez v. S. Pac. Transp. Co., 413 F. Supp. 1203, 1208, 1211 (E.D. Cal. 1976).

11. *E.g.*, *In re Derailment Cases*, 416 F.3d 787, 796 (8th Cir. 2005) ("Nebraska has not yet decided whether to adopt . . . strict liability for ultrahazardous or abnormally dangerous activities. . . . We predict that the Supreme Court of Nebraska would decline to reach the issue of strict liability based upon the evidence set forth in this case.").

12. *See, e.g.*, Nat'l Steel Serv. Ctr., Inc., v. Gibbons, 319 N.W.2d 269, 272 (Iowa 1982).

I. BACKGROUND

A. *The Shipment of TIH Materials*

The shipment of TIH freight, as well as other hazardous materials, is an everyday event. Some 800,000 shipments of hazardous materials move in the United States each day for an annual total exceeding four billion tons.¹³ Most of these shipments move by road or by waterway,¹⁴ yet many of the most hazardous of these shipments move by rail.¹⁵ American railroads move between 1.5 and 1.6 million carloads of hazardous materials each year,¹⁶ some 100,000 of which consist of TIH materials.¹⁷ Of all commodities shipped by rail in this country, these TIH shipments are the most likely to inflict massive casualties in the event of an accident.¹⁸

13. FRANK R. SPELLMAN, *TRANSPORTATION OF HAZARDOUS MATERIALS POST-9/11*, at 8 (2007); John Levin, *The Transportation of Hazardous Materials by Rail: A Recommendation for Reform*, 22 *TRANSP. L.J.* 41, 42 (1994). The number of hazardous material shipments has increased greatly over the past twenty years or so. In the late 1980s, daily shipments of all classes of hazardous materials were estimated at 250,000. Gary M. Bowman, *Judicial Ordering of Intergovernmental Roles in Hazardous Materials Transportation*, 18 *TRANSP. L.J.* 31, 32 (1989); Stuart C. Thompson, *The Hazardous Materials Transportation Act: Chemicals at Uncertain Crossroads*, 15 *TRANSP. L.J.* 411, 411 (1987).

14. SPELLMAN, *supra* note 13, at 9.

15. See BUREAU OF TRANSP. STATISTICS, U.S. DEP'T OF TRANSP., & U.S. CENSUS BUREAU, U.S. DEP'T. OF COMMERCE, 2002 ECONOMIC CENSUS, TRANSPORTATION—COMMODITY FLOW SURVEY: HAZARDOUS MATERIALS 20 tbl.7b (2004) [hereinafter 2002 COMMODITY FLOW SURVEY]. In 2002, for example, rail shipments accounted for more than 3.2 billion ton-miles of TIH shipments. *Id.* Even though this was a considerable drop from five years before, this was still nearly double the ton-mileage moved by truck that year. *Id.*

16. Position Paper, Ass'n of Am. R.R., *Hazmat Transportation by Rail: An Unfair Liability* 1 (Sept. 2008) [hereinafter *Hazmat Transportation by Rail*], available at <http://www.aar.org/Resources/PositionPapers/Safety%20and%20Security/~ /media/AAR/PositionPapers/Hazmat%20by%20Rail%20September%202009.ashx>. While the total number of hazardous materials carloads shipped annually has greatly increased over the last twenty years, the number of shipments moving by rail has not increased at so high a rate. In 1989, for example, 1.5 million carloads of hazardous materials were shipped by rail. Levin, *supra* note 13, at 42.

17. *Hazmat Transportation by Rail*, *supra* note 16, at 1. Out of all the modes of transportation, trucks move the greatest amount of gases by weight (45.4% of total tonnage in 2002), but railroads move the greatest number of revenue ton-miles of gases (44.6% of ton-miles in 2002, as compared to 36.3% of ton-miles for trucks). 2002 COMMODITY FLOW SURVEY, *supra* note 15, at 6 tbl.6a.

18. See Ross C. Paolino, *All Aboard! Making the Case for a Comprehensive Rerouting Policy to Reduce the Vulnerability of Hazardous Railcargoes to Terrorist Attack*, 193 *MIL. L. REV.* 144, 145 (2007). The U.S. Naval Research Laboratory recently estimated that an attack in Washington, D.C., on a freight car carrying TIH materials could inflict nearly 100,000 casualties. *Id.* at 148. In another study, the Chlorine Institute estimated that the destruction of a tank car

Despite their usefulness, TIH materials have special characteristics that make them exceptionally dangerous in the event of an accidental release.¹⁹ TIH materials are gases at room temperature,²⁰ meaning that when their containers are breached, they can spread as far as the wind may carry them. Some have a mass greater than that of air, allowing them to sink into recessed or low-lying areas.²¹ Some TIH materials are also inflammable²² and may cause permanent injury or death, even at relatively low atmospheric concentrations.²³ These characteristics mean that, no matter the degree to which a rail carrier may or may not be responsible for a release, once a release has occurred, the potential for harm from that point forward is beyond the carrier's power to control. But given their wide variety of uses and their importance to modern industry, *not* moving TIH materials is not realistic. Industry and regulatory authorities alike believe that transportation by rail is the safest method of moving TIH materials from one place to another;²⁴ this is a question of risk. However, whether railroads are actually required to move these materials is essentially a question of law.

carrying ninety tons of chlorine gas could create a poisonous cloud measuring ten miles by forty. *Id.* at 148 n.19.

19. Anhydrous ammonia, for example, is used widely as a fertilizer and to control nitrous oxide emissions from power plants; benzene is used to manufacture products ranging from plastics to pharmaceuticals; and chlorine is used in water purification and in the manufacture of goods as diverse as paper and PVC pipe. CRC HANDBOOK OF CHEMISTRY AND PHYSICS 4-8 (David R. Lide ed., 71st ed. 1990) [hereinafter CRC HANDBOOK]; Press Release, Fertilizer Inst., Rail Transportation of Anhydrous Ammonia (Mar. 12, 2008), *available at* <http://www.tfi.org/mediacenter/railstatement.pdf>; HEALTH ASSESSMENT SECTION OF THE BUREAU OF ENVTL. HEALTH, OHIO DEP'T OF HEALTH, BENZENE: ANSWERS TO FREQUENTLY ASKED HEALTH QUESTIONS (2003), <http://www.odh.ohio.gov/ASSETS/B50DD769DEAF483D84C7A06756121521/benzen.pdf>.

20. *See, e.g.*, CRC HANDBOOK, *supra* note 19, at 4-42, -57 (detailing the boiling points of anhydrous ammonia and chlorine).

21. *See, e.g., id.* at 4-9 (detailing the physical properties of chlorine).

22. *See, e.g.*, RIVERVIEW ACCIDENT REPORT, *supra* note 8, at 1 (referencing the flammability of methyl mercaptan).

23. CRC HANDBOOK, *supra* note 19, at 16-24. Anhydrous ammonia vapor may be lethal at 0.5% to 1.0% of atmosphere over a period of half an hour. *Id.* The maximum safe threshold for exposure to ammonia vapor over the course of an eight-hour work day is 100 parts per million. *Id.* at 16-28. Chlorine is usually fatal at 1,000 parts per million. *Id.* at 4-9. It is these characteristics that precisely suit some of these materials for use as chemical weapons and make their cargo containers ideal targets for terrorist attack. *See* Paolino, *supra* note 18, at 145-49.

24. *Common Carrier Obligation of Railroads—Transportation of Hazardous Materials: Hearing Before the Surface Transp. Bd.*, STB Ex Parte No. 677 (Sub-No. 1), at 4-5 (2008) [hereinafter *Hazardous Materials Hearing*] (statement of Charles D. Nottingham, Chairman, U.S. Surface Transp. Bd.); *id.* at 77 (statement of Bruce J. Carlton, President, Nat'l Indus. Transp. League).

B. *The Common Carrier Obligation*

Although most rail carriers in the United States are for-profit corporations moving freight to make money, the principal reason they move TIH materials is their obligation to do so. The risk associated with the transportation of TIH materials is such that, given the option, rail companies would not move them.²⁵ Instead, the rail transport of TIH materials stems from the common carrier rule, a doctrine binding firms that transport persons or property for hire.²⁶ Common carriers have special duties not applicable to most other business firms, including the provision of carriage to all parties who request it, provision of that carriage at a reasonable rate, a duty to insure the shipper against the loss of his goods,²⁷ and an elevated duty of care toward the public.²⁸

The ultimate origin of the concept of common carriage is lost in the distant past. The Code of Hammurabi, for instance, required men licensed for carriage to make reparations to shippers for failure to deliver goods entrusted to their care.²⁹ In the common law tradition, the basic principles of common carriage were established “long before the advent of railroads,”³⁰ even if not necessarily from time immemorial. Many of the rules and practices governing common carriage were developed in the Court of Admiralty and applied to merchant mariners in the sixteenth century; they were then adopted

25. *Cf.* Hazmat Transportation by Rail, *supra* note 16, at 1 (noting the “enormous risk” of transporting TIH materials and the obligation to transport these materials “even if [the railroad companies] don’t want to” (bolding omitted)).

26. *See* JAMES W. ELY, JR., RAILROADS AND AMERICAN LAW 180–81 (2001).

27. *Id.* Litigation over what is “reasonable” in regard to both a request for carriage and the rates a rail carrier may charge for that carriage has profoundly affected American constitutional jurisprudence. For an in-depth discussion of this litigation, see generally RICHARD C. CORTNER, THE IRON HORSE AND THE CONSTITUTION: THE RAILROADS AND THE TRANSFORMATION OF THE FOURTEENTH AMENDMENT (1993).

28. *See* ELY, *supra* note 26, at 219–20.

29. The relevant passage reads:

If a man be on a journey and he give[s] silver, gold, stones or portable property to a man with a commission for transportation, and if that man do[es] not deliver that which was to be transported where it was to be transported, but take[s] it to himself, the owner of the transported goods shall call that man to account for the goods . . . , and that man shall deliver to the owner of the transported goods fivefold the amount which was given to him.

THE CODE OF HAMMURABI, KING OF BABYLON § 112, at 39 (Robert Francis Harper trans., Lawbook Exchange 2d ed. 1999) (1904).

30. ELY, *supra* note 26, at 180.

by common law courts and applied to land carriers in the seventeenth century.³¹

Modern American courts define a common carrier as “one who holds himself out to the public as engaged in the business of transportation of persons or property from place to place for compensation, offering his services to the public generally.”³² Railroads’ status as common carriers was assumed from the industry’s earliest years in the United States. For example, the 1855 Michigan General Railroad Act declared that any railroad receiving freight from a shipper held the same rights and liabilities as other common carriers, an 1857 ruling of the Illinois Supreme Court held that rail carriers’ status as common carriers “cannot be disputed,” and several state constitutions incorporated language to the same effect.³³ Following the Civil War, various U.S. Supreme Court opinions helped cement the rule that most rail carriers are common carriers.³⁴ This rule and its attendant duties have endured to the present day.

These duties have not been frequently challenged in court. The challenges presented have been defeated. For example, in the 1970s, several railroad companies in the eastern United States pushed to have the traditional common carrier rules—specifically the provision of carriage for all parties requesting it—suspended when the cargo involved was spent nuclear reactor fuel.³⁵ In a process known as “flagging out,” these carriers failed to publish their tariffs for spent nuclear fuel in an attempt to dodge their obligation to ship it.³⁶ An order from the Interstate Commerce Commission (“ICC”) to publish

31. 8 WILLIAM HOLDSWORTH, *A HISTORY OF ENGLISH LAW* 257 (2nd ed. 1937).

32. *Willard v. Fairfield S. Co.*, 472 F.3d 817, 821 (11th Cir. 2006) (quoting *Kieronski v. Wyandotte Terminal R.R. Co.*, 806 F.2d 107, 108 (6th Cir. 1986)).

33. *See* ELY, *supra* note 26, at 181; *see also* ARK. CONST. art. XVII, § 1 (“All railroads, canals and turnpikes shall be public highways, and all railroads and canal companies shall be common carriers.”).

34. *See, e.g.*, *Pa. R.R. Co. v. Puritan Coal Mining Co.*, 237 U.S. 121, 133 (1914) (“The common law of old in requiring the carrier to receive all goods and passengers . . . is applicable to those who transport freight in cars drawn by steam locomotives.”). It is important to note that the common carrier obligation does not extend to all companies operating a railroad. *See, e.g., Willard*, 472 F.3d at 822 (“In a situation where an industry maintains a complicated intraplant railroad system, such rail operations will be regarded as plant facilities rather than those of a common carrier.”); *see also* *Greene v. Long Island R.R. Co.*, 280 F.3d 224, 235 (2d Cir. 2002) (outlining factors to be considered in determining whether a particular railroad or railroad supply company is a common carrier).

35. *Akron, Canton & Youngstown R.R. Co. v. ICC*, 611 F.2d 1162, 1163 (6th Cir. 1979).

36. *Id.* at 1163, 1166; *Consol. Rail Corp. v. ICC*, 646 F.2d 642, 644 (D.C. Cir. 1981).

the tariffs led to lawsuits and, in time, to federal court appeals.³⁷ The courts hearing these cases sided with the ICC, holding that, under the common carrier doctrine, the carriers involved were required to honor requests to ship spent nuclear fuel and to publish their tariffs for handling the same.³⁸

Whatever the ultimate origins of the relationship, the common carrier doctrine and the railroad industry in this country are intertwined so closely at this point that railroad companies—at least as far as large companies like the Canadian Pacific and the Norfolk Southern are concerned—cannot really argue that they are *not* common carriers. Thus, the answer to the first of this Note's principal questions is that rail carriers must honor requests for the shipment of TIH materials. If a request for the shipment of spent nuclear fuel is reasonable, there is no reason to presume that a request for the shipment of anhydrous ammonia is not. Railroads' status as common carriers requires them to move all types of freight.

However, in fulfilling their duty to transport TIH materials, railroad companies are exposed to potentially staggering liability that they do not face in the transportation of less dangerous commodities.³⁹ The common carrier obligation and the special characteristics of TIH materials thus combine to put rail carriers in potentially difficult straits. The law imposes on them the duty to transport hazardous materials, but at the same time exposes them to tremendous liability in the fulfillment of that duty. Thus, answering the second of this Note's principal questions—and sketching the outline of a solution to a difficult situation—is rather more complicated. The best start can be made by reviewing the approach that has already been taken.

II. THE APPROACH TO RAIL CARRIER LIABILITY IN HAZARDOUS MATERIALS ACCIDENTS

The approach courts have taken to the question of rail carrier liability in hazardous materials accidents has been one of variations

37. *Akron*, 611 F.2d at 1163–64.

38. *See id.* at 1168, 1170; *see also Consol. Rail Corp.*, 646 F.2d at 644.

39. In one case, for example, resulting from the leakage and explosion of butadiene from a tank car in New Orleans in 1987, CSX Transportation faced the payment of compensatory and punitive damages in excess of \$850 million. *See generally In re New Orleans Train Car Leakage Fire Litig.*, 795 So. 2d 364 (La. Ct. App. 4 Cir. 2001). The court was not concerned with the value of this sum because it was “only” eighteen percent of the net worth of the company at the time the award was appealed. *Id.* at 388.

on a theme of strict liability. Courts have operated on the assumption that railroads are common carriers. The questions they sought to answer were thus whether that status exempted railroads from liability altogether and whether their status as common carriers shielded railroads from strict liability.

Most precedents in the hazardous materials field are cases stemming from explosions. These cases are considered most analogous to some well-known blasting cases from the turn of the twentieth century,⁴⁰ which in turn were used to develop strict liability theories.⁴¹ As applied to rail carriers, strict liability was initially rejected as a theory of no value.⁴² Strict liability was more widely accepted in time, but the common law defense based on the common carrier obligation was held to be a valid defense to strict liability.⁴³ Courts then either accepted or rejected the common carrier defense as it applied to the carriage of hazardous materials.⁴⁴ Since TIH materials are intrinsically different from explosives, these precedents present little useful advice with regard to liability in TIH releases.⁴⁵ They are nonetheless well worth reviewing.

A. Actiesselskabet Ingrid

In light of the common carrier obligation, courts once entirely exempted rail carriers from liability in accidents where the carrier was not negligent, usually in cases of *vis major* (superior force of nature) or “acts of . . . the public enemy.”⁴⁶ The leading example of this

40. See, e.g., *Sullivan v. Dunham*, 55 N.E. 923 (N.Y. 1900).

41. See William K. Jones, *Strict Liability for Hazardous Enterprise*, 92 COLUM. L. REV. 1705, 1709 (1992).

42. See *Actiesselskabet Ingrid v. Cent. R.R. Co. of N.J.*, 216 F. 72, 78 (2d Cir. 1914).

43. See RESTATEMENT (SECOND) OF TORTS § 521 cmt. a (1977).

44. See *infra* notes 46–77 and accompanying text.

45. Cf. *Ind. Harbor Belt R.R. Co. v. Am. Cyanamid Co.*, 916 F.2d 1174, 1179 (7th Cir. 1990) (finding that cases imposing strict liability on persons storing dangerous chemicals provide “little help” in a case involving the transportation of these chemicals because “the storer . . . has more control than the shipper”). The U.S. Department of Transportation has recognized the differences between explosives and TIH materials and the dangers they present, even if tort law has not. The Department divides hazardous materials into nine separate classes based on the characteristics of the materials. For example, Hazard Class 1 contains explosives, Hazard Class 2 contains gases (including inflammable gases, like propane and butane, and TIH materials), Hazard Class 3 contains inflammable liquids, Hazard Class 4 contains inflammable solids and materials that are dangerous when wet, and so forth. See 49 C.F.R. §§ 173.115, .120, .124, .127–.128, .132, .136, .140, .403 (2008).

46. ELY, *supra* note 26, at 181. The implications of this in regard to terrorist attacks are too numerous to outline here. For a discussion of the potential for a terrorist attack on a railroad car

scenario is the opinion of the U.S. Court of Appeals for the Second Circuit in *Actiesselskabet Ingrid v. Central Railroad Co. of New Jersey*,⁴⁷ an admiralty case stemming from a dynamite explosion.

On January 26, 1911, the Central of New Jersey ("CNJ") spotted a boxcar loaded with 670 cases of dynamite on a pier in Jersey City.⁴⁸ At noon the following February 1, as workmen were transferring several of the cases from the pier to a steam lighter moored nearby, the dynamite exploded.⁴⁹ At least twenty-four men died in the blast; dozens more were injured.⁵⁰ The lighter, the Norwegian freighter *Ingrid*, several smaller vessels and railroad freight cars, and the pier itself were destroyed.⁵¹ People as far away as Brooklyn and Harlem felt the shock wave.⁵² Property damage in New Jersey and New York exceeded one million dollars, not adjusted for inflation.⁵³ The explosion's cause was never determined; any clues accident investigators could have used were most likely incinerated in the blast.⁵⁴

The *Ingrid's* master and owners sued the CNJ to recover their losses.⁵⁵ Since they were unable to produce any evidence of CNJ's negligence, the plaintiffs urged the court to apply the strict liability rule first articulated in the famous English case of *Rylands v. Fletcher*:

[I]f the owner of land brings upon his land anything which would not naturally come upon it and which is in itself dangerous and may become mischievous if not kept under proper control, he will be

loaded with TIIH materials, see Paolino, *supra* note 18, at 147–50. Suffice it to say for our purposes, terrorist attacks could be considered acts of war, and in the event of such an attack, the carrier should be exempted from liability altogether, since this approach would be more consistent with other situations "caused by acts of God or the public enemy." See ELY, *supra* note 26, at 181; cf. Levin, *supra* note 13, at 50 (noting that acts of God and acts of war are among the only defenses permitted by the Comprehensive Environmental Response Compensation and Liability Act of 1980).

47. *Actiesselskabet Ingrid*, 216 F. 72.

48. *Ingrid*, 195 F. 596, 598 (S.D.N.Y. 1912), *aff'd Actiesselskabet Ingrid*, 216 F. 72.

49. *Id.* at 598–99.

50. *Exploding Dynamite Kills at Least 24; Hundreds Injured; All New York Shaken*, N.Y. TIMES, Feb. 2, 1911, at 1 [hereinafter *Exploding Dynamite Kills at Least 24*].

51. *Ingrid*, 195 F. at 599.

52. *Exploding Dynamite Kills at Least 24*, *supra* note 50.

53. *Id.*; *Jersey City to Arrest Eight for Explosion*, N.Y. TIMES, Feb. 3, 1911, at 1.

54. See *Ingrid*, 195 F. at 603 (noting the impossibility of determining with any certainty what caused the Jersey City explosion).

55. *Id.* at 598.

liable in damages for any mischief thereby occasioned, even though he may have acted without negligence.⁵⁶

The *Actiesselskabet Ingrid* plaintiffs argued that the transportation of dynamite was so dangerous that the simple fact the explosion occurred was sufficient to prove CNJ's wrongdoing.⁵⁷ They further argued that, by agreeing to transport the dynamite, CNJ had assumed liability for any injuries caused when the dynamite exploded.⁵⁸

Before rejecting the plaintiffs' theory in no uncertain terms, the court first noted the general disapproval with which American courts had treated the *Rylands* doctrine up to that point. The court recited a list of states that had rejected *Rylands* and then stated, "[T]he doctrine of *Rylands v. Fletcher*, if applicable at all, cannot be applied to cases of this nature."⁵⁹ The court continued:

We think there can be no doubt, so far as a common carrier is concerned, that such danger as necessarily results to others from the performance of its duty, without negligence, must be borne by [the public] as an unavoidable incident of the lawful performance of legitimate business.

....

It certainly would be an extraordinary doctrine for courts . . . to say that a common carrier is under legal obligation to transport dynamite and is an insurer against any damage which may result . . . even though it has been guilty of no negligence . . .⁶⁰

This common law rule—the common carrier defense—is the rule in most states.⁶¹ In the years after the *Ingrid's* destruction, it was incorporated into the Restatement of Torts as a defense to strict

56. *Actiesselskabet Ingrid v. Cent. R.R. Co. of N.J.*, 216 F. 72, 76–77 (2d Cir. 1914) (construing *Rylands v. Fletcher* (1868) 3 L.R.E. & I. App. 330, 339). For an interesting and worthwhile discussion about how American courts may have been incorrectly defining “strict” liability as “absolute” liability, see Frank C. Woodside III, Mark L. Silbersack, Travis L. Fliehman & Douglas J. Feichtner, *Why Absolute Liability Under Rylands v. Fletcher Is Absolutely Wrong*, 29 DAYTON L. REV. 1 (2003).

57. *Actiesselskabet Ingrid*, 216 F. at 76.

58. *See id.* at 78.

59. *Id.* at 77–78.

60. *Id.* at 78.

61. California and Iowa are the exceptions. *See infra* notes 64–77 and accompanying text.

liability.⁶² However, the common carrier defense was later rejected by two states, and its validity is an open question in others.⁶³ Some courts question it by pointing out that the defense either prevents an injured party from recovering any damages at all or that it creates the potential for economic harm. Thus, these courts have classified hazardous materials transport as an ultrahazardous activity to which the common law defense does not apply.

B. Chavez *and* National Steel

Courts rejecting the common carrier defense in strict liability actions have done so partly on the premise that rail transportation of hazardous materials is an ultrahazardous activity and that imposing strict liability provides some economic benefit to society by spreading losses among the general public.⁶⁴ One of the first courts to rely

62. See RESTATEMENT (SECOND) OF TORTS, *supra* note 43, § 521. The First Restatement defined as ultrahazardous an activity that created strict liability in tort. See RESTATEMENT OF TORTS §§ 519–20 (1938). This is rather circular: What is an ultrahazardous activity? It is an activity creating strict liability in tort. How then do we know when to apply strict liability? We apply it when the defendant is engaged in an ultrahazardous activity.

Apart from the common carrier defense, a plaintiff may find his case preempted by federal regulation. This was the result in litigation stemming from the November 2000 derailment and benzene release in Scottsbluff, Nebraska. The tank cars that derailed in Scottsbluff were inspected in Montana two days before the accident, in accordance with regulations promulgated by the Federal Railroad Administration. *In re Derailment Cases*, 416 F.3d 787, 791–92 (8th Cir. 2005). The plaintiffs alleged that the railroad workers who inspected the cars were negligent in their duties, and that the federal regulations governing tank car inspections did not preempt their tort claim of “negligent inspection.” *Id.* at 792. The court disagreed:

It is clear that the FRA’s regulations are intended to prevent negligent inspection by setting forth minimum qualifications for inspectors, specifying certain aspects of freight cars that must be inspected, providing agency monitoring of the inspectors, and establishing a civil enforcement regime. These intentions are buttressed by the FRA’s inspection manual for federal and state inspectors. Further, there is no indication that the FRA meant to leave open a state tort cause of action to deter negligent inspection.

Id. at 794.

63. See *supra* note 11 and accompanying text; *infra* notes 64–77 and accompanying text.

64. See *Chavez v. S. Pac. Transp. Co.*, 413 F. Supp. 1203, 1208 (E.D. Cal. 1976) (“Notwithstanding Southern Pacific’s protestations to the contrary, one public policy now recognized in California as justifying the imposition of strict liability for the miscarriage of an ultrahazardous activity is the social and economic desirability of distributing the losses . . .”). For an explanation of how loss-spreading works, at least in theory, see GUIDO CALABRESI, *THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS* 39–67 (1970).

heavily on this argument in its decision was the federal district court in *Chavez v. Southern Pacific Transportation Co.*⁶⁵

The facts behind *Chavez* are strikingly similar to those behind *Actiesselskabet Ingrid*. The U.S. Navy had consigned eighteen boxcars loaded with bombs over the Southern Pacific Railroad (“SP”) from a weapons depot in Nevada to a naval base on San Francisco Bay.⁶⁶ While spotted in storage at SP’s Antelope Yard in Roseville, California, the bombs exploded, causing extensive injuries and damage.⁶⁷ As with the CNJ in *Actiesselskabet Ingrid*, the SP in *Chavez* was never proved to be responsible for the explosion, and after the lawsuit was initiated, SP filed a motion to dismiss the action, urging the court to recognize the common carrier defense to strict liability as an element of California tort law, citing the railroads’ duty to move the Navy’s weapons.⁶⁸

The *Chavez* plaintiffs argued that because California law did not recognize a common carrier defense in the case of ultrahazardous activities and the transportation of high explosives was one of those activities, their lawsuit against SP should proceed.⁶⁹ The court, agreeing with the plaintiffs, held that SP could be found strictly liable for injuries from the explosion and denied SP’s motion for dismissal.⁷⁰ The court also offered another rationale for imposing strict liability on SP, based on the economic principle of loss-spreading:

[T]here is no logical reason for creating a “public duty” exception when the rationale for subjecting the carrier to absolute liability is the carrier’s ability to distribute the loss to the public. . . . Bound or not, Southern Pacific is in a position to pass along the loss to the public. Bound or not, the social and economic benefits which are

65. *Chavez*, 413 F. Supp. 1203.

66. *Id.* at 1205.

67. *Id.* Unlike the Jersey City explosion in *Actiesselskabet Ingrid*, no one was killed in the Roseville explosion. THOMAS WHITE, MANAGING RAILROAD TRANSPORTATION 165–66 (2005).

68. *Chavez*, 413 F. Supp. at 1205–06.

69. *Id.* at 1206. The *Chavez* plaintiffs presented four arguments. Their second was that the common carrier defense should not apply because SP was storing, not transporting the weapons at Roseville; the third, that the common carrier defense should not apply because there was no federal or state requirement for a common carrier to transport high explosives; and the fourth, that even if California tort law recognized the common carrier defense and SP had a common carrier obligation to accept the Navy’s weapons for transport, SP “may still be strictly liable if it had no duty to accept for shipment” the particular weapons which exploded at Roseville. *Id.* Asserting that the plaintiffs’ claims rose or fell on the first argument, the court declined to address the rest. *Id.*

70. *Id.* at 1214.

ordinarily derived from imposing strict liability are achieved. Those which benefit from the dangerous activity bear the inherent costs. The harsh impact of inevitable disasters is softened by spreading the cost among a greater population and over a larger time period. A more efficient allocation of resources results.⁷¹

In short, the court rejected out of hand the point that SP had not actually done anything wrong and had not been negligent in fulfilling its duties as a common carrier. It had merely accrued some benefit from an activity the court called ultrahazardous.⁷²

Another explosion—this one in Iowa on the defunct Chicago, Rock Island & Pacific Railroad (“Rock Island”), involving tank cars loaded with propane—led another state to reject the common carrier defense. In *National Steel Service Center, Inc. v. Gibbons*, the owner of a warehouse destroyed in the explosion sued the Rock Island’s bankruptcy trustee for damages.⁷³ In approaching the case, the Iowa Supreme Court addressed a specific question: “Does the theory of strict liability for abnormally dangerous activities apply to a common carrier under the circumstances of this case?”⁷⁴ The court responded in the affirmative, rejecting the common carrier defense and adopting the “shorter but more recent” line of authority started in *Chavez*.⁷⁵ Adding its own commentary to the *Chavez* court’s analysis, the court continued:

Here we have two parties without fault. One of them, the carrier, engaged in an abnormally dangerous activity under compulsion of public duty. The other, who was injured, was wholly innocent. The carrier was part of the dangerous enterprise, and the victim was not.

71. *Id.* At the time of *Chavez*, California had not yet developed its tort law to the point of either accepting or rejecting the common carrier defense: “Here, the court has the doubtful privilege of trying to ‘guess’ whether the California courts would except Southern Pacific from . . . strict liability . . .” *Id.* at 1206.

72. It is interesting that the *Chavez* court did not apply this doctrine to the other party benefitting from the weapons shipment, namely the U.S. Navy. As an exercise in the absurd, *Chavez*’s principle could be extended to all parties who benefit in any way from the shipment and use of any class of hazardous materials. In the case of TIH materials, that could be anyone who benefits from drinking purified water or anyone who eats food grown in a field fertilized with anhydrous ammonia. Courts following this doctrine could “pass along the loss to the public” in more ways than one. If it is all right to pass the costs of a particular transaction or accident along to the public, then why should it not be all right to pass all the tort liability along to the public as well?

73. *Nat’l Steel Serv. Ctr., Inc. v. Gibbons*, 319 N.W.2d 269, 269 (Iowa 1982).

74. *Id.* (internal quotation marks omitted).

75. *Id.* at 271–72.

The carrier was in a better position to investigate and identify the cause of the accident.⁷⁶

The court concluded, “When an accident destroys the evidence of causation, it is fairer for the carrier to bear the cost of that fortuity.”⁷⁷

Thus, courts rejecting the common law common carrier defense have advanced two principal reasons for doing so. First, imposing strict liability will attain an economic benefit for society as a whole; second, it is only fair for a defendant participating in an activity to pay for the incidental costs of that activity. Some scholars add that strict liability guarantees plaintiffs a source of funds from which to recover damages, noting that rail carriers can charge higher-than-normal tariffs for the shipment of hazardous materials.⁷⁸ The revenue generated from these higher tariffs creates, in theory, a pool of “funds indirectly furnished for the purpose” of compensating plaintiffs.⁷⁹

No matter what variation of strict liability courts have applied to these cases, though, this approach is too detached from the facts on the ground, or more precisely, the facts of each particular release of hazardous materials from a railroad accident site. It rests on a theory developed in cases where evidence of causation could not be recovered, which is simply not the case in most TIH accidents. That is not to say that arguments against the common law rule are without merit. But strict liability theories overlook many facets of a rail carrier’s duties, particularly in regard to the transportation of TIH freight. Overlooking these facets may well produce a result in litigation that is neither desirable nor equitable.

III. THOUGHTS ON THE APPROACH

The strict liability approach is flawed for three principal reasons. First, since the legal precedents for dealing with railroad hazardous materials accidents stem from explosions, courts have placed TIH accidents under the same umbrella as the explosives cases.⁸⁰ These precedents have been balanced against regulatory rulemaking and

76. *Id.* at 272.

77. *Id.*

78. See Jones, *supra* note 41, at 1758.

79. *Id.*

80. See *Ind. Harbor Belt R.R. Co. v. Am. Cyanamid Co.*, 916 F.2d 1174, 1180 (7th Cir. 1990) (discussing *Chavez* and *National Steel*).

enforcement in an attempt to compensate for perceived defects in the common law approach.⁸¹ But these efforts to address liability in TIH accidents have thrown away the baby with the bathwater. In attempting to balance these perceived defects, other perfectly valid common law rules were also discarded. The *Chavez* court couched its argument for strict liability in terms of “fairness,” ignoring the fact that it is not “fairer” for a court to compel a defendant to pay damages for injuries the defendant did not cause.

Of course, any attempt to answer the question of who should pay damages in TIH accidents should consider the flaws of the common law approach. Chief among these flaws is the possibility a plaintiff might not recover damages for a legitimate injury: the common law defense shields a rail carrier from liability when it is not negligent, or at least when a plaintiff cannot prove the carrier was negligent.⁸² Imposing strict liability, California and Iowa have argued, redresses that flaw.⁸³ But this approach holds no regard for the fact that imposing strict liability may force an innocent defendant to pay damages. In that point at least, the common law approach—as expressed in *Actiesselskabet Ingrid*—was dead on: it is not right to impose a duty to move hazardous cargo on a defendant and then compel that same defendant to compensate an injured plaintiff merely because the defendant was carrying the source of harm.

Second, imposing strict liability on a rail carrier ignores the contribution shippers make to injuries resulting from an accident. The performance of a duty by CNJ and SP did not cause the Jersey City or Roseville explosions. While the *Actiesselskabet Ingrid*, *Chavez*, and *National Steel* courts all recognized that the defendants

81. Cf. Bowman, *supra* note 13, at 32 (“Although no legislative action has been taken to explicitly balance standard-setting with tort liability, an inadvertent but fortuitous result of hazardous materials litigation in the past five years has been the assignment of intergovernmental roles in hazardous materials policymaking . . .”).

82. In an explosion, this could leave the plaintiff in the unenviable position of trying to prove the existence of a negative. See *Ingrid*, 195 F. 596, 598 (S.D.N.Y. 1912), *aff’d* *Actiesselskabet Ingrid v. Cent. R.R. Co. of N.J.*, 216 F. 72 (2d Cir. 1914).

83. Cf. Jones, *supra* note 41, at 1720 (“In general, the approach of the explosives cases is sound. Confronted with strict liability, a business is expected to make the most appropriate decisions as to mode of operation and locale.” (citations omitted)). Strict liability may force a business to relocate its operations to a place where there are fewer hazards to the public, but given the extensive physical plant and intricate array of property holdings involved in railroad operations, this is not really feasible. See *Ind. Harbor Belt R.R. Co.*, 916 F.2d at 1181 (“Brutal though it may seem to say it, the inappropriate use to which land is being put in the [Indiana Harbor Belt Railroad’s] Blue Island yard and neighborhood may be, not the transportation of hazardous chemicals, but residential living.”).

were not responsible for the injuries, only the *Actiesselskabet Ingrid* court held its defendant blameless.⁸⁴ Particularly in the *Chavez* case, the cargo and not the carrier caused the harm.

Third, it does not help that the precedents available to assess this matter have been interpreted by different courts in different ways, creating a confused patchwork varying from state to state. As one author noted, “Our tort law of accidents is, in short, torn. Strict enterprise liability and fault liability coexist uneasily with one another; the justifications for the one are criticisms of the other.”⁸⁵

In short, then, the correct answer to the second of this Note’s two principal questions—whether a rail carrier should be fully liable for damages in a TIH accident—depends not so much on what legal precedents are available, but instead on a factual determination of whether rail carriers actually derive any benefits from the transportation of TIH materials, whether the transportation of TIH materials is really an ultrahazardous activity, and on the nature of the materials themselves. Each of these considerations argues in favor of the common law rule found in *Actiesselskabet Ingrid*.

A. *Derived Benefits*

One argument in favor of strict liability as far as TIH materials are concerned, as the *Chavez* court asserted, is that rail carriers derive a benefit from the transportation of hazardous materials.⁸⁶ But this assertion does not prove that the revenues generated by the transportation of TIH materials would actually be sufficient to cover claims against the carriers stemming from a TIH accident. In fact, there is no way to do this with any real accuracy.⁸⁷ The assertion also

84. No evidence pertaining to manufacturer’s or shipper’s fault was mentioned in the *Actiesselskabet Ingrid*, *Chavez*, or *National Steel* opinions. The courts in these cases remained generally silent on the possibility of such fault.

85. Gregory C. Keating, *The Theory of Enterprise Liability and Common Law Strict Liability*, 54 VAND. L. REV. 1285, 1335 (2001).

86. *Cf.* Jones, *supra* note 41, at 1758 (“A carrier may be under a duty to carry hazardous materials, but it is permitted to charge premium rates for the risks assumed.”). It is true chemicals bring higher rates per carload than other commodity classes. In 2004, for example, chemicals as a class accounted for the second highest revenue margin per carload, after paper. Marc Ivaldi & Gerard McCullough, *Railroad Pricing and Revenue-to-Cost Margins in the Post-Staggers Era*, in 20 RESEARCH IN TRANSPORTATION ECONOMICS: RAILROAD ECONOMICS 153, 154 tbl.1 (Scott M. Dennis & Wayne K. Talley eds., 2007).

87. *See* Ivaldi & McCullough, *supra* note 86, at 164 (“In fact, there is no direct way to estimate commodity-specific rail rates using public data. The [Surface Transportation Board]

does not consider that chemicals as a whole are a relatively small part of the total railroad traffic mix,⁸⁸ and that TIH materials are in turn a tiny part of the chemical traffic mix.⁸⁹ So there is no truly accurate way to determine what, if any, extra revenue exists from hazardous materials transportation, and thus no way to be sure that this revenue will cover the costs of an accident.⁹⁰

Since no court can guarantee that funds generated specifically by the shipment of hazardous materials for the purpose of compensating plaintiffs actually exist, it makes no sense to argue that this is a just or an effective way to ensure recovery for injured plaintiffs. Even assuming that a separate pool of revenue exists, this assertion still does not account for the fact that it is the shipper who derives the benefit from TIH materials through the sale and transportation of its product.⁹¹ It is hardly an exaggeration to state that, for a rail carrier, there is really no benefit at all. This approach cannot guarantee recovery and does not address the extent to which injuries from a TIH spill are or are not the carrier's fault.

B. *An Ultrahazardous Activity?*

Another reason the historical approach to hazardous materials accidents is inappropriate for TIH accidents is that, all things considered, the rail transportation of TIH freight—or any other cargo, for that matter—is not really an ultrahazardous activity. The odds of dying in a hazardous materials accident—across all modes of transportation—are roughly one in 23.35 million, or 4.2 deaths for

collects rate data for regulatory purposes in an annual *Waybill Sample* but the detailed records containing rates are confidential." (footnote omitted)).

88. *Id.* at 170 fig.1.

89. For example, in 2002, chlorine shipped by rail accounted for 3.3% of the total tonnage of hazardous materials, as defined in DOT regulations, moved that year, and 2.7% of the total ton-miles. 2002 COMMODITY FLOW SURVEY, *supra* note 15, at 31 tbl.9c. Keep in mind that while nearly all hazardous materials fall within the definition of "chemicals," not all chemicals are classified as hazardous materials. If tonnage and ton-miles of chlorine, for example, were measured as a percentage of all chemicals, then the percentages would be even smaller.

90. *Cf. Hazardous Materials Hearing*, *supra* note 24, at 273 (statement of Charles D. Nottingham, Chairman, U.S. Surface Transp. Bd.) ("It occurs to me that if you assume a massive liability imposed on a Class I railroad that would require that Class I railroad to go out of business, you are basically looking at [a] situation where . . . some injured parties [are] not getting compensated . . .").

91. Thompson, *supra* note 13, at 429 n.120.

every 100 million hazardous materials shipments.⁹² There is less risk, by many orders of magnitude, of dying in a TIH railroad accident than in an ordinary motor vehicle accident, by poison, or by drowning.⁹³ Hazardous materials accidents are often spectacular, but they are quite rare:

Hazardous materials incidents are random events: the frequency of accidents is not related to the total number of non-hazardous material accidents (which occur in relation to the number of cargo-miles), the causes of the accidents are random and not representative of the overall distribution of accident causes, the number of casualties in any one year does not appear to be related to the number of accidents, and each accident is unique in its characteristics. In short, each hazardous material accident is a freak occurrence⁹⁴

While the inherent unpredictability of TIH accidents seems to argue for strict liability (as if to say, “Since we cannot predict when or where a TIH accident will occur, we will force the rail carrier to pay for it when it does”), it is more accurate to say that each accident will present a unique situation that must be examined case by case. Ordinary negligence rules are more appropriate for these scenarios than strict liability.⁹⁵ But still, there is no consideration here of the peculiar characteristics of TIH materials and no consideration for the extent to which a carrier is liable only because it fulfills its duty to transport cargo.

92. Pipeline and Hazardous Materials Safety Admin., U.S. Dep’t of Transp., A Comparison of Risk (Jan. 1, 2004), <http://www.phmsa.dot.gov/hazmat/library> (follow the “A Comparison of Risk” hyperlink under the Alphabetical List of More Documents section).

93. The average per year from 1999 to 2003 (inclusive) was 36,676 deaths from motor vehicle accidents, 15,206 from poison, and 3409 from drowning. *Id.* The average annual number of deaths resulting from transportation-related hazardous materials accidents over the same five-year period was twelve. *Id.*

94. Bowman, *supra* note 13, at 41 (footnote omitted).

95. *Cf. Ind. Harbor Belt R.R. Co. v. Am. Cyanamid Co.*, 916 F.2d 1174, 1179 (7th Cir. 1990) (“For all that appears from the record of the case or any other sources of information that we have found, if a tank car is carefully maintained the danger of a spill . . . is negligible. If this is right, there is no compelling reason to move to a regime of strict liability, especially one that might embrace all other hazardous materials shipped by rail . . .”).

C. *Special Characteristics of TIH Materials*

The strict liability approach also ignores the unique nature of TIH materials. While precedents like *Actiesselskabet Ingrid*, *Chavez*, and *National Steel* all stem from explosions (which kill through force of impact and heat), the situation on the ground is different in the case of TIH materials (which kill through dispersion and inhalation). The gaseous state of TIH materials means that no matter how much of the commodity is released from an accident site, the vapor plume will eventually dissipate. After dissipation, the tank car could be examined and the ultimate cause of the release determined. Liability for injuries could then be assigned to the party responsible for the release, whether the rail carrier, the shipper, or the owner of the car. This is quite unlike an explosion, where the evidence of causation might be destroyed,⁹⁶ leaving a court to ponder who should pay damages.

In any event, full liability for a TIH accident should never lie solely with the rail carrier. Again, as the *Actiesselskabet Ingrid* court noted, the carrier is under legal compulsion to move the freight.⁹⁷ The simple presence of TIH materials on a train headed for a high-speed derailment is as much a factor in the resulting injuries as any action on the carrier's part. That factor exists solely because of a third party's decision to use TIH materials. Thus, TIH materials fit quite neatly into a frame described by Professor Ronald Coase in 1960:

In the case of the cattle and the crops, it is true that there would be no crop damage without the cattle. It is equally true that there would be no crop damage without the crops. The doctor's work would not have been disturbed if the confectioner had not worked his machinery; but the machinery would have disturbed no one if the doctor had not set up his consulting room in that particular place. . . . If we are to discuss the problem in terms of causation, both parties cause the damage.⁹⁸

The Scottsbluff, Minot, and Graniteville accidents illustrate this principle well. If the tank cars involved in these accidents had been carrying milk instead of toxic gas, there would have been no vapor plumes drifting from the accident sites. Scottsbluff would not have been evacuated to avoid a plume of atomized beef tallow, a tank car

96. See *supra* note 54 and accompanying text.

97. *Actiesselskabet Ingrid v. Cent. R.R. Co. of N.J.*, 216 F. 72, 78 (2d Cir. 1914).

98. R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 13 (1960).

full of soybean oil would not have killed anyone in Minot, and none of Graniteville's citizens would have died if the damaged tank cars had been carrying high-fructose corn syrup instead of chlorine. Put another way, but for third-party requests for the shipment of ammonia, benzene, or chlorine, there would have been no evacuations, deaths, or injuries resulting from the spread of toxic gas.

Does the fact that shippers, manufacturers, and receivers are in some way responsible for injuries resulting from a TIH spill mean that strict liability should be imposed on them? No, it does not. The same objections to strict liability as applied to rail carriers apply to TIH shippers as well. Rather than laying down a blanket of liability for the mere production, use, or shipment of TIH freight or altogether ignoring a commodity's role in causing harm, a more tightly focused approach is called for—an approach diverging from that available under current law.⁹⁹

IV. A DIVERGING APPROACH

The appropriate route to address liability for TIH accidents is much less clear than the railroads' obligation to move TIH materials; what is clear is that there is no easy solution. On one hand, it is not equitable to hold rail carriers fully liable for damages resulting from a TIH accident, since they are under compulsion to move TIH materials. Because injuries from any particular accident will be multiplied due to the nature of TIH freight, these injuries may be pinned on the freight itself as much as on any action or negligence on the railroad's part. On the other hand, manufacturers and shippers of TIH materials will argue that it is not fair to impose liability on them for injuries that they say could only result from a rail carrier's negligence.¹⁰⁰ Regardless, it is in the interest of rail carriers, shippers, and plaintiffs alike to develop a clear approach to the liability for injuries resulting from TIH accidents, so that the rights and duties of potential parties to litigation are understood in advance, and they may plan accordingly. This approach should consider following four angles.

99. Cf. Levin, *supra* note 13, at 60 ("It is irrational and inequitable to regulate an industry by making one actor, who may have done little wrong, financially responsible for everyone.").

100. Of course, this is not entirely true. The Minot and Graniteville accidents were attributed to negligence on the part of the railroad companies, but the explosions in *Actiesselskabet Ingrid*, *Chavez*, and *National Steel* were not.

First, it must recognize the special characteristics of TIH materials. Tort law should conform, to the extent possible, to the U.S. Department of Transportation's hazardous materials regulations and classify dangerous goods by the particular characteristics that make them dangerous. The causes of action available to plaintiffs should be governed accordingly. For example, recovery for injuries sustained in a blast could be assessed in light of rules developed in explosion cases, and recovery for injuries sustained in a TIH release could be governed by ordinary negligence rules. Given the variations in tort law from state to state, this may well be best accomplished by a federal rule applicable across the country.

Second, this approach must recognize that there is a place for indemnification contracts in the rail transportation of TIH freight, since the fulfillment of a legal duty should not be a continuing source of liability. Rail carriers should be permitted to require limited indemnification for damages stemming from a TIH accident, or to be more precise, to allow for indemnity in the measure in which the cargo is responsible for injuries. This cannot fairly be described as an attempt to avoid liability for negligence, but an honest recognition of the fact—and this point cannot be stressed too much—that these accidents can occur without any negligence on a rail carrier's part at all.

A useful model for comparison can be found in cases developing the 1908 Federal Employers' Liability Act ("FELA"), the federal statute governing railroad worker personal-injury claims.¹⁰¹ Several courts have recognized that, where conditions at a shipper's facility create FELA liability for a railroad, the railroad company can contract with the shipper for indemnification for the damages the railroad eventually pays to the employee; such contracts have been upheld in both state and federal courts.¹⁰² The right of rail carriers to employ these contracts in their shipping agreements should be recognized. These contracts could include terms apportioning liability between the carrier and the shipper in the measure to which the carrier and the shipper are paid for the shipment.¹⁰³ As with the classification of

101. Employers' Liability Act, 45 U.S.C. §§ 51–60 (2006).

102. *See, e.g.,* Waylander-Peterson Co. v. Great N. Ry. Co., 201 F.2d 408 (8th Cir. 1953); Booth-Kelly Lumber Co. v. S. Pac. Co., 183 F.2d 902 (9th Cir. 1950); Grand Trunk W. R.R., Inc. v. Auto Warehousing Co., 686 N.W.2d 756 (Mich. App. 2004).

103. Obviously the bulk of such apportionment would fall on the shipper, but this would be fitting, considering that the shipper receives the bulk of the money from the shipment. *See supra* note 90 and accompanying text.

causes of action according to the nature of the commodity being carried, this would best be accomplished by a rule standard throughout the United States.

Third, a cap on the total amount of damages payable in the event of a TIH accident should be established. This is in the interest of both rail carriers and shippers, since it provides a clear understanding of the maximum damages possible for a TIH spill and would allow them to calculate beforehand the proper apportionment of the liability for those damages. This would also avoid massive damage awards,¹⁰⁴ freeing money for capital improvement, employee development, or the like. A similar limit already exists, established by federal statute, covering claims arising from passenger train operation on lines serviced by the National Railroad Passenger Corporation.¹⁰⁵

Fourth and finally, a rule emerging from certain real property cases could be considered. Courts have upheld indemnity contracts between rail carriers and lessees of the carriers' real property for injuries occurring on that property. For example, in *Ryan Mercantile Co. v. Great Northern Railway Co.*,¹⁰⁶ the court upheld a contract requiring a tenant operating a store on railroad property to hold the carrier harmless from injuries to tenants, even if the railroad's negligence caused the injury:

Neither law nor public policy prevents the ordinary contractor from buying from a third party indemnity from the pecuniary result of his own negligence. That is legitimate as insurance. How does the same process, with identical result, become illicit simply because they are [the terms] of the original and basic contract rather than a collateral one for conventional insurance?¹⁰⁷

The *Ryan* court thus observed that, since a carrier can purchase insurance to cover liability for its own negligence, it should be allowed to contract for indemnity in a situation where the carrier's liability stems from the decision or action of a third party.¹⁰⁸ The Minnesota Supreme Court reached a similar conclusion in *Speltz Grain & Coal Co. v. Rush*: "It is well settled that a railroad company

104. See *supra* note 39.

105. See 49 U.S.C. §§ 28102–28103 (2006).

106. 294 F.2d 629 (9th Cir. 1961).

107. *Id.* at 635 (internal quotation marks omitted) (quoting *Pettit Grain & Potato Co. v. N. Pac. Ry. Co.*, 35 N.W.2d 127, 133 (Minn. 1948)).

108. *Id.*

may, in leasing its own property, insert terms exempting it from liability for loss to the leased premises from fires caused by its own or its employe's [sic] negligence."¹⁰⁹ Such a contract need not be void,¹¹⁰ and would also recognize in law the real-world fact that, since nearly all TIH materials move in privately owned tank cars, the carrier is principally using its real property—track, right-of-way, and operating plant—in executing its common carrier duty.¹¹¹ This would not exempt the carrier from making good the loss of cargo from a privately owned car,¹¹² but it could shield it from paying damages stemming from the cargo itself or from the improper or negligent maintenance of a rail car.

In summary, the rail transportation of TIH materials presents an interesting and complex question of liability. There is a clear obligation for rail carriers to transport TIH materials, but this leaves these potential defendants exposed to liability as a direct consequence of their legal obligation. The cases addressing such accidents are inadequate. They have focused on strict liability and ignored the hazards plaintiffs actually face, the ability to determine the cause of an accident—greater in a TIH accident than in an explosion—and the lack of culpability on the part of the defendants. A successful approach to this problem must carefully consider both the general nature of the problem and leave room to account for the facts of each particular accident.

Such an approach should dispense with strict liability in those states where it is applied. Since TIH accidents will not destroy the evidence of an accident's causation, it will be possible to determine that causation and allocate liability accordingly under ordinary negligence rules. In addition, since a rule of law developed from explosions will not accurately reflect the dangers associated with TIH

109. *Speltz Grain & Coal Co. v. Rush*, 51 N.W.2d 641, 644 (Minn. 1952).

110. In the case of *Bisso v. Inland Waterways Corp.*, the Supreme Court voided a contract provision exempting the owner of a tow boat from liability for his own negligence. *Bisso v. Inland Waterways Corp.*, 349 U.S. 85, 95 (1955). However, *Bisso* is not on point here. The *Bisso* contract applied to negligence on part of the tow boat's master while in the act of towing a vessel and did not address the issue of any cargo being carried aboard it. *Id.* at 85–87. The source of liability in a TIH accident stems as much from the product being carried as it does from any acts on the carrier's part, and on that point *Bisso* is silent.

111. Obviously a rail carrier is using its men and locomotives as well. The point is that if a carrier can sign an indemnity contract for the use of its real property when it is *not* using it to fulfill its common carrier duties, it does not seem consistent to deny the owner of the property such a luxury in some other scenario.

112. The Carmack Amendment to the Interstate Commerce Act explicitly prohibits this. See ELY, *supra* note 26, at 186–87.

Fall 2009] *COMMON CARRIAGE AND LIABILITY* 221

releases, more concrete rules should be promulgated classifying the causes of action available to plaintiffs according to the hazards they actually face. The approach should allow for indemnity contracts between carrier and shipper which would apportion the share of potential damages between carrier and shipper according to their respective shares of value received for the shipment. Finally, there should be a limit to the total damages payable in the event of an accident.

CONCLUSION

There are complex issues arising from the intersection of common carriage and tort liability in the rail transportation of TIH materials that cannot all be adequately addressed in a single short Note. What should be taken from all this is the recognition that there is only so much that the law, as such, can do. It is important to realize that no statute, rule, or regulation can prevent the occurrence of TIH accidents. Regulations governing the operation of switches and the impact resilience of tank cars can be promulgated, new limits on train speeds can be imposed, and a dozen other legal angles might be taken to address these accidents in advance. But no law can prevent a TIH accident any more than a statute proscribing murder can resurrect the victim of a homicide.

What the law can do is recognize a special class of harms stemming from a special set of circumstances and allocate liability resulting from those circumstances accordingly. The current tort regime, as applied to the rail transportation of TIH materials, is inadequate to establish a just distribution of liability for inevitable accidents. It is both illogical and inconsistent. To address this, clear rules should be developed to level the board. If this Note succeeds in drawing attention to the matter and in sketching the framework of a possible solution, it will have served its purpose.