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Products Liability: Terrorist Bombs and Strict Liability--A Volatile Formula for Fertilizer Makers?

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COMMENT

Products Liability: Terrorist Bombs and Strict Liability — A Volatile Formula for Fertilizer Makers?

I. Introduction

Existing principles of Oklahoma products liability law may require evolutionary changes[1] if the judicial system is to remain a provider of general protection from devastating misfortune. Specifically, damage awards to families of bomb victims may be sustainable on appeal only if courts reject the "supervening cause" defense in product liability cases, and if courts recognize the magnitude of foreseeable harm as a sufficient basis to sustain a finding that a product is "unreasonably dangerous." Those doctrinal revisions could lead a court to sustain a judgment that imposes liability on the manufacturer of the ammonium nitrate fertilizer used to make the bomb that killed 169 innocent bystanders at the Alfred P. Murrah Federal Building in Oklahoma City on April 19, 1995.[2] This comment will explore the legal and policy ramifications which could arise if courts hold responsible the manufacturers of normally benign products, such as certain types of fertilizer, for damages caused when terrorists modify and then misuse those products in vastly destructive, yet foreseeable, ways.

Part II of this comment provides an overview of the circumstances surrounding the Oklahoma City Bombing. In addition, the well-known formula for fertilizer bombs, the history of fertilizer bombs as terrorists' weapons of choice, and the alleged availability of additives to reduce explosive risk will be discussed. Part III explores trends in products liability law which lead to the conclusion that current privity and causation rules support liability. Finally, Part IV of this comment examines justifications for imposing liability on fertilizer manufacturers and suggests that Oklahoma adopt a standard which considers risk of harm as evidence that a product is unreasonably dangerous.

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1. "It is incumbent on all of us to recognize that the law must change, and to be willing to do our part to see that the developments to which we make contributions are beneficial to mankind." CLAUDE R. MILLER, PRACTICE OF LAW 223 (1946). England's chancery courts "had their rise because they afforded broader relief than could be found in the courts of common law." *Id.* After the chancery courts became replete with delays, high costs and inefficiency, American colonists determined that "courts should do justice first and worry about form and precedent later. These well known developments are mentioned . . . as a reminder that law grows." *Id.*

2. *See* Serge F. Kovaleski, *Two Suspects Charged in Plot to Bomb Nevada IRS Building*, WASH. POST, Dec. 29, 1995, at A2.

II. "The Bomb Lurking in the Garden Shed"[3]

A. Allegations of the Oklahoma Bombing Plaintiffs

In a case filed by families of the Oklahoma City Bombing victims (the *Oklahoma City Bombing Case*),[4] the plaintiffs allege that the fertilizer used to make the bomb was unreasonably dangerous for two reasons.[5] First, the plaintiffs assert that the fertilizer manufacturer intentionally omitted additives known to reduce the explosive potential of ammonium nitrate.[6] in an effort to reduce costs, utilized a manufacturing process which made the fertilizer more porous.

The plaintiffs claim that the increased porosity boosted the fertilizer's explosive properties.[7] To complete the elements of their central claim,[8] the plaintiffs contend that the causal link between these "defects" and the deaths of the bombing victims was sufficient to require the manufacturer to pay damages to the families of all victims.[9] If a verdict is returned for the plaintiffs on that theory, and if an appellate court sustains a large judgment against the manufacturers, the precedent could have substantial consequences for products liability law in this country. The factual allegations in this case are summarized briefly as a predicate for the legal discussion that follows.

1. The Well-Known Formula for Fertilizer Bombs

The Oklahoma City bomb, like the fertilizer-based bomb at the World Trade Center,[10] was allegedly made by combining ammonium nitrate fertilizer and fuel oil

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3. Section title taken from the article by Christine Gorman, *The Bomb Lurking in the Garden Shed*, TIME, May 1, 1995, at 54.

4. The case is *Lena R. Gaines-Tabb v. ICI Explosives U.S.A.*, No. CIV-95-719-R (W.D. Okla. filed May 10, 1995) [hereinafter *Oklahoma City Bombing Case*]. At the time this comment was written, no discovery had occurred, and all material allegations of plaintiffs were vigorously denied by defendant, including the central allegation that defendant's fertilizer was present in the bomb that exploded in Oklahoma City on April 19, 1995. This comment is written on the assumption that most of these factual allegations of plaintiffs are found to be true by a jury, either in this case or in some future case brought by victims of fertilizer bombs planted by terrorists. The legal and policy implications arise from facts that are largely undisputed, even if some of those facts prove not to be present in the *Oklahoma City Bombing Case*.

5. Plaintiffs' Third Amended Class Action Complaint at 55-61, *Oklahoma City Bombing Case*, *supra* note 4 (No. CIV-95-719-R) [hereinafter Third Amended Complaint].

6. *Id.* at 56-61.

7. *Id.* at 55-56.

8. The plaintiffs in the *Oklahoma City Bombing Case* also allege negligence and negligence per se based on case-specific facts. *Id.* at 49-72. This comment uses the *Oklahoma City Bombing Case* as a paradigm to illustrate legal issues that would apply generally to any terrorist use of fertilizer bombs, so these negligence allegations are disregarded.

9. *See generally* Third Amended Complaint, *supra* note 5.

10. The World Trade Center bomb used a urea-nitrate based compound. *FBI: No Evidence That Lab Workers Changed Findings*, ARIZ. REPUBLIC, Sept. 14, 1995, at A4. That compound is essentially the same substance used in the Oklahoma City bomb. *Police Seek Thieves Who Stole Chemical*, ORLANDO SENTINEL, Sept. 2, 1995, at 2. The World Trade Center blast took place on February 26, 1993. *NYC Bombing Arrest*, PITTSBURGH POST-GAZETTE, Feb. 22, 1995, at A6.

(e.g., diesel fuel).[11] The ammonium nitrate and fuel oil combination known as an "ANFO" mixture is marketed worldwide as an explosive.[12] The destructive blast force derives from the ammonium nitrate, while the fuel oil is merely a blasting agent that initiates the detonation of the ammonium nitrate. Similarly, a blasting cap, used to detonate dynamite, merely releases the explosive power inherent in the dynamite itself. The recipe for ANFO bombs is readily available from many sources,[13] including the Internet.[14]

2. Fertilizer Bombs Became the Weapon of Choice for Terrorists Years Ago

Even before the fertilizer bomb at the World Trade Center shocked the United States, there was ample evidence that terrorist use of fertilizer was absolutely foreseeable. The dangers of ammonium nitrate fertilizer were clear many years ago when, in 1947, a ship loaded with ammonium nitrate exploded, killing more than five hundred people.[15]

During hearings in 1970 for the Organized Crime Control Act, "members of Congress repeatedly expressed concern with respect to the difficulty in controlling the malicious use of . . . ammonium nitrate without overburdening . . . people engaged in [its] legitimate" use.[16] Three years later, during legislation which dealt with the regulation of black powder,[17] the then-president of the National Rifle Association[18] (NRA) emphasized that many easily available explosive materials, which existed in abundant supply, were not regulated by the Federal Explosives Law.[19] Specifically, the NRA president reminded the committee that ammonium nitrate and fuel oil was used to blow up the University of Wisconsin mathematics building.[20]

Between 1989 and 1994, Ralph Ostrowski, the Chief of the Arson and Explosives Division of the Bureau of Alcohol, Tobacco, and Firearms, reported that illegal ammonium nitrate explosions occurred on twenty-seven occasions.[21] In 1993, the

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11. David Willman, *Acquaintances Link McVeigh to Drug Deals*, L.A. TIMES, May 11, 1995, at A1.

12. "ANFO" is "the most common commercial explosive." "The ATF [Bureau of Alcohol, Tobacco, and Firearms] regulates the sale and use of . . . ANFO. The market is vast . . . with annual sales totaling between 4 billion and 4.5 billion pounds." John Sawyer, *Bomber's Signature Awaits Trade Center Debris Holds Indelible Clues*, ST. LOUIS POST-DISPATCH, Mar. 3, 1993, at 1A.

13. From the time of the Oklahoma City Bombing, newspapers widely publicized the formula for ANFO bombs. *See* discussion *infra* Part II.A-B.

14. One Internet page, for example, provided advice on the type of fertilizer to use, the mixture of fuel oil, and preferred methods of detonation. The MCW Digest, *ANFO and the OK City Bomb* (Jan. 15, 1996) <http://www.xmission.com/seer/mcw/anfo.html> (no longer available) (on file with the *Oklahoma Law Review*].

15. *See* Dalehite v. United States, 346 U.S. 15, 17 (1953).

16. United States v. Agrillo-Ladlad, 675 F.2d 905, 909 (7th Cir. 1982) (defendants convicted of conspiracy to destroy property used in interstate commerce by means of explosive).

17. *Black Powder, 1973: Hearings on S. 1083 Before the Comm. on the Judiciary*, 93d Cong. 1 (1973).

18. *Id.* at 113. Dr. C.R. Gutermuth expressed his objections to the regulation of black powder. *Id.* at 113-15.

19. *Id.* at 114.

20. *Id.* at 110. Investigators estimated that 1,000 pounds of ANFO was used in the University of Wisconsin bombing. *Id.*

21. John McQuaid, *Tauzin Has Hearing on Fertilizer*, NEW ORLEANS TIMES-PICAYUNE, May 24,

Ninth Circuit Court of Appeals listed the automobile contents of a defendant who had been convicted of various offenses in connection with a series of attacks against Internal Revenue Service buildings.[22] The court wrote that the defendant's "car contained several different types of explosives, including a water heater core filled with a volatile mixture of ammonium nitrate and fuel oil."[23] The United States, however, is not the only country in which courts recognize the dangers of ammonium nitrate fertilizer.

The use of fertilizer to build bombs in the United Kingdom, and especially in Northern Ireland, was so common[24] that possession of fertilizer in a nonagricultural setting is recognized as a crime.[25] The Crown Court in Northern Ireland commented in 1991 that the ANFO "mixture [is] used extensively in a variety of terrorist devices."[26] In another case, the Criminal Court of Appeal in England explained that the use of fertilizer bombs to "bring death or very grave injuries to a considerable number of innocent people . . . has happened time after time."[27] Furthermore, United Kingdom fertilizer regulations passed in 1991 require that no person sell or make available to another person any fertilizer which contains ammonium nitrate.[28]

B. Alleged Availability of Additives to Reduce Explosive Risk

For at least thirty years, "the state of the art" has recognized that additives can reduce the explosive potential for ammonium nitrate fertilizer. In the 1960s, Samuel Porter developed a process by which ammonium nitrate fertilizer could be made less explosive.[29] The addition of a chemical mixture[30] made such fertilizer "insensitive" to detonation; for that process, Porter received a patent[31] in 1968.[32] Despite the increase in safety offered by Porter's process, the fertilizer industry resisted implementation.[33] Countries which have had more experience then the United States

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1995, at A8.

22. *See* United States v. Hicks, 997 F.2d 594, 596 (9th Cir. 1993).

23. *Hicks*, 997 F.2d at 596.

24. *See, e.g., Great Britain: Anti-IRA Failure*, INTELLIGENCE NEWSLETTER, May 13, 1993, § 217, at 1.

25. Regina v. O'Reilly (Eng. C.A. Oct. 16, 1989) (LEXIS, Intlaw Library, All File) (on file with the *Oklahoma Law Review*).

26. Regina v. McKee (N. Ir. Crown Ct. Oct. 14, 1991) (LEXIS, Intlaw Library, All File).

27. *O'Reilly* (Eng. C.A. Oct. 16, 1989) (LEXIS, Intlaw Library, All File).

28. Fertiliser Regulations, Control of Materials Designated as EEC Fertilisers, S.I. 1991, No. 2197 § 2 (1991) (LEXIS, UK library, SI).

29. Keith White, *Old Plan to Neutralize Fertilizer Gets New Look*, GANNETT NEWS SERV., May 2, 1995, *available in* 1995 WL 2896083 (page numbers unavailable online).

30. The additive contained di-ammonium phosphate or mono-ammonium phosphate which prevented ammonium nitrate from exploding. *Fertilizer Firm Denies Safe-Additive Claim*, SAN DIEGO UNION-TRIB., June 14, 1995, at A10.

31. That patent fell into the public domain in 1985; however, fertilizer manufacturers failed to use the previously patented process. Third Amended Complaint, *supra* note 5, at 58.

32. *See* White, *supra* note 29.

33. Lobbyists for the fertilizer industry told a proponent of Porter's process, "You haven't got enough time and money to fight us. I have got an unlimited budget to fight you anywhere in the United States and oversees if necessary. Take this as a piece of friendly advice . . . you ought to just give up." *Id.*

with terrorism have regulations which mandate the addition of chemicals to make ammonium nitrate fertilizer useless for bombs.[34] At the Senate Judiciary Committee hearing on terrorism,[35] Sen. Patrick Leahy (D.-Vt.) suggested that the United States look to the British model,[36] which requires ammonium nitrate to be mixed with calcium carbonate before it is put into the flow of commerce. That additive allegedly prevents the mixture from being used as an explosive.[37]

Farmers and the fertilizer industry have complained that changing the composition of ammonium nitrate fertilizer would force farmers to modify their practices.[38] Adding phosphorus, for example, might make the fertilizer unsuitable for land that is prone to excess phosphorus buildup. "Lowering the nitrogen content per pound would require more tonnage to accomplish the same effect and more time and fuel to spread it."[39]

The cost of adding agents to make fertilizer less volatile will be a hotly disputed fact in the *Oklahoma City Bombing Case.* A significant legal and policy question discussed below is whether this cost should be relevant to the liability analysis.

III. Privity and Causation Rules Support Liability

The current Oklahoma law of products liability has already evolved to remove the traditional requirements of privity and foreseeable causation. Analyzing the maturation of these doctrines points the way, however, to the next logical step that should be taken in the judicial alignment of legal rules with the underlying postulates of strict liability theory.

A. Elimination of Privity Was Inexorable

The judicial elimination of privity rules went beyond the expectations of even the most farsighted torts scholars. The question of whether manufacturers would be liable for injuries to bystanders first arose under a negligence theory. Courts initially prohibited bystanders from recovery because they lacked privity.[40] Justice Cardozo, however, rejected the privity limitation in *MacPherson v. Buick Motor Co.*,[41] after which other jurisdictions allowed recovery to bystanders against negligent manufacturers.[42] As recently as 1961, Professor Prosser observed that bystanders had not been

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34. *Bomb Ingredients Can Be Controlled*, GREENSBORO NEWS & REC., May 6, 1995, at A8 [hereinafter *Bomb Ingredients*].

35. Andrianne Flynn, *More Rules on Fertilizer — 'Excessive' Farmers Decry Talk of Curbs on Chemical*, ARIZ. REPUBLIC, Apr. 28, 1995, at A26.

36. Terrorist bombings by the Irish Republic Army have led the British to regulate ammonium nitrate since 1980. *Id.*

37. *Id.*

38. *Bomb Ingredients*, *supra* note 34, at A8; *see also* Tony Rizzo, *Chemical Mixture Counteracts Explosive Nature of Fertilizer — Process Was Patented in 1968 but Never Used by Manufacturers*, KAN. CITY STAR, Apr. 27, 1995, at A17.

39. *Bomb Ingredients*, *supra* note 34, at A8.

40. *See* Winterbottom v. Wright, 10 M & W 109, 114-16, 152 Eng. Rep. 402, 405-06 (Exch. 1842) (established privity doctrine that barred bystanders from recovery).

41. 111 N.E. 1050, 1054 (N.Y. 1916).

42. W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 96, at 683 (5th ed.

drawn into the zone of protection for strict liability: "The innocent bystander, the person who is standing around when the [product] blows up . . . has been denied recovery. There may not be any theoretical reason why he shouldn't get in on this strict liability, but . . . nobody has yet built up any excitement about the innocent bystander."[43]

Initially, privity between parties had some justification when strict products liability developed as a warranty cause of action.[44] Courts soon began to recognize, however, the ever-widening zones of foreseeability within which third parties fell. These bystanders deserved greater protection from defective products than the consumers themselves because, some courts reasoned, the relationship with the product and its manufacturer was often imposed upon bystanders. Thus, bystanders had involuntarily entered into the relationship.

Some courts have allowed the bystander a cause of action in strict products liability,[45] while several others have allowed recovery to persons who could be categorized as bystanders.[46] Early cases, however, do not claim to extend the law to compensate bystanders; rather, they merely observe that there is no reason to distinguish a bystander from the consumer.

1. The General Trend to Include Bystanders

The first case to allow a cause of action to a bystander was *Piercefield v. Remington Arms Co.*,[47] decided in 1965 by the Supreme Court of Michigan. In *Piercefield*, a bystander sued the manufacturer of a shotgun shell which exploded when the purchaser, the bystander's brother, fired the charge. The court illustrated with a few examples the absence of any logical reason to distinguish the bystander from the consumer.[48] One example the court offered is a situation in which a car suddenly veers off the road and runs into a pedestrian. In that situation, explained the court, the bystander deserves compensation "for abundantly worthy reasons."[49] *Piercefield* based

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1984) (footnote omitted).

43. William L. Prosser, 38 A.L.I. PROC. 55-56 (1961). One year earlier, Prosser wrote that "any extension to the nonconsumer will be slow; and *it may perhaps never come*." William L. Prosser, *The Assault upon the Citadel (Strict Liability to the Consumer)*, 69 YALE L.J. 1099, 1142 (1960) (emphasis added).

44. *See* William L. Prosser, *The Fall of the Citadel (Strict Liability to the Consumer)*, 50 MINN. L. REV. 791, 800 (1966).

45. *See, e.g.*, Wasik v. Borg, 423 F.2d 44 (2d Cir. 1970); Sills v. Massey-Ferguson, Inc., 296 F. Supp. 776 (N.D. Ind. 1969); Caruth v. Mariani, 463 P.2d 83 (Ariz. Ct. App. 1970); Elmore v. American Motors Corp., 451 P.2d 84 (Cal. 1969); Toombs v. Fort Pierce Gas Co., 208 So. 2d 615 (Fla. 1968); Piercefield v. Remington Arms Co., 133 N.W.2d 129 (Mich. 1965); Darryl v. Ford Motor Co., 440 S.W.2d 630 (Tex. 1969).

46. *See, e.g.*, Speed Fastners, Inc. v. Newsom, 382 F.2d 395 (10th Cir. 1967) (applying Oklahoma law); Klimas v. International Tel. & Tel. Corp., 297 F. Supp. 937 (D.R.I. 1969); Pike v. Frank G. Hough Co., 467 P.2d 229 (Cal. 1970); Connolly v. Hagi, 188 A.2d 884 (Conn. Super. Ct. 1963); Ford Motor Co. v. Cockrell, 211 So. 2d 833 (Miss. 1968); Lonzrick v. Republic Steel Corp., 218 N.E.2d 185 (Ohio 1966).

47. 133 N.W.2d 129 (Mich. 1965).

48. *Id.* at 135.

49. *Id.*

its holding for the bystander on an implied warranty claim in tort principles.[50]

During the same year, the Connecticut Superior Court examined the issue of bystander liability when a parked car rolled onto a golf course and struck the decedent.[51] That court based its decision on tort principles, noting the practice of allowing nonbuyers recovery in tort rather than implied warranty.[52] Three years later, the Florida Supreme Court recognized the bystander cause of action when a propane tank exploded, injuring several bystanders.[53] The court concluded that, according to the instrumentality exception to Florida's implied warranty privity requirement, the plaintiffs were foreseeable parties who came within the zone of danger.[54]

In *Elmore v. American Motors Corp.*,[55] the Supreme Court of California decided in 1969 that an automobile with a defectively connected drive shaft constitutes a substantial hazard on the highway not only to the driver and passengers but also to pedestrians and other drivers.[56] The court explained that public policy which protects the driver and passengers should extend to protect the bystander.[57] The *Elmore* court concluded that "the doctrine of strict liability in tort is available in an action for personal injuries by a bystander against the manufacturer and the retailer."[58]

2. Oklahoma's Precedent for Bystander Compensation

In 1974, the Oklahoma Supreme Court adopted manufacturers' products liability in *Kirkland v. General Motors Corp.*[59] After noting that courts in other jurisdictions have held that manufacturers' products liability should apply for the "protection of innocent bystanders,"[60] the court recognized that "Oklahoma authorities . . . have extended [manufacturers'] liability . . . to various consumers and third parties."[61]

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50. Although the complaint was framed in implied warranty, the court recognized that a decision for the bystander would create "a common law remedy for tortious wrong bottomed upon breach of a legally implied, rather than a contractually created, warranty of fitness." *Id.* at 133.

51. Mitchell v. Miller, 214 A.2d 694, 698 (Conn. Super. Ct. 1965).

52. *Id.* at 698.

53. Toombs v. Fort Pierce Gas Co., 208 So. 2d 615, 616-17 (Fla. 1968).

54. *Id.* at 616-17.

55. 451 P.2d 84 (Cal. 1969) (en banc).

56. *Id.* at 89.

57. *Id.*

58. *Id.*

59. 521 P.2d 1353 (Okla. 1974). *Kirkland* is a landmark case in which the Oklahoma Supreme Court unambiguously adopted a new cause of action in strict tort liability. *Id.* at 1362. The court defined "unreasonably dangerous," the first hurdle a plaintiff must clear in a strict tort action, as a product which is "dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics." *Id.* That definition is the standard set forth in the RESTATEMENT (SECOND) OF TORTS § 402A cmt. g (1989). Cases and secondary authority on the strict tort standard are legion. *See generally* William J. McNichols, *The Relevance of Plaintiff's Misconduct in Strict Tort Products Liability, the Advent of Comparative Responsibility, and the Proposed Restatement (Third) of Torts*, 47 OKLA. L. REV. 201 (1994); J. Matthew Thompson, Note, *Torts:* Dutsch v. Sea Ray Boats, Inc.*: A Policy Based Analysis of the Recovery of Economic Loss Under Manufacturer's Products Liability in Oklahoma*, 47 OKLA. L. REV. 397 (1994).

60. *Kirkland*, 521 P.2d at 1365.

61. *Id.*

Later that year, the same court, in *Moss v. Polyco, Inc.*,[62] clearly stated that the manufacturer's products liability doctrine "also applies to bystanders."[63] Quoting a Texas Supreme Court decision,[64] Oklahoma adopted the rationale that no reasonable explanation exists why nonusers and nonconsumers should be denied recovery from the manufacturer of a defective product.[65] The desire to minimize risks of personal injury and of property damage justifies extending the strict liability doctrine to bystanders.[66]

Oklahoma's decision to compensate bystanders was cited by the District Court of Colorado when it recognized in 1982[67] that the trend of courts had been to extend liability to compensate bystanders. The court gave as its justification for extension of the law the idea that "it is irrational to exclude bystanders from pursuing redress" for injury solely on the basis that they are in a different circle of plaintiffs.[68] The court offered the rationale borrowed from many cases[69] that bystanders are in a poorer position than consumers to inspect for defects. Therefore, concluded the court, bystanders should be entitled to even greater protection than consumers when the injury from the defect was reasonably foreseeable.[70]

3. Justifications for Bystander Compensation

Two primary rationales exist for imposing liability for bystander injury on manufacturers of products which are used in a dangerous manner: fairness and economic policy. Fairness justifies providing protection for bystanders in addition to protection for consumers because bystanders are likely to undervalue or be unaware of the risk that products create to them.[71]

Significantly, a few courts have justified the extension of strict liability to bystanders in terms of economic policy. Manufacturers and consumers who enjoy the benefits of dangerous products expose bystanders to unreciprocated risk.[72] If courts

62. 522 P.2d 622 (Okla. 1974). The plaintiff in *Moss* was injured when a plastic container fell from a shelf, and the contents spilled onto plaintiff. The court held that the action against the manufacturer of the container was governed by two-year statute of limitations for action for injuries to rights of another, not arising on contract. *Id.* at 626.

63. *Id.*

64. Darryl v. Ford Motor Co., 440 S.W.2d 630, 633 (Tex. 1969).

65. *Moss*, 522 P.2d at 626.

66. *Id.* at 636.

67. Williams v. National Trailer Convoy, 549 F. Supp. 305, 306 (D. Colo. 1982). The court held law of strict liability in Colorado extends to nonusers or nonconsumers when decedent was killed in collision with tractor which was towing a mobile home. *Williams*, 549 F. Supp. at 306.

68. *Id.*

69. *See* discussion *supra* Part III.A.

70. *Williams*, 549 F. Supp. at 306.

71. *See generally* Robert F. Cochran, Jr., Comment, *"Good Whiskey," Drunk Driving, and Innocent Bystanders: The Responsibility of Manufacturers of Alcohol and Other Dangerous Hedonic Products For Bystander Injury*, 45 S.C. L. REV. 269 (1994) (discussing the rationales for bystander compensation).

72. *See* George P. Fletcher, *Fairness and Utility in Tort Theory*, 85 HARV. L. REV. 537, 542 (1972) ("[A] victim has a right to recover for injuries caused by a risk greater in degree and different in order from those created by the victim and imposed on the defendant — in short, for injuries resulting from nonreciprocal risks.").

impose liability for injuries to bystanders on manufacturers of products which may be easily modified for illegal use, manufacturers will internalize the cost of bystander injury. Manufacturers will choose the most efficient combination of safeguards and price increases to cover bystander loss.[73] Imposing liability would internalize the cost of bystander injury in the price of products,[74] encouraging manufacturers to take cost-justified safety measures and encouraging consumers to purchase the cost-justified number of products. This rational economic approach holds promise for issues that remain unresolved in fertilizer bomb cases.

B. Any Remaining Foreseeability Requirements of Proximate Cause Are Met When Terrorists Misuse Fertilizer for Bombs

Trends in strict liability have eliminated or reduced foreseeability components of the causation test. Following that direction, misuse of fertilizer falls well within the reach of current Oklahoma causation tests.

1. Bomb Making is a Foreseeable Misuse for Ammonium Nitrate Fertilizer

Even before the World Trade Center blast, plaintiffs would have had little difficulty showing that misuse of fertilizer to make bombs was foreseeable to any manufacturer. Indeed, the same chemical formulation used for the bomb in Oklahoma City is alleged by the plaintiffs in the *Oklahoma City Bombing Case* to be sold for demolition purposes.[75]

Following the promulgation of section 402A of the *Restatement (Second) of Torts*, courts often distinguished between two "types of use" when discussing misuse issues: (1) purpose of use and (2) manner of use.[76] Many courts classified misuse as either use for an unforeseeable purpose or an unforeseeable manner of use.[77] Such classifications led to the conclusion that there was either no defect or no proximate cause.[78] Thus, use of a product in a foreseeable manner or for a foreseeable purpose would not bar liability.[79] For example, if a plaintiff used an automobile for one of

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73. *See* Jones & Laughlin Steel Corp. v. Johns-Manville Sales Corp., 626 F.2d 280, 288 (3d Cir. 1980). Judge Adams reasoned that a defective product may injure persons who have not purchased the product or dealt with the manufacturer in any way, so no price mechanism exists by which bystanders may be insured against the risk of loss. Thus, Judge Adams concluded, imposing on manufacturers strict liability for defective products internalizes the costs of injury which could not be compensated for with a price mechanism. *Id.* Adams' argument applies to bystander injuries from nondefective products in addition to those injuries from defective products.

74. *See* Cochran, *supra* note 71, at 330.

75. Third Amended Complaint, *supra* note 5, at 43.

76. McNichols, *supra* note 59, at 213.

77. *Id.*

78. *See generally* David A. Fischer, *Products Liability — Applicability of Comparative Negligence to Misuse and Assumption of the Risk*, 43 MO. L. REV. 643 (1978).

79. *See* VICTOR E. SCHWARTZ, COMPARATIVE NEGLIGENCE § 12.4, at 202 n.53 (2d ed. 1986 & Supp. 1993). In distinguishing *Sun Valley Airlines v. Avco-Lycoming Corp.*, 411 F. Supp. 598, 603 (D. Idaho 1976) (unforeseeable misuse where plaintiff improperly maintained airplane), Schwartz notes that "[w]hile it is arguable that the misuse was unforeseeable, it was not an unintended use. The airplane was being used for the purpose it was intended. Thus it may be important to distinguish misuse . . . where the product itself is used for its intended purpose." *Id.*; *see also* McNichols, *supra* note 59, at 213 n.50.

the purposes for which automobiles are made, even if the manner in which he used it was both unforeseeable and unreasonable, there is no defense and no bar to liability.[80]

Section 402A of the *Restatement (Second) of Torts* recognizes that misuse is one facet of the general causation analysis.[81] That section does not refer to the concepts of abnormal use or misuse as affirmative defenses. Further, the comments to section 402A discuss only the relevance of misuse when a plaintiff asserts a defective product design or defective warning claim.[82] Thus, section 402A follows the view that misuse is not an affirmative defense; instead, misuse is significant to show proof of defect and proximate cause.

Courts first dealt with consumer modifications of a product that exposed the consumer to personal injury. By the mid-1970s, courts began to impose liability when misuse by one person caused injury to another. A New York court, for example, allowed recovery in 1976 to a child who was injured when an unknown consumer improperly discarded a can of drain cleaner.[83] The majority held that the plaintiff had not established as a matter of law misuse of the product when the infant was injured after he found and added water to a discarded can of drain cleaner, causing it to explode.[84] The manufacturer moved to dismiss the products liability claim on the grounds that recovery was barred by the infant's misuse and mishandling of the drain cleaner.[85] The court reasoned that the true test of liability is not the identity or character of the user who is injured. Rather, it is whether the risks would arise from a reasonably foreseeable misuse.[86] "Thus, a casual bystander or an aimless interloper may not be excluded from recovery for an injury resulting from a dangerous product, if the injury arose from a reasonably foreseeable risk which might befall a consumer."[87]

During this same era, liability was imposed when mischievous misuse injured another party. The Maryland Court of Appeals examined in 1975 the question of whether a plaintiff could recover against a cologne manufacturer when the plaintiff's companion poured cologne on a burning candle, igniting the cologne and burning the plaintiff.[88] The court held that sufficient evidence existed to support the trial court's finding that the manufacturer was negligent for failure to place a warning on the bottle indicating the cologne's flammability.[89]

The court reasoned that once a product is used in a dangerous manner which should have been anticipated by the manufacturer, the fact that the manufacturer neither foresaw nor should have foreseen the severity of harm or the exact manner

80. *See* McNichols, *supra* note 59, at 213 n.50.
81. RESTATEMENT (SECOND) OF TORTS § 402A cmts. a-q (1965).
82. *Id.*
83. Tucci v. Bosser, 385 N.Y.S.2d 328, 330 (App. Div. 1976).
84. *Id.* at 331.
85. *Id.* at 330.
86. *Id.*
87. *Id.* at 331.
88. Moran v. Faberge, Inc., 332 A.2d 11, 13 n.2 (Md. 1975).
89. *Id.* at 13.

in which the harm occurred does not prevent the manufacturer from being liable.[90] Thus, the test for foreseeability in negligence dictates that, although the harm may be "unusual, improbable and highly unexpectable[,] . . . if the harm suffered falls within the general danger area, there may be liability."[91] While the negligence standard demands the plaintiff to satisfy cause in fact and legal cause requisites, the cologne case is notable because the court allowed a jury to decide the issue flowing from an intentional act of product misuse which harmed a third party.

In another expansion, courts recognized liability even when negligent misuse by a third party caused harm to bystanders. In 1986, for example, the Seventh Circuit let a jury decide whether a manufacturer should have reasonably foreseen that an employer might use pure, hot flue dust in a hopper, rather than flue dust mixed with filter cake, so as to present danger to an employee who inhaled hot flue dust.[92] Because the manufacturer failed to design its product to prevent the danger of pure flue dust being fed into the hopper without filter cake, a jury could find that the manufacturer should have reasonably foreseen that an employer could misuse the product in a manner injurious to its employees.[93] Thus, the question of whether a manufacturer could be liable for injuries to a third party from the user's negligent, foreseeable misuse of the product was for the trier of fact to decide.[94]

Product modification cases advanced the foreseeable misuse doctrine under strict liability rules in a number of jurisdictions. Starting one's tractor with an ignition bypass[95] and removing the belt guard from a riding lawn mower[96] were situations in which a manufacturer was held liable for injury following a modification of its product. This line of analysis led to the general rule that a manufacturer is liable if the subsequent modification was foreseeable.[97] Many courts hold that a manufacturer must anticipate all foreseeable uses of its product, or in the alternative, a jury may decide the issue of whether the modification was reasonably foreseeable.[98]

In jurisdictions other than Oklahoma, ample precedent exists for imposing liability for foreseeable criminal misuse that causes injury to bystanders. In a notorious decision, Maryland's highest court adopted a new cause of action for bystanders who are injured by pistols which are characterized as "Saturday Night Specials."[99] There, an innocent bystander was injured during the commission of a crime in which the assailant used a short-barrelled pistol. In concluding that the "Saturday Night Special" was a product deserving a distinct cause of action, the court reasoned that: (1) the

90. *Id.* at 19.
91. *Id.*
92. Ruther v. Robins Eng'g & Constructors, 802 F.2d 276, 279 (7th Cir. 1986).
93. *Id.* at 279.
94. *Id.*
95. McMurray v. Deere & Co., 858 F.2d 1436 (10th Cir. 1988) (applying Oklahoma law).
96. Saupitty v. Yazoo Mfg. Co., 726 F.2d 657 (10th Cir. 1984) (applying Oklahoma law).
97. *Id.* at 659; *see* Vanskike v. ACF Indus., 665 F.2d 188, 195 (8th Cir. 1981) (manufacturer of railroad trailer hitches held liable for injuries . . . because the hitch designers should have foreseen that the hitches would be operated without the retaining rings); Merriweather v. E.W. Bliss Co., 636 F.2d 42, 45 (3d Cir. 1980).
98. Smith v. United States Gypsum Co., 612 P.2d 251, 254 (Okla. 1980).
99. Kelley v. R.G. Indus., 497 A.2d 1143, 1159 (Md. 1985).

dangers to society outweighed the benefits;[100] (2) the risks of injury were foreseeable;[101] and (3) the manufacturer was more at fault than the victim.[102] Accordingly, the court held that the manufacturer was liable for the bystander's injuries inflicted by intentional illegal misconduct with the manufacturer's product.[103]

A relatively early Michigan case suggested that liability might exist for the maker of airplane glue when someone who used the glue to become intoxicated turned to murder. After the assailant, acting under the effects of "glue sniffing," murdered two persons, the decedents' father brought a products liability action against the manufacturer of the model glue.[104] The Michigan Court of Appeals in 1972 allowed that suit to survive the manufacturer's summary judgment motion.[105] The plaintiff argued that the manufacturer should have known that the practice of "glue sniffing" was an alternate use for its product which causes, inter alia, loss of self-control and insanity.[106] Therefore, the plaintiff argued, the manufacturer had a duty to produce a safer product, and its failure to do so proximately caused the decedents' injuries.[107]

In response, the manufacturer claimed that it did not owe a duty to third persons to safeguard its product to prevent injury caused by intentional misuse.[108] Also, the manufacturer argued that even if there was a breach of a duty owed, that breach did not proximately result in the injury because the intentional intervening act of sniffing the glue was a superseding cause.[109] The court reasoned, however, that an issue of fact existed whether the practice of "glue sniffing" was sufficiently notorious such that the manufacturer knew or should have known that inhalation was an alternative use for its product.[110] Thus, despite a criminal actor's intentional misuse of the product and subsequent murder of bystanders, the court held that a jury should decide the extent of the manufacturer's liability based on the "facts as they ultimately appear."[111]

If plaintiffs should be given an opportunity to show that "sniffing" was a known alternative use for airplane glue, it follows a fortiori that courts should permit plaintiffs to get to the jury on the claim that terrorist bombs are an alternative use for fertilizer. Fertilizer manufacturers, as well as the general public, have long known that ammonium nitrate fertilizer is a highly effective explosive. With the limited opportunities that law-abiding citizens have to benefit from low-cost, high-power explosives, the foreseeable misusers of fertilizer bombs are criminals (especially terrorists).[112] If the Oklahoma trial court applied the reasoning articulated by the Michigan appellate court in the "glue sniffing" case, a plaintiff would surely clear the

100. *Id.* at 1154.
101. *Id.* at 1158.
102. *Id.* at 1159.
103. *Id.*
104. Crowther v. Koss Chem. & Mfg. Co., 202 N.W.2d 577 (Mich. Ct. App. 1972).
105. *Id.* at 581.
106. *Id.* at 579.
107. *Id.*
108. *Id.* at 580.
109. *Id.* at 581.
110. *Id.*
111. *Id.*
112. *See* discussion *supra* Part II.A.2-B.

summary judgment hurdle, allowing a jury to determine whether the practice of combining fertilizer with fuel oil to create an explosive is sufficiently notorious to constitute foreseeable misuse.

2. Oklahoma's Causation Test in Products Liability Cases Does Not Require Foreseeability

Although Oklahoma has not uniformly adopted the "producing cause" formulation for the causation test in strict liability cases,[113] the element of foreseeability is regularly omitted from the instructions that define "proximate cause" in Oklahoma products liability cases.[114] Some courts have adopted a "producing cause" definition in products liability cases that formally rejects the foreseeability component of the "proximate cause" definition in negligence cases. In a 1995 decision, the Supreme Court of Texas wrote, "Negligence requires a showing of proximate cause, while producing cause is the test in strict liability. Proximate and producing cause differ in that foreseeability is an element of proximate cause, but not of producing cause."[115] Oklahoma still refers to "proximate cause" in products liability cases, but the definition appears to be no different from "producing cause" in other states.[116]

Oklahoma's consideration of the relevance and ramifications of plaintiffs' or third parties' conduct in a products liability action began when Oklahoma adopted strict liability in tort. The Oklahoma Supreme Court recognized as a defense to a products liability claim the doctrine of misuse or "abnormal use" in *Kirkland v. General Motors Corp.*[117] That 1974 decision dealt with a plaintiff who, after drinking alcohol, lost control of her car after an allegedly defective seat back broke loose and fell backwards.[118] The court affirmed the holding for the manufacturer because a jury could have found that plaintiff's alcohol consumption was misconduct that either constituted misuse or was the sole cause of the accident.[119]

Just two years later, however, the same court ruled in *Fields v. Volkswagen of America*[120] that a plaintiff's excessive speed and drinking alcohol were not misuses of an automobile.[121] The court gave two reasons why drinking alcohol and speeding

113. Oklahoma mentioned "producing cause" in a products liability case in the 1974 case of *Cunningham v. Charles Pfizer & Co.*, 532 P.2d 1377, 1382 (Okla. 1974). There, however, the court combined a foreseeability component with the producing cause standard. *Id.*; *see* Duane v. Oklahoma Gas & Elec. Co., 833 P.2d 284 (Okla. 1992). In *Duane*, the court discusses importance of foreseeability in the analysis of failure to warn as a "proximate, producing cause." *Duane*, 833 P.2d at 286.

114. *See infra* notes 125-38 and accompanying text.

115. Union Pump Co. v. Allbritton, 898 S.W.2d 773, 775 (Tex. 1995) (citation omitted).

116. In Texas, for example, the Pattern Jury Instructions define "producing cause" as "an efficient, exciting, or contributing cause that, in a natural sequence, produced the [occurrence] [injury] [occurrence or injury]. There may be more than one producing cause." TEXAS PATTERN JURY INSTRUCTIONS § 70.01 (1990). That definition of "producing cause" is the proper citation standard for a strict liability case. Rourke v. Garza, 530 S.W.2d 794, 801 (Tex. 1975).

117. 521 P.2d 1353, 1366 (Okla. 1974); *see also* McNichols, *supra* note 59, at 217-20.

118. *Kirkland*, 521 P.2d at 1356.

119. *Id.* at 1367.

120. 555 P.2d 48 (Okla. 1976).

121. *Id.* at 57.

did not support the defendant's affirmative defense of misuse. First, the plaintiff's actions were not abnormal uses of an automobile because they were foreseeable. Second, the court stated that the conduct should be characterized as "use for a proper purpose but in a careless manner."[122] The court reasoned that "[i]t is certainly foreseeable by a car manufacturer a person might drive a car over the speed limit or after drinking; but unless . . . [that conduct] caused the accident," the plaintiff is not barred from recovery despite the fact that the conduct contributed to the accident.[123] The *Fields* court thus held that "[i]n order to determine whether the use of a product . . . is abnormal, we must ask whether it was reasonably foreseeable by the manufacturer."[124]

The court, in instructing the jury, defined proximate cause as:

> that cause which, in natural and probabl[e] sequence, brought about the injury alleged. It need not be the only cause, nor the last or nearest cause. It is sufficient if it concurs with some other cause acting at the same time, which in combination with it, brings about the injury.[125]

The court thus presented to the jury a causation test in which there was not an inquiry into the foreseeability of plaintiff's conduct, despite the court's "abnormal use" analysis which inquired into the foreseeability of the plaintiff's use.[126]

By 1980, Oklahoma had extended strict liability to injuries caused, at least in part, by the intervening misconduct of third parties. The manufacturer of wall adhesive in *Smith v. United States Gypsum*[127] was found liable for a plaintiff's injuries resulting from an explosion that detonated when the plaintiff's spouse ignited the flammable fumes.[128] The plaintiff read the safety instructions on the adhesive[129] and took the necessary precautions,[130] but the plaintiff's spouse turned on a fan in another room, which ignited the vapors. The plaintiff maintained that the adhesive was unreasonably dangerous even if the warnings were followed. The court instructed the jury on the issue of the plaintiff's misuse, and the jury returned a verdict holding the manufacturer liable for the plaintiff's injuries.[131]

The Oklahoma Supreme Court affirmed, stating that use of the product for a proper purpose but in a careless manner is not misuse.[132] Without mentioning whether the plaintiff's use of the product with an electric fan running was foreseeable, the court

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122. *Id.*
123. *Id.*
124. *Id.* at 56-57.
125. *Id.* at 57.
126. *See id.*
127. 612 P.2d 251 (Okla. 1980).
128. *Id.* at 253.
129. Instruction said that the adhesive should be used with proper ventilation and that all flames, pilot lights, electric motors, and other sources of ignition should be turned off until vapors were gone. *Id.* at 252-53.
130. Victim turned off his hot water heater, turned off the pilot light in his kitchen stove, and opened his front and back doors. *Id.* at 253.
131. *Id.* at 254-55.
132. *Id.* at 256.

said, "Use of 'Walite' as an adhesive, its sole purpose, cannot be misuse of the product even if plaintiff used it carelessly as alleged."[133] Thus, when a product is used for its intended purpose, foreseeability is irrelevant, and only when a product is used for an unintended purpose will foreseeability become a factor in the analysis.[134]

Similarly, the Oklahoma Supreme Court held in 1984 that liability for injuries sustained by the user of an altered product may be imposed on the manufacturer if the injuries were caused by a product defect existing at the time of manufacture.[135] In *Messler v. Simmons Gun Specialties*,[136] the court analyzed the manufacturer's liability to a third party whose death resulted when the manufacturer's shotgun exploded as decedent's friend fired the gun.[137] The plaintiff alleged that the shotgun had a manufacturing defect and design flaws. The manufacturer argued that the gun exploded because it was improperly fired with overloaded shells.[138] Additionally, a sighting device had been soldered on top of the gun which the manufacturer claimed to be a modification, barring the plaintiff's action.[139] On appeal, the court did not decide the misuse issue; rather, the case dealt with causation issues similar to those in *Fields*.[140]

The court affirmed the trial court's proximate cause instruction which read:

> The 'proximate cause' of any injury . . . means the cause which in its natural and continuous sequence produces the injury. It need not be the only cause, nor the last or nearest cause. It is sufficient if it concurs with some other cause acting at the same time, which in combination with it brings about the injury.[141]

The court compared that instruction with the definition of proximate cause given in *Fields* and determined that the instructions were "virtually identical."[142] Thus, the court, as in *Fields*, did not include in its definition of proximate cause the foreseeability component.

The most recent Oklahoma misuse case was decided in 1988. The Oklahoma Supreme Court interpreted the *Smith* decision broadly, holding in *Treadway v. Uniroyal Tire Co.*[143] that unintended use or unforeseeable use are independently sufficient grounds for barring recovery to plaintiffs under the doctrine of misuse.[144] In *Treadway*, the plaintiff, a service station attendant, was injured when he inflated a tire on the ground rather than on the tire mount, despite the manufacturer's instructions

133. *Id.*
134. *See* McNichols, *supra* note 59, at 221 n.97.
135. Messler v. Simmons Gun Specialties, 687 P.2d 121, 125 (Okla. 1984).
136. 687 P.2d 121 (Okla. 1984).
137. *Id.* at 124-25.
138. *Id.* at 125.
139. *Id.* at 124-26.
140. *See supra* notes 120-26 and accompanying text.
141. *Messler*, 687 P.2d at 129.
142. *Id.*
143. 766 P.2d 938 (Okla. 1988).
144. *Id.* at 940-41; *see also* McNichols, *supra* note 59, at 222.

to the contrary. The plaintiff claimed that a defect in the bead of the tire caused the explosion. The defendant argued on appeal that the misuse instruction should have instructed the trier of fact that failure to follow instructions would constitute misuse if the instructions were legally adequate.[145]

Justice Wilson wrote the majority opinion for the splintered court,[146] explaining first that a distinction exists between "use for an abnormal purpose and use for a proper purpose."[147] Because the plaintiff was using the tire as a tire, the plaintiff met the "proper purpose" definition described in *Smith*.[148] The waters became muddied, however, when the court inquired into whether that use for a proper purpose was foreseeable.[149] By implication, the court indicates that the manufacturer could have raised the affirmative defense of unforeseeable misuse.[150]

In the *Oklahoma City Bombing Case*, the defendant, in response to the plaintiff's Third Amended Class Action Complaint,[151] filed a motion to dismiss and offered a memorandum in support.[152] The defendant's argument that the terrorist bombing was a supervening cause[153] that was not reasonably foreseeable[154] is of particular import to this comment.

The primary support for the defendant's contention is a 1989 Tenth Circuit case. *Henry v. Merck & Co.*[155] held that, in a negligence action,[156] the defendant was not liable when its employee intentionally threw sulfuric acid from the defendant's workplace in the plaintiff's face.[157] The complaint alleged that the employee had stolen the sulfuric acid from the workplace.[158]

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145. McNichols, *supra* note 59, at 222.

146. The holding was a 5-4 decision, and the deciding vote was cast by a judge appointed to sit on that particular case. Presumably because Justice Summers was the trial judge below, he disqualified himself. Judge Bailey then filled that vacancy. *Id.* at 223 n.104.

147. *Treadway*, 766 P.2d at 941.

148. *See supra* notes 129-47 and accompanying text.

149. *Treadway*, 766 P.2d at 941.

150. *Id.*

151. *See generally* Third Amended Complaint, *supra* note 5.

152. Supplemental Memorandum in Support of Defendant's Rule 12(b)(6) Motion to Dismiss at 1, *Oklahoma City Bombing Case*, *supra* note 4 (No. CIV-95-719-R) [hereinafter Defendant's Supplemental Memorandum].

153. *Id.* at 8.

154. *Id.* at 9.

155. 877 F.2d 1489 (10th Cir. 1989) (applying Oklahoma law).

156. That the action was based in negligence is significant to the foreseeability questions raised by this comment. The district court in *Henry* granted defendant a summary judgment on plaintiff's strict liability claim but allowed the jury to decide the negligence claim. *Id.* at 1491.

157. *Id.* at 1495-96.

158. *Id.* How the employee obtained the acid was disputed at trial; the court however chose to assume in the opinion that the employee "stole a cupful of the concentrated sulfuric acid," *id.* at 1491 n.2. The Defendant's Supplemental Memorandum in the *Oklahoma City Bombing Case* explains that defendant in *Henry* "had allowed one of its employees to obtain sulfuric acid from the workplace." Defendant's Supplemental Memorandum, *supra* note 152, at 4.

The *Henry* court articulated two reasons for its holding.[159] First, the defendant had no duty to prevent the criminal acts of a third party.[160] Second, the third party's criminal acts were a supervening cause of the plaintiff's injuries.[161] According to *Henry*, a plaintiff in a negligence action must prove "that his injuries resulted directly and proximately from the defendant's carelessness."[162] Remote causes of injury are not dispositive in a negligence action. Instead, "[t]he law . . . looks for the proximate cause of the injury."[163] The court found that the theft of the acid and the throwing of that product in the plaintiff's face were intervening acts that "broke the causal nexus between the [defendant's] careless behavior and the resulting injury."[164]

Henry explained that a court may apply the doctrine of supervening cause[165] to break the causal nexus if an intervening act meets three requirements.[166] First, the act must be independent of the original act. When an act does not naturally flow from "the original carelessness," it is independent.[167] Additionally, conduct is more likely to be characterized as independent "[w]hen the intervening act is intentionally tortious or criminal."[168] The second requirement to establish a supervening cause is that the act must be sufficient in itself to bring about the result.[169] Finally, the third criterion mandates that the act's occurrence must not be reasonably foreseeable.[170] "[F]oreseeability is the standard by which proximate cause, as distinguished from the mere existence of a condition, is to be tested."[171]

The employee's throwing of the acid in the plaintiff's face constitutes an independent act because that act, not the defendant's careless storage of the acid, caused the plaintiff's injury.[172] Although the defendant's actions facilitated the employee's acquisition of the weapon,[173] the employee's own actions directly caused the resulting harm.[174] The court then reasoned that, because the employee was a model worker, the defendant could not have anticipated the employee's criminal propensities.[175] In

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159. The jury initially ruled in favor of plaintiff. The appellate court, however, reversed the jury after applying negligence principles.

160. *Henry*, 877 F.2d at 1497.

161. *Id.*

162. *Id.* at 1494 (citation omitted).

163. *Id.*

164. *Id.* at 1495.

165. Oklahoma courts refer to intervening factors that break the causal chain as "supervening." That term may be used interchangeably with the term "superseding" from RESTATEMENT (SECOND) OF TORTS § 440 (1965). *Henry*, 877 F.2d at 1495 n.10.

166. *Id.* The Oklahoma Supreme Court in 1989 articulated the "three-prong test" for determining whether an intervening act is a supervening cause. *See* Strong v. Allen, 768 P.2d 369, 371 (Okla. 1989).

167. *Henry*, 877 F.2d at 1495.

168. *Id.*

169. *Id.*

170. *Id.*

171. *Id.*

172. *See id.*

173. The sulfuric acid was stored under an unlocked "fume hood" that was accessible to all laboratory personnel. *Id.* at 1491.

174. *Id.* at 1495.

175. *Id.*

reaching its conclusion that the employee's actions were a supervening cause of the plaintiff's injuries, the court held that the defendant's careless storage of the acid was "a mere condition rather than a proximate cause" of the plaintiff's injuries.[176]

Terrorist use of fertilizer in bombs is certainly an act independent of the manufacturers' withholding possible safeguards. Because terrorists intentionally commit crimes, courts would likely reason that terrorists are acting independently. To determine, however, whether detonation of fertilizer is an act adequate in itself to bring about the injury requires deeper analysis. Without a highly explosive product, terrorists would lack the necessary means to reach their desired end.

Although fertilizer is not the only explosive in the world, it is currently best suited for terrorist use with regard to its price, availability, and volatility. If fertilizer manufacturers exerted sufficient time and effort in an attempt to make their product less volatile, the price of fertilizer today would reflect that design research. Thus, it matters not whether that foregone research would have revealed a feasible safeguard because the increased price resulting from the manufacturer's efforts to make its product safer would restrict some terrorists' access to and desire for ammonium nitrate. It is arguable, therefore, that the ignition of ammonium nitrate fertilizer's highly explosive properties by terrorists may be considered adequate in itself to bring about the destruction which lies dormant in the fertilizer bomb's essential ingredient.

Although the second criterion announced in *Henry* may or may not be satisfied when terrorists liberate ammonium nitrate's explosive properties, one could hardly argue that terrorist detonation of a fertilizer bomb was unforeseeable.[177] For years, terrorists in the Irish Republican Army have bombed Northern Ireland and the United Kingdom.[178] Recently, in the wake of the World Trade Center explosion, the Federal Bureau of Investigation interdicted a plot to bomb several New York City landmarks and political figures in 1993.[179] Despite the frequency with which terrorist attacks occur, the Texas City disaster in 1947[180] should satisfy the foreseeability element of the proximate cause standard articulated in *Henry*.

In the area of social host liability, the Oklahoma Supreme Court demonstrated its willingness to impose responsibility despite the presence of intervening criminal misconduct by creating a new cause of action in *Brigance v. Velvet Dove Restaurant*.[181] Social host liability imposes liability on those who serve alcohol to impaired customers or guests.[182] In 1986, the court recognized a "dram shop"

176. *Id.* at 1496.

177. *See* discussion *supra* Part II.A.

178. *See* discussion *supra* Part II.A.

179. The plot included plans to bomb the United Nations headquarters, the federal building which houses the New York FBI office, and the Lincoln and Holland tunnels. The explosive substance chosen for those bombs was ammonium nitrate. Third Amended Complaint, *supra* note 5, at 67.

180. The Texas City disaster is memorialized in the United States Supreme Court opinion, *Dalehite v. United States*, 346 U.S. 15 (1953).

181. 725 P.2d 300, 304 (Okla. 1986).

182. *See, e.g.*, McGuiggan v. New England Tel. & Tel. Co., 496 N.E.2d 141, 146 (Mass. 1986) (refusing to hold parents, social hosts of youth, passenger killed in automobile accident liable because parents had no knowledge driver was drunk).

common law action, holding that a third party who is injured in an intoxicated driver's automobile accident may state a cause of action against the restaurant that served liquor to the driver.[183] At common law, no third party action existed because consumption of the alcohol rather than its sale was the cause of the injury. Thus, the plaintiffs lacked the requirement of proximate cause. Changing the common law and creating a new cause of action, the *Brigance* court acknowledged that legal duty and liability are matters of public policy and are therefore subject to changing attitudes and needs of society.[184]

In a 1991 decision, the same court adopted the *Brigance* rationale, stating that the innocent bystander must be afforded protection.[185] The court reasoned that drunk driving accidents are commonplace, and the modern car of steel and speed is a "lethal weapon in the hands of a drunken imbiber."[186]

Omission of any foreseeability element with regard to the nature and type of harm is consistent with the underlying purposes of strict liability. While it is true that fertilizer manufacturers could never anticipate a bombing by foreign terrorists in New York followed by domestic terrorism in Oklahoma City, it is equally true that no manufacturer can ever know the time and the place a defect in its product will interact with other events to produce an injury. If an Oklahoma jury concludes that fertilizer is "unreasonably dangerous," doubts about the causal link between the product and the deaths of bomb victims should not be the basis for reversal on appeal.

IV. Magnitude of Harm and the "Unreasonably Dangerous" Test

The *Oklahoma City Bombing Case* presents a good vehicle for Oklahoma to recognize that the magnitude of harm should be a factor in the "unreasonably dangerous" test. The policies that have driven the "judicial revolution" in strict liability would be well served by a rule that sometimes spreads the risk of harm even if there are no known alternatives for making a product safer.

A. Risk-Spreading Concepts Are Central to Strict Liability Theory

The law of products liability has been driven by the social needs of each era, and risk spreading has emerged as the current goal. "The courts of the nineteenth century made allowance for the growing pains of industry by restricting" the manufacturer's duty of care to the consumer.[187] Courts restricted that duty so much that in 1842, the Court of Exchequer in *Winterbottom v. Wright*[188] acknowledged that "it is, no doubt, a hardship upon the plaintiff to be without a remedy, but by that consideration we

183. *Brigance*, 725 P.2d at 304-05.

184. *Id.* at 303.

185. Ohio Cas. Ins. Co. v. Todd, 813 P.2d 508, 509 (Okla. 1991). The court held that a tavern owner has no liability to intoxicated adult who voluntarily consumes alcoholic beverages to excess and sustains injury as result of his intoxication. *Id.* at 510-11.

186. *Id.* at 509.

187. Roger J. Traynor, *The Ways and Means of Defective Products and Strict Liability*, 32 TENN. L. REV. 363, 363 (1965).

188. 10 M & W 109, 152 Eng. Rep. 402 (Exch. 1842).

ought not to be influenced."[189] Without privity of contract, the *Winterbottom* court feared that there would be "the most absurd and outrageous consequences."[190] That rationale feared an explosion of plaintiffs[191] seeking redress from industry for any injury inflicted by a product.

Seventy-four years later, the courts faced a world in which industries distributed defective products over ever-widening zones, resulting in uncompensated injuries to consumers.[192] In 1916, the New York Court of Appeals expanded the duty of care in *MacPherson v. Buick Motor Co.*[193] to protect consumers who purchased automobiles from a manufacturer's dealer.[194] Judge Cardozo declared that, although manufacturers would argue that the dealer was the only party to whom they owe a duty, "[t]he dealer was indeed the one person of whom it might be said with some certainty . . . the car would not be used."[195]

Judge Traynor's renowned concurring opinion in *Escola v. Coca-Cola Bottling Co.*[196] is well known for articulating the goal of fixing liability upon the one best able to anticipate and bear the risks of injury from defective products.[197] Judge Traynor also stressed the need for spreading the risk without regard to the potential for correction. He wrote:

> Those who suffer injury from defective products are unprepared to meet its consequences. The cost of injury and the loss of time or health may be an overwhelming misfortune to the person injured, and a needless one, for the risk of the injury can be insured by the manufacturer and distributed among the public as a cost of doing business . . . . However intermittently such injuries may occur and however haphazardly they may strike, the risk of their occurrence is a constant risk and a general one. Against such a risk there should be general and constant protection and the manufacturer is best situated to afford such protection.[198]

For the families of the 169 victims of the fertilizer explosion in Oklahoma City, the loss was indeed an "overwhelming misfortune" that stuck "haphazardly." The risk-spreading concept in strict products liability is analogous to an insurance system, although courts and commentators are quick to disclaim any notions that the manufacturer is an insurer for its product.[199] If courts impose liability, then manufac-

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189. *Id.* at 405-06.

190. *Id.* at 405.

191. This "explosion of plaintiffs" refers to an outbreak of claimants with similar causes of action. No pun on the word "explosion" is intended.

192. *See* Traynor, *supra* note 187, at 364.

193. 111 N.E. 1050 (N.Y. 1916).

194. *Id.* at 394-95.

195. *Id.* at 391.

196. 150 P.2d 436 (Cal. 1944).

197. *Id.* at 441 (Traynor, J., concurring).

198. *Id.* (Traynor, J., concurring).

199. *See* W.E. Hembree v. Southard, 339 P.2d 771, 773 (Okla. 1959). *See generally* Traynor, *supra* note 187.

turers will raise their prices; the additional charge acts as an insurance premium. Thus, "premiums" may be collected to pay for the injureds' losses.

Risk spreading has also been one rationale for judicial imposition of liability on airlines for injuries caused by terrorists. The special duty of a carrier to protect passengers against risks inherent in the mode of transportation has been one basis for this form of liability for terroristic conduct. One court has concluded that "the fundamental premise relied upon by the courts to expand carrier liability to include hijackers and terrorist attacks is that such risks are characteristic of air travel."[200] This rationale, of course, is not present in a bystander-bombing case. The fertilizer manufacturers in the *Oklahoma City Bombing Case* have argued that they have no duty that would arise if a special relationship existed.[201]

At least one court, however, has overtly relied on risk spreading to impose liability on airlines for passenger injuries caused by foreseeable terrorist conduct. A Second Circuit Panel in *Day v. Trans World Airline*[202] explained:

> The airlines are in a position to distribute among all passengers what would otherwise be a crushing burden upon those few unfortunate enough to become "accident" victims. Equally important, this . . . fosters the goal of accident prevention. The airlines, in marked contrast to individual passengers, are in a better posture to persuade, pressure or, if need be, compensate airport managers to adopt more stringent security measures against terrorist attacks. If necessary, the airlines can hire their own security guards. And, the companies operate under circumstances more conducive to investigating the conditions at the airports they regularly serve than do their passengers. Moreover, they can better assess the probabilities of accidents, and balance the reduction in risk to be gained by any given preventive measure against its cost.[203]

This rationale could be relied upon by Oklahoma courts to impose liability on manufacturers of products that are known to be suitable for misuse by terrorists to cause mass destruction.

Fertilizer manufacturers will argue that risk spreading is inappropriate in their industry because fertilizer serves an essential function for society. For example, without fertilizer, the produce in the world would be much more costly. Imposing liability on fertilizer manufacturers would raise the price of fertilizer — and potentially the price of food — for those who might not be able to afford the more costly version. This argument may actually work against the manufacturers, however, by supporting the concept that dangerous products should not be made more available by a "subsidy" based on leaving victims who are injured by the product without compensation. Many courts recognize that imposing liability on manufacturers

200. Price v. British Airways, No. 91 Civ. 4947 (JFK), 1992 WL 170679, at *3 (S.D.N.Y. July 7, 1992); *see also* Martinez Hernandez v. Air France, 545 F.2d 279 (1st Cir. 1976).

201. Defendant's Supplemental Memorandum, *supra* note 152, at 11-14.

202. 528 F.2d 31 (2d Cir. 1975).

203. *Id.* at 34.

compensates bystanders for their losses and spreads the risk of such injury to the consumers who aid in the creation of the risk.[204] In light of this rationale, it is fair to ask: should the need for "constant protection" against such a risk depend on expert testimony about additives that might or might not have caused the terrorists to shift to less lethal explosives?

B. Oklahoma Should Adopt a Standard that Considers Risk of Harm as Evidence a Product Is "Unreasonably Dangerous"

The progression of products liability law, as well as its underlying principles, point to the need for another evolutionary step in foreseeable terrorist-misuse cases: A finding that a product is "unreasonably dangerous" should be sustained on the basis of the magnitude of foreseeable harm the product causes, even if there is no evidence the manufacturer was unreasonable. The Oklahoma Supreme Court foreshadowed this necessity in *Kirkland v. General Motors Corp.*[205] when Justice Doolin wrote "that in some accidents the surrounding circumstances and human experience should make the Plaintiff's burden less arduous."[206] Thus, in civil cases, that a product is "unreasonably dangerous" "may be proved by direct or circumstantial evidence, or a combination of both; and it is not necessary that such proof rise to such degree of certainty as to support only one reasonable conclusion and exclude all others."[207]

Under this approach, a jury could be allowed to find that any product recognized as capable of causing enormous destruction is "unreasonably dangerous," without regard to whether safety modifications exist. In fertilizer-bomb cases, the efficacy of additives, while clearly relevant, should not be outcome determinative. Even in the absence of alternatives to save a particular manufacturer from crushing liabilities, the true costs of a product will be reflected more accurately if the injuries it creates are included in its cost.

Reflecting the full cost of a product by including the injuries it causes[208] should have positive long-term benefits, even if some products or manufacturers are inhibited. Assume, for example, that the cost of damage awards from fertilizer bombs drives the price of ammonium nitrate fertilizer above the cost of other sources of nitrogen. Under those circumstances, farmers can be expected to shift to alternatives that now appear (if the costs of bomb injuries are excluded from ammonium nitrate prices) to be more expensive.

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204. *See, e.g.*, Lippard v. Houdaille Indus., 715 S.W.2d 491, 502 (Mo. 1986); Beshada v. Johns-Manville Prods. Corp., 447 A.2d 539, 546 (N.J. 1982); Allen v. Heil Co., 589 P.2d 1120, 1126 (Or. 1979).

205. 521 P.2d 1353 (Okla. 1974).

206. *Id.* at 1364.

207. Chickasha Cotton Oil Co. v. Hancock, 306 P.2d 330, 332 (Okla. 1957).

208. Ideally, damages should be based on the incremental injuries that would not occur if the product did not exist. This is merely cause in fact. If ammonia nitrate fertilizer did not exist, it is possible the Oklahoma City Bombing would still have occurred, but it is unlikely, given the budget and sophistication of the perpetrators, that the bomb would have taken so many lives and destroyed so much property. A jury should be allowed to conclude, however, that all the loss would have been averted if fertilizer had not been sold in an "unreasonably dangerous" condition.

Calcium nitrate and nitrate of soda both offer sixteen percent nitrogen in a non-explosive dry form.[209] Many farmers in the United States have switched from ammonium nitrate to liquid formulations that offer forty percent or more nitrogen.[210] In addition, manures, compost, and dried sludge accomplish the same purposes as ammonium nitrate, but they are in a benign form.[211] Thus, increased prices of ammonium nitrate are likely to force changes in consumer behavior that would, in turn, make ammonium nitrate less available and more expensive for would-be terrorists. If additives produce a better balance of the economic incentives, it is likely that manufacturers, acting in their own rational economic self-interest, can be expected to maximize the efficiency of those additives. If additives do not work to stem the tide of liability from terrorist bombings, then fertilizer manufacturers may shift their efforts from the production and sale of ammonium nitrate to other fertilizer alternatives.

If the risk of harm is sufficiently great, even the extinction of an entire industry may be in the best interest of society. Assume, for discussion purposes, that someone invented a small nuclear-powered engine that was affordable enough for installation in family automobiles. The benefits of this product might be enormous by eliminating fuel costs, conserving irreplaceable fossil fuels, and reducing pollution. Further assume, however, that this miniature nuclear engine could be easily adapted by any miscreant to become a nuclear bomb. If the risk of liability kept the nuclear car from reaching the market — thereby saving several cities and towns from destruction — who could say the society was not best served by the rule that imposed liability? In fact, something very close to this scenario may have occurred with regard to nuclear power plants. No new nuclear power projects have been initiated in this country after accidents suggested the liability risk and compliance costs would outweigh any efficiency benefits.[212]

V. Conclusion

The tragedy in Oklahoma City may fit the old maxim that "hard cases make bad law," but positive social policies can be served by allowing a jury to impose liability on the manufacturer of the product that brought mass destruction within the reach of even low-budget terrorists. Existing precedents, such as the "glue sniffing" case, have established that the intervention of foreseeable criminal misuse is not a defense when bystanders are harmed. Oklahoma can be expected to follow those precedents with regard to privity and causation.

Even if practical alternatives to make fertilizer less explosive are not proved by the plaintiffs, Oklahoma judges should give a jury in the *Oklahoma City Bombing Case* the latitude to find that ammonium nitrate fertilizer is "unreasonably dangerous" when

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209. *See Bomb Ingredients*, *supra* note 34, at A8.

210. *Id.*

211. *Id.*

212. The nuclear reactor accident at Three Mile Island in 1979 "spawned billions of dollars' worth of cleanup and litigation costs and . . . put an end to construction of nuclear power plants in the U.S." *TMI Reduced Shutdowns*, PITTSBURGH POST-GAZETTE, Oct. 16, 1995, at A6, *available in* LEXIS, News Library, Majpap File.

sold to the general public at low prices in feed stores across America. The rapid succession of three uses of fertilizer bombs by terrorists in this country[213] has created actual damage and probable future risk that should affect the price and availability of that product. This positive social goal — and just legal result — can be accomplished by recognizing that the magnitude of harm caused by a product can suffice to support a finding that the product is "unreasonably dangerous," even if no reasonable alternatives have been shown by a plaintiff to make that particular product safer. By this logical extension of the existing law, Oklahoma courts can come one step closer to attaining Judge Traynor's promise that the law will give "general protection" against "overwhelming loss" caused by dangerous products "[h]owever . . . intermittently such injuries may occur and however haphazardly they may strike."[216]

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213. In addition to the bombs that exploded at the World Trade Center and in Oklahoma City, a third bomb failed to explode when the fuse went out in Reno, Nevada on December 18, 1995. *2 Plead in IRS Bombing Attempt*, CHI. SUN-TIMES, Jan. 12, 1996, at 26. Three weeks following the Oklahoma City Bombing, police charged a man in Massachusetts with assembling a "fertilizer bomb." Police said, however, that the bomb could not have exploded because the suspect "had mistakenly used potting soil instead of fertilizer." Chuck Shepherd, *The Secret Life of 1995: News Your Paper May Have Missed*, WASH. POST, Dec. 24, 1995, at C3.

216. Escola v. Coca-Cola Bottling Co. 150 P.2d 436, 441 (Cal. 1944) (Traynor, J., concurring).