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Physical Injury and Economic Loss - The Fine Line of Distinction Made Clearer

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PHYSICAL INJURY AND ECONOMIC LOSS – THE FINE LINE OF DISTINCTION MADE CLEARER

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SINCE THE ADVENT OF STRICT LIABILITY as introduced in section 402A of the Second Restatement of Torts (Restatement) [1] and as initially adopted in *Greenman v. Yuba Power Products, Inc.*,[2] the battle has raged over what damages are to be available to parties who claim that they have been injured in some way as a result of their acquisition and use of defective products. This battle has been provoked by the overlap of the Uniform Commercial Code (UCC) [3] with strict liability tort principles, and has become especially fierce when the damages are sustained in a commercial setting.[4] The United States Court of Appeals for the Third Circuit, in its recent decision in *Pennsylvania Glass Sand Corp. v. Caterpillar Tractor Co.*,[5] very clearly outlined the controversy as it has evolved and, to a great extent, succeeded in clari-

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1. RESTATEMENT (SECOND) OF TORTS § 402A (1965). Section 402A provides:

> (1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if
>
> (a) the seller is engaged in the business of selling such a product, and
>
> (b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.
>
> (2) The rule stated in Subsection (1) applies although
>
> (a) the seller has exercised all possible care in the preparation and sale of his product, and
>
> (b) the user or consumer has not bought the product from or entered into any contractual relation with the seller.

Id. Pennsylvania adopted § 402A in Webb v. Zern, 422 Pa. 424, 220 A.2d 853 (1966). For examples of recent decisions applying § 402A, see Azarello v. Black Bros. Co., Inc., 480 Pa. 547, 391 A.2d 1020 (1978); Berkebile v. Brantly Helicopter Corp., 462 Pa. 83, 337 A.2d 893 (1975).

2. 59 Cal. 2d 57, 377 P.2d 897, 27 Cal. Rptr. 697 (1963).

3. 13 PA. CONS. STAT. ANN. §§ 1101-9507 (Purdon Pamphlet 1980).

4. *See* notes 143-47 and accompanying text *infra*.

5. 652 F.2d 1165 (3d Cir. 1981), *rev'g*, 496 F. Supp. 713 (M.D. Pa. 1980).

fying the fine line of distinction between damages recoverable in tort and those recoverable in contract.

Damages sustained as a result of the acquisition or use of a defective product can generally be categorized as follows: 1) personal injury; 2) physical injury to property other than the defective product itself; 3) physical injury to the defective product itself; 4) damages arising as a result of the unsatisfactory performance of the product or its failure to meet the expectations of the purchaser, and 5) incidental and consequential damages.[6] Recovery for personal injuries and for physical damage to property other than the defective product itself is available in tort under strict liability principles in jurisdictions which have adopted section 402A[7] and under negligence principles in jurisdictions which have not yet embraced the doctrine of strict liability.[8] The disagreement arises, however, over the recoverability of damages of the third and fourth categories, those sustained as a result of physical damage to the product itself and those sustained as a result of the failure of the product to meet the purchaser's expectations, each of which have been labeled "economic loss."[9] It is this overlapping use of the

6. *See* W. PROSSER, LAW OF TORTS 665-67 (4th ed. 1971); Keeton, *The Meaning of Defect in Products Liability Law—A Review of Basic Principles,* 45 MO. L. REV. 579, 583-88 (1980).

7. *See, e.g.,* Suvada v. White Motor Co., 32 Ill. 2d 612, 210 N.E.2d 182 (1965); Santor v. A & M Karagheusian, Inc., 44 N.J. 52, 207 A.2d 305 (1965); Webb v. Zern, 422 Pa. 424, 220 A.2d 853 (1966). *See generally* Annot., 13 A.L.R.3d 1057, 1071-75 (1967).

8. *See, e.g.,* Handy v. Uniroyal, Inc., 327 F. Supp. 596 (D. Del. 1971); Lipsius v. Bristol-Myers Co., 265 So. 2d 396 (Fla. App. 1972). *See generally,* 63 AM. JUR. 2d *Products Liability* §§ 25-123 (2d ed. 1972).

9. For examples of decisions disfavoring recovery of economic loss in tort, see Fredonia Broadcasting Corp. v. RCA Corp., 481 F.2d 781 (5th Cir. 1973); Bright v. Goodyear Tire & Rubber Co., 463 F.2d 240 (9th Cir. 1972); Southwest Forest Indus., Inc. v. Westinghouse Elec. Corp., 422 F.2d 1013 (9th Cir.), *cert. denied,* 400 U.S. 902 (1970); Midland Forge, Inc. v. Letts Indus., Inc., 395 F. Supp. 962 (N.D. Iowa 1975), *aff'd,* 541 F.2d 226 (9th Cir. 1976); Cooley v. Salopian Indus., Ltd., 383 F. Supp. 1114 (D.S.C. 1974); Noel Transfer & Package Delivery Serv., Inc. v. General Motors Corp., 341 F. Supp. 968 (D. Minn. 1972); Morrow v. New Moon Homes, Inc., 548 P.2d 279 (Alaska 1976); Beauchamp v. Wilson, 21 Ariz. App. 14, 515 P.2d 41 (1973); Seely v. White Motor Co., 63 Cal. 2d 9, 403 P.2d 145, 45 Cal. Rptr. 17 (1965); Hiigel v. General Motors Corp., 190 Colo. 47, 544 P.2d 983 (1975); Alfred N. Koplin & Co. v. Chrysler Corp., 49 Ill. App. 3d 194, 364 N.E.2d 100 (1977); Hawkins Constr. Co. v. Matthews Co., 190 Neb. 546, 209 N.W.2d 643 (1973); Inglis v. American Motors Corp., 3 Ohio St. 2d 132, 209 N.E.2d 538 (1965); Price v. Gatlin, 241 Or. 315, 405 P.2d 502 (1965); Nobility Homes, Inc. v. Shivers, 557 S.W.2d 77 (Tex. 1977).

For examples of decisions permitting recovery of economic loss in tort, see Mead Corp. v. Allendale Mut. Ins. Co., 465 F. Supp. 355 (N.D. Ohio 1979); Cova v. Harley-Davidson Motor Co., 26 Mich. App. 602, 182 N.W.2d 800 (1970); Santor v. A & M Karagheusian. Inc., 44 N.J. 52, 207 A.2d 305 (1965);

term "economic loss" which has, in great part, contributed to the confusion over which damages are recoverable in tort and which are not.

Before one can intelligently commence an analysis of the types of damages recoverable in tort and those recoverable in contract, one must first define the term "economic loss." Fifteen years ago, a commentator defined it as "the diminution in the value of the product because it is inferior in quality and does not work for the general purposes for which it was manufactured and sold." [10] In 1968, however, the Pennsylvania Supreme Court, using the example of an exploding gas range, noted that the cost of "replacing the stove has sometimes been referred to as 'economic loss.'" [11] Subsequently, another commentator defined economic loss as "the financial injury sustained by the purchaser of a defective product, where neither personal injury, nor injury to property other than the product occurs." [12]

In *Pennsylvania Glass Sand,* the Third Circuit, relying heavily on Justice Traynor's analysis in *Seely v. White Motor Co.,*[13] distinguished economic loss from physical damage to a defective product itself when it noted:

> The line that is drawn usually depends on the nature of the defect and the manner in which the damage occurred. Defects of quality, evidenced by internal deterioration or breakdown, are assigned to the economic loss category, while the loss stemming from defects that cause accidents "of violence or collision with external objects" is treated as physical injury.[14]

The court went on, however, to outline the interrelated factors which it believed must be analyzed when attempting to draw the line between physical injury which is recoverable in tort and eco-

Ianco v. Anderson Concrete Corp., 42 Ohio St. 2d 88, 326 N.E.2d 267 (1975); Berg v. General Motors Corp., 87 Wash. 2d 584, 555 P.2d 818 (1976); City of La Crosse v. Schubert, Schroeder & Assocs., Inc., 72 Wis. 2d 38, 240 N.W.2d 124 (1976).

10. Comment, *Manufacturer's Liability to Remote Purchasers for "Economic Loss" Damages—Tort or Contract?,* 114 U. PA. L. REV. 539, 541 (1966).

11. Kassab v. Central Soya, 432 Pa. 217, 231 n.7, 246 A.2d 848, 855 n.7 (1968), *citing* Comment, *supra* note 10. *See* note 83 and accompanying text *infra.*

12. Mislow, *The Recovery of Economic Losses Under Strict Liability: A Lesson in Applied Metaphysics,* 11 PA. RESEARCHER 1, 1 (Oct. 1980).

13. 63 Cal. 2d 9, 403 P.2d 145, 45 Cal. Rptr. 17 (1965).

14. 652 F.2d at 1169-70 (footnote omitted). *See also* Comment, *Economic Loss in Products Liability Jurisprudence,* 66 COLUM. L. REV. 917, 918 (1966) (direct economic loss differentiated from consequential economic loss).

nomic loss which, under the majority view as defined by the Third Circuit, is not compensable under negligence or strict liability standards.[15] These factors include: "the nature of the defect, the type of risk, and the manner in which the injury arose." [16] These factors, the court noted, bear directly on whether the "safety insurance policy of tort law or the expectation-bargain protection policy of warranty law is most applicable to a particular claim." [17]

The battle over the recoverability in tort of damages sustained to a defective product itself, whether called physical damage or economic loss, was fueled by a split of authorty which arose early in the development of strict liability.[18] In 1965, the supreme courts of California and of New Jersey were both called upon to determine whether damages for physical injury to a defective product itself could be recovered in strict liability actions. The California Supreme Court articulated what has become the majority view in its decision in *Seely*,[19] while the New Jersey Supreme Court articulated what has since become the minority view in *Santor v. A & M Karagheusian, Inc.*[20]

The plaintiff in *Seely* had purchased a truck manufactured by the defendant.[21] From October, 1959, when he purchased the truck, until late 1960, the plaintiff had experienced numerous difficulties with the truck's operation.[22] On one occasion, the truck was damaged when it overturned after its brakes failed.[23] The plaintiff had the truck repaired at a cost of over $5000, and he suffered lost profits of over $9000 while the truck was being repaired.[24] Despite efforts by the distributor and the manufacturer to correct the difficulties, the truck's deficiencies continued.[25] In

15. 652 F.2d at 1169-73.

16. *Id.* at 1173.

17. *Id.*

18. *See* Ribstein, *Guidelines for Deciding Product Economic Loss Cases*, 29 MERCER L. REV. 493 (1978); Comment, *Products Liability: Expanding the Property Damage Exception in Pure Economic Loss Cases*, 54 CHI.-KENT L. REV. 963 (1978); Comment, *The Vexing Problem of the Purely Economic Loss in Products Liability: An Injury in Search of a Remedy*, 4 SETON HALL L. REV. 145 (1972).

19. For a discussion of *Seely*, see notes 21-35 & 51 and accompanying text *infra*. *See also* note 9 *supra* and authorities cited therein.

20. 44 N.J. 52, 207 A.2d 305 (1965). For a discussion of *Santor*, see notes 36-44 and accompanying text *infra*. *See also* note 9 *supra* and authorities cited therein.

21. 63 Cal. 2d at 12, 403 P.2d at 147, 45 Cal. Rptr. at 19.

22. *Id.*

23. *Id.*

24. *Id.*

25. *Id.*

September 1960, the truck was repossessed after the plaintiff refused to continue making payments toward its purchase price.[26]

The plaintiff brought an action against the distributor and the manufacturer to recover his payments toward the purchase price, his repairs to the truck, and his lost profits.[27] The trial court found that the manufacturer had breached its warranty to the plaintiff, and it awarded damages for his payments and his lost profits.[28] His repair costs were disallowed, however, because the trial court found that he had failed to prove that the truck's defects were the cause of the brake failure which necessitated the repairs.[29]

On appeal, the California Supreme Court was faced with the question of whether strict liability tort principles or the warranty provisions of the UCC should be applied in determining the damages which the plaintiff could recover. In an opinion by Justice Traynor, the court pointed out that strict liability had not totally superseded the provisions of the UCC, stating: "The history of . . . strict liability . . . indicates that it was designed . . . to govern the distinct problem of physical injuries," [30] and the court found that the warranty provisions of the UCC were appropriate in the commercial setting.[31] Therefore, the court reasoned, the plaintiff could not be compensated for the loss of the benefit of his bargain —the purchase price and his lost profits—under the rules of strict liability.[32]

While the court held that the plaintiff could not recover under strict liability for his "economic losses" caused by the product's failure to perform satisfactorily, the court noted in dictum that his reliance on a tort theory of recovery would not prevent the plaintiff from recovering his repair costs if he could establish that the damage to the product was caused by the conduct of the defendant.[33] The court reasoned that physical injury to property "is so akin to personal injury" that there is no reason to distinguish between the two.[34] While disallowing recovery of the damages which it

26. *Id.*

27. *Id.* at 12-13, 403 P.2d at 147-48, 45 Cal. Rptr. at 19-20.

28. *Id.*

29. *Id.*

30. *Id.* at 15, 403 P.2d at 149, 45 Cal. Rptr. at 21.

31. *Id.* at 16, 403 P.2d at 150, 45 Cal. Rptr. at 22.

32. *Id.*

33. *Id.* at 19, 403 P.2d at 152, 45 Cal. Rptr. at 24.

34. *Id., citing* Prosser, *The Assault Upon the Citadel,* 69 YALE L.J. 1099 (1960). *See also* Gherna v. Ford Motor Co., 246 Cal. App. 2d 639, 55 Cal. Rptr. 94 (1966) (plaintiff permitted to recover in strict liability for physical damage to defective product itself).

characterized as economic losses, the California Supreme Court was of the opinion that physical injury to persons or property, including the defective product itself, was compensable under the strict liability theory.[35]

An alternative view on the question of whether economic loss is recoverable in tort was expressed by the New Jersey Supreme Court in *Santor*.[36] In *Santor*, the plaintiff had purchased a carpet manufactured by the defendant.[37] The carpet developed lines.[38] In his complaint, the plaintiff alleged that the carpeting was defective and that the manufacturer had breached its warranty of merchantability.[39] The trial court found that the manufacturer had breached its warranty, and it awarded the plaintiff damages for the full amount of the carpet's purchase price.[40]

While the New Jersey Supreme Court found the breach of warranty action a permissible theory of recovery, it reasoned that strict liability in tort would "cast [the manufacturer's liability] in simpler form,"[41] and it permitted the plaintiff to recover his damages under a strict liability theory.[42] The supreme court modified the trial court's award of the full purchase price to "the difference between the price paid by plaintiff and the actual market value of the defective carpeting at the time when the plaintiff knew or should have known that it was defective."[43] Thus, the plaintiff was permitted to recover his economic loss—the benefit of his bargain—under principles of strict liability.[44]

In addition to the *Seely* and *Santor* approaches, there are a number of other views which highlight the very problem with which

35. 63 Cal. 2d at 16-18, 403 P.2d at 150-51, 45 Cal. Rptr. at 22-24. *Seely* was followed in Dudley Constr., Inc. v. Droitt Mfg. Co., 66 App. Div. 2d 368, 412 N.Y.S.2d 512 (1979). In *Dudley*, a crane owned by the plaintiff and manufactured by the defendant had collapsed and was damaged. *Id.* at 370, 412 N.Y.S.2d at 513. The *Dudley* court followed the California Supreme Court's dictum in *Seeley*, and held that physical injuries caused by defects that create an unreasonable risk of harm are compensable in strict liability. *Id.* at 374, 412 N.Y.S.2d at 516.

36. *See* 44 N.J. at 52, 207 A.2d at 305.

37. *Id.* at 55, 207 A.2d at 306.

38. *Id.* at 56, 207 A.2d at 307.

39. *Id.* at 57, 207 A.2d at 307.

40. *Id.*

41. *Id.* at 63, 207 A.2d at 311.

42. *Id.* at 63-68, 207 A.2d at 311-13.

43. *Id.* at 68-69, 207 A.2d at 314.

44. *See id.* To the *Santor* court, compensation for physical damage to a defective product itself could also be recovered since, as the court stated, the "responsibility of the maker should be no different where [there is] damage to the article sold or to other property of the consumer." *Id.* at 66, 207 A.2d at 312.

the Third Circuit was confronted after the lower court had held in *Pennsylvania Glass Sand* that losses sustained as a result of repair or replacement of a defective product itself constitute economic losses which are not recoverable in tort. In Georgia, for example, strict liability protection extends only to natural persons, and the tort redress available to corporate plaintiffs for physical damage to a defective product itself is limited to traditional negligence.[45] Virginia has failed to adopt strict liability in tort to protect any consumer, and thus corporations, like natural persons, must seek recompense in tort for their property damages by establishing the negligence of the manufacturer or seller of a defective product.[46] Courts in Texas and Illinois, perhaps misapplying the reasoning of Justice Traynor in *Seely*,[47] have included damage to a defective product itself within the economic loss rubric and have denied recovery in tort for physical damages sustained by corporations.[48]

Dean Keeton's position is that recovery in tort for damage to a defective product itself should not be allowed.[49] He wrote:

> A distinction should be made between the type of "dangerous condition" that causes damage only to the product itself and the type that is dangerous to other property or persons. A hazardous product that has harmed something or someone can be labeled a part of the accident problem; tort law seeks to protect against this type of harm through allocation of risk. In contrast, a damaging event that harms only the product should be treated as irrelevant to policy considerations directing liability placement in tort. Consequently, if a defect causes damage limited solely to the property, recovery should be available if at all on a contract-warranty theory.[50]

Such reasoning, however, does little to advance the purposes behind strict liability. A product is no less defective if it injures only itself, and, accordingly, its manufacturer is no less culpable under such circumstances. As Justice Traynor stated in *Seely*:

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45. Long Mfg., Inc. v. Grady Tractor Co., 140 Ga. App. 320, 231 S.E.2d 105 (1976).

46. *See* Pruitt v. Allied Chem. Corp., 523 F. Supp. 975 (E.D. Va. 1981).

47. For a discussion of Justice Traynor's analysis in *Seely*, see notes 21-35 & 51 and accompanying text *infra*.

48. *See* Alfred N. Koplin & Co. v. Chrysler Corp., 49 Ill. App. 3d 194, 364 N.E.2d 100 (1977); Mid-Continent Aircraft v. Curry County Spraying Serv., 572 S.W.2d 308 (Tex. 1978).

49. *See* Keeton, *Annual Survey of Texas Law on Torts*, 32 Sw. L.J. 1 (1978).

50. *Id.* at 5.

> The distinction that the law has drawn between tort recovery for physical injuries and warranty recovery for economic loss is not arbitrary and does not rest on the "luck" of one plaintiff in having an accident causing physical injury. The distinction rests, rather, on an understanding of the nature of the responsibility a manufacturer must undertake in distributing his products. He can appropriately be held liable for physical injuries caused by defects by requiring his goods to match a standard of safety defined in terms of conditions that create unreasonable risks of harm. He cannot be held for the level of performance of his products in the consumer's business unless he agrees that the product was designed to meet the consumer's demands. A consumer should not be charged at the will of the manufacturer with bearing the risk of physical injury when he buys a product on the market. He can, however, be fairly charged with the risk that the product will not match his economic expectations unless the manufacturer agrees that it will.[51]

This distinction set forth by Justice Traynor appears to have been overlooked by the courts which, following the reasoning of Dean Keeton, have automatically treated damage to a defective product itself as economic loss.[52]

Against this background, the Third Circuit Court of Appeals was called upon to enter the fray in *Pennsylvania Glass Sand*.[53] In November 1971, Pennsylvania Glass Sand Corporation (Pennsylvania Glass Sand), the operator of a sand quarry and processing plant in central Pennsylvania, purchased a front-end loader from the Caterpillar Tractor Company (Caterpillar).[54] After nearly four years of continuous use, a fire originated in the forward portion of the front-end loader near hydraulic lines connected to the loader's bucket.[55] While the operator was able to escape without injury, in his haste to evacuate the equipment he failed to turn off the motor.[56] The hydraulic fluid in the lines thus remained pressurized and fueled the fire.[57] The front-end loader was not

51. 63 Cal. 2d at 18, 403 P.2d at 151, 45 Cal. Rptr. at 23.

52. For a discussion of Dean Keeton's reasoning, see notes 49-50 and accompanying text *supra*.

53. *See* note 5 and accompanying text *supra*.

54. 652 F.2d at 1166.

55. *Id.*

56. *Id.*

57. *Id.*

equipped with any type of fire suppression system, and was severely damaged by the fire.[58] The plaintiff spent over $170,000 to repair the damaged equipment and to secure replacement equipment while the damaged loader was being repaired.[59]

Since the statute of limitations applicable to an action on the loader's warranty had expired,[60] Pennsylvania Glass Sand brought suit on theories of strict liability and negligence.[61] The plaintiff alleged that the loader was defective due to the absence of fire suppression equipment and the absence of any warnings or instructions to the operator of what to do in the event of a fire.[62]

Caterpillar, the defendant manufacturer, filed a motion for summary judgment, arguing that the plaintiff's damages constituted economic losses for which Pennsylvania law did not permit recovery in a tort action.[63] On hearing the defendant's motion, the trial court framed the issue to be decided on summary judgment as "whether Pennsylvania law . . . permits recovery for . . . economic losses in an action sounding in tort or whether [the] remedies are limited to those available under the UCC for breach of warranty and subject to whatever limitation of remedies for breach of warranty the parties may have agreed upon." [64]

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58. *Id.*

59. *Id.* at 1166-67.

60. *See* 13 PA. CONS. STAT. ANN. § 2725(a) (Purdon Pamphlet 1980) (four year UCC statute of limitations).

61. 652 F.2d at 1166.

62. *Id.* at 1166-67.

63. *Id.* at 1167. In its motion, the defendant relied on the recent decision of the Third Circuit in Jones & Laughlin Steel Corp. v. Johns-Manville Sales Corp., 626 F.2d 280 (3d Cir. 1980).

In *Jones & Laughlin,* the court had been called upon to determine whether the repair and replacement costs of an allegedly defective roof were compensable under § 402A. *See* 626 F.2d at 284. The manufacturer had warranted that the roof would withstand high winds and wet weather conditions; over a period of time, however, portions of the roof had blown away or suffered damage from inclement weather. *Id.* at 282. Applying Illinois law, the Third Circuit pointed out that the damage to the roof was exactly the type against which the manufacturer had warranted its product. *See id.* at 293.

It bears emphasis that the damage to the roof in *Jones & Laughlin* did not arise as the result of an "accident" of a type traditionally compensable in tort, and the product itself was not unsafe or hazardous. *See id.* at 282. Classifying the damage to the roof as an economic loss, the *Jones & Laughlin* court refused to permit recovery under § 402A. *See id.* at 293.

While the facts of *Jones & Laughlin* and of *Pennsylvania Glass Sand* are somewhat similar, in *Jones & Laughlin* the Third Circuit did not need to determine whether the damage to the roof constituted physical damage or economic loss since the court's decision was based solely on the issue of whether Illinois law permitted recovery for economic loss in strict liability. *See id.* at 285.

64. 496 F. Supp. at 713.

Finding no Pennsylvania authority directly on point,[65] the district court reviewed the decisions discussing the distinction between warranty actions and strict liability actions.[66] Defining economic losses as those which result when a product fails to perform as expected, the district court predicted that the Pennsylvania courts would find strict liability in tort to be an inappropriate remedy for such losses in actions between a corporate purchaser and a manufacturer.[67] The court found this rule to hold true "regardless of the nature of the defect in the product." [68] Emphasizing the equal bargaining positions of the parties, the trial court granted summary judgment in favor of Caterpillar.[69]

The Third Circuit reversed, and in so doing it narrowed the issue upon which the decision was based. As the Third Circuit viewed the case, the question before it was whether "accidental injury to the defective product itself should be regarded as an economic loss." [70]

Recognized by the court as essential in its analysis of the issue at hand was the portion of the *Seely* [71] opinion in which Justice Traynor specifically acknowledged the availability of strict tort liability remedies to redress physical injury to a defective product itself.[72] Justice Traynor's view, now that of the Third Circuit, is in accord with Dean Prosser's distinction between the two types of injury—physical harm and economic loss. As Dean Prosser stated:

> There can be no doubt that the seller's liability for negligence covers any kind of physical harm, including not only personal injuries, but also property damage to the defective chattel itself. . . . But where there is no accident, and no physical damage, and the only loss is a pecuniary one, through loss of the value or use of the thing sold or the cost of repairing it, courts have adhered to the rule . . . that purely economic interests are not entitled to protection against mere negligence. . . .[73]

65. *See* note 63 *supra.*

66. 496 F. Supp. at 713-15.

67. *Id.* at 715.

68. *Id.*

69. *Id.* at 715-16.

70. 652 F.2d at 1167.

71. For a discussion of *Seely,* see notes 21-35 & 51 and accompanying text *supra.*

72. *See* note 51 and accompanying text *supra.*

73. W. PROSSER, *supra* note 6, at 665 (footnotes omitted).

The pronouncements of Justice Traynor,[74] the Third Circuit,[75] and Dean Prosser [76] make it clear that there must be a distinction between qualitative defects and defects which cause physical harm. This is in recognition of the fact that warranty law, which provides the purchaser only with the benefit of his bargain as redress for inferior quality, is ill-suited to provide protection for accidents or catastrophic incidents such as the destruction of Pennsylvania Glass Sand's front-end loader.

In making the distinction between economic loss and physical harm, the Third Circuit also relied heavily on the Alaska Supreme Court's decision in *Cloud v. Kit Manufacturing Co.*[77] In *Cloud,* the plaintiff's mobile home had been severely damaged as the result of the ignition of the unit's polyurethane carpet padding.[78] The Alaska court opined that public policy requires a manufacturer to bear the loss when its product proves to be dangerous or hazardous.[79] Citing *Cloud,* the Third Circuit in *Pennsylvania Glass Sand* carried this view to the conclusion that recovery in tort "should not depend on the fortuity of whether . . . a person escapes injury." [80]

The court in *Pennsylvania Glass Sand* next turned to an examination of Pennsylvania jurisprudence in order to make its "prediction" of how the Pennsylvania Supreme Court would rule on the issue presented.[81]

In *Kassab v. Central Soya,*[82] the Pennsylvania Supreme Court had noted, in dictum, the possible availability of recovery of dam-

74. *See* notes 21-35 & 51 and accompanying text *supra.*

75. *See* notes 53-72 and accompanying text *supra.*

76. *See* note 73 and accompanying text *supra.*

77. 563 P.2d 248 (Alaska 1977).

78. *Id.* at 249.

79. *Id.* at 250. The Alaska court emphasized the powerlessness of consumers to protect themselves against such accidents. *See id.*

The Alaska Supreme Court further defined the scope of its decision in *Cloud* in Northern Power & Eng'g Corp. v. Caterpillar Tractor Co., 623 P.2d 324 (Alaska 1981). In *Northern Power,* the plaintiff claimed damages in strict liability for damage to an engine caused by a failure in the machine's low oil pressure shut-down system. *Id.* at 325-27. The Alaska court stated that "when a defective product creates a situation potentially dangerous to persons or other property, and loss occurs as a result of that danger, strict liability in tort is an appropriate theory of recovery, even though the damage is confined to the product itself." *Id.* at 329 (footnote omitted).

80. 652 F.2d at 1172. *See* note 79 *supra.*

81. *See* 652 F.2d at 1173. Since the United States Supreme Court's decision in Erie R.R. v. Tompkins, 304 U.S. 64 (1938), it has been well-settled that federal courts are bound to follow state law. Moreover, when the applicable state law is unclear, federal courts are obligated to "predict" how the state courts would resolve the issue in controversy. *See* McKenna v. Ortho Pharmaceutical Corp., 622 F.2d 657, 662 (3d Cir. 1980).

82. 432 Pa. 217, 246 A.2d 848 (1968).

ages to a defective product itself in a strict liability action. The *Kassab* court stated:

> The language of the Restatement, speaking as it does of injury to either the individual or his property, appears broad enough to cover practically all of the harm that could befall one due to a defective product. Thus, for example, were one to buy a defective gas range which exploded, ruining the buyer's kitchen, injuring him, and of course necessitating a replacement of the stove itself, all of these three elements of the injury should be compensable. The last, replacing the stove, has been sometimes referred to as "economic loss," i.e., "the diminution in the value of the product because it is inferior in quality and does not work for the general purposes for which it was manufactured and sold." There would seem to be no reason for excluding this measure of damages in an action brought under the Restatement, since the defective product itself is as much "property" as any other possession of the plaintiff that is damaged as a result of the manufacturing flaw.[83]

The Third Circuit relied on this footnote in *Kassab* to predict that the Pennsylvania Supreme Court would recognize the distinction between economic loss and physical injury.[84] In so doing, the Third Circuit pointed to two Pennsylvania Superior Court decisions which permitted plaintiffs to recover for property damage to a defective product itself.[85] In *Cornell Drilling Co. v. Ford Motor Co.*,[86] a truck purchased by the plaintiff and manufactured by the defendant had caught fire several days after it was first put to use.[87] The Pennsylvania Superior Court permitted the plaintiff,

83. *Id.* at 231 n.7, 246 A.2d at 854 n.7 (citation omitted). Relying on this passage from *Kassab*, the Supreme Court of Wisconsin has determined that Pennsylvania law would permit recovery in strict liability for damage to a defective product. *See* Air Prods. & Chems., Inc. v. Fairbanks Morse, Inc., 58 Wis. 2d 193, 217-18, 206 N.W.2d 414, 426-27 (1973).

84. *See* 652 F.2d at 1173-75. *Accord* Air Prods. & Chems., Inc. v. Fairbanks Morse, Inc., 58 Wis. 2d 193, 206 N.W.2d 414 (1973). *See* note 83 and accompanying text *supra*.

85. 652 F.2d at 1173. *See* notes 86-90 and accompanying text *infra*. A handful of decisions from the federal courts have permitted recovery of damages to a defective product itself under Pennsylvania law, but without discussing the economic loss issue. *See* Keystone Aeronautics Corp. v. R.J. Enstrom Corp., 499 F.2d 146 (3d Cir. 1974); Armstrong Cork Co. v. Drott Mfg. Co., 433 F. Supp. 413 (E.D. Pa. 1977); Southwire Co. v. Beloit E. Corp., 370 F. Supp. 842 (E.D. Pa. 1974); Atlas Aluminum Corp. v. Borden Chem. Corp., 233 F. Supp. 53 (E.D. Pa. 1964).

86. 241 Pa. Super. Ct. 129, 359 A.2d 822 (1976).

87. *Id.* at 132, 359 A.2d at 823.

a corporation, to recover for the damage to the truck under section 402A.[88] Similarly, in *MacDougall v. Ford Motor Co.*,[89] the plaintiff was permitted to recover for damage to her vehicle from an accident occurring after its steering mechanism failed.[90]

The Third Circuit also examined several recent federal cases holding, under Pennsylvania law, that warranty disclaimers limiting negligence or strict liability claims must be set out with particularity.[91] In examining these recent federal cases, the court again reiterated the dichotomy between the loss of the benefit of one's bargain and the loss of a product or the use of a product by a danger which creates a serious risk of harm to persons or property.[92] The Third Circuit carefully distinguished its decision in *Posttape Associates v. Eastman Kodak Co.*,[93] wherein it had permitted a manufacturer to disclaim warranty liability for damage to a defective product itself.[94] The *Pennsylvania Glass Sand* court pointed out that although a defect in a roll of film purchased by the plaintiff in *Posttape* rendered the product useless, it did not create an unsafe or hazardous condition.[95] The plaintiff in *Posttape* was only denied the benefit of its bargain; it was not subjected to a hazardous or dangerous condition.

Following its clear delineation of the issue presented in *Pennsylvania Glass Sand*,[96] the Third Circuit predicted that the loss of the plaintiff's front-end loader and associated damages were of the kind which would clearly be recoverable in tort under Pennsylvania law:

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88. *Id.* at 141-42, 359 A.2d at 827-28. The superior court did not discuss the question of economic loss. *See* note 85 *supra.*

89. 214 Pa. Super. Ct. 384, 257 A.2d 676 (1969).

90. *Id.* at 391, 257 A.2d at 680. The court did not address the question of economic loss. *See* notes 85 & 88 and accompanying text *supra.*

91. *See* 652 F.2d 1175-76. *See, e.g.,* Posttape Assocs. v. Eastman Kodak Co., 537 F.2d 751 (3d Cir. 1976); Keystone Aeronautics Corp. v. R.J. Enstrom Corp., 499 F.2d 146 (3d Cir. 1974); Ebasco Servs., Inc. v. Pennsylvania Power & Light Co., 460 F. Supp. 163 (E.D. Pa. 1978). While these decisions are most frequently cited as authority for the proposition that a disclaimer of warranty in a contract of sale will not permit a manufacturer to escape liability under strict liability or negligence unless the disclaimer is set forth clearly and with particularity, it would appear that the most significant impact of these cases is the courts' willingness to uphold such clauses when they satisfy the standard of clarity and particularity. For a further discussion of the impact of contractual disclaimers, see notes 142-50 and accompanying text *infra.*

92. *See* 652 F.2d at 1174.

93. 537 F.2d 751 (3d Cir. 1976).

94. *Id.* at 755-57. *See* note 95 and accompanying text *infra.*

95. 652 F.2d at 1174.

96. *See* note 70 and accompanying text *supra.*

> We therefore believe that the Pennsylvania Supreme Court would draw a distinction between the type of injury to a defective product that constitutes mere economic loss, and the type of injury that amounts to the sort of physical harm traditionally compensable in tort.
>
> . . . .
>
> . . . . We predict that the state's courts would adhere to the majority view that claims for damage caused by hazardous conditions may be brought under tort law, regardless of whether the plaintiff is an ordinary consumer or a commercial consumer.[97]

Pennsylvania Glass Sand did not lose the benefit of its bargain; indeed, its front-end loader had performed without incident for nearly four years prior to the fire in question.[98] Pennsylvania Glass Sand had, however, sustained damages as a result of an accident caused by a defect in the product.[99] Therefore, recovery for damage to the defective product itself was held to be compensable in tort under strict liability.[100]

By its decision in *Pennsylvania Glass Sand,* the Third Circuit took a major step in advancing Justice Traynor's articulation in *Seely* of the parameters of recovery in strict liability.[101] Although tort and contract doctrines do indeed overlap in products liability,[102] certain instances exist in which it is important to set forth the distinction between the two concepts clearly. *Pennsylvania Glass Sand* presented the classic setting in which to articulate such a distinction. Although Pennsylvania Glass Sand's losses were clearly recoverable under the UCC, two obstacles stood in the way of such recovery. The first was the statute of limitations for UCC actions, which had expired, leaving only tort remedies to pursue.[103] The second was the limited warranty given by Caterpillar to Penn-

97. 652 F.2d at 1173-75.

98. *See id.* at 1166.

99. *See id.*

100. *See id.* at 1175-76. Since its decision was reached on an appeal from summary judgment, the Third Circuit remanded to the district court for a determination of whether the alleged defects in the front-end loader caused the damage. *Id.* at 1176.

101. For a discussion of Justice Traynor's analysis in *Seely,* see notes 21-35 & 51 and accompanying text *supra.*

102. *See* notes 1-4 and accompanying text *supra.* The Third Circuit acknowledged this overlap. *See* 652 F.2d at 1165-66.

103. *See* note 60 and accompanying text *supra.*

sylvania Glass Sand, which, as Caterpillar argued, preempted any warranty action beyond its terms.[104]

The situation presented in *Pennsylvania Glass Sand* is not an uncommon one in the products liability area, especially in cases in which corporate plaintiffs are involved. The pivotal question in such cases is, of course, whether and when a manufacturer should be allowed to escape tort liability for damage caused by a defective product. One of the major purposes of strict liability in tort has been to alleviate the harsh results which often befall the consumer seeking recompense in warranty actions.[105] The Third Circuit recognized that the distinction between recovery in tort and recovery in contract does not depend on the type of damages claimed, but rather on the nature of the defect and the manner in which the damage occurred.[106] Although damage to a defective product itself often may be redressable only in contract, the distinction does not turn on so simple a test. When a product is hazardous, as opposed to merely unsuitable, tort law will impose liability on the manufacturer if the ultimate impact of the hazard is on people, property, or the product itself.

By focusing on the nature of the defect, the type of risk, and the manner in which the injury arose, the Third Circuit set forth a test by which future cases can be analyzed.[107] While it is now clear under Pennsylvania law that a hazardous defect in a product which causes physical property damage, even to the product itself, is firmly within the ambit of tort principles,[108] the *Pennsylvania Glass Sand* test is not absolute. Its vagueness is attributable to the difficult task that the Third Circuit sought to accomplish, that is, to articulate the fine line of distinction between contract and tort. Indeed, although *Pennsylvania Glass Sand* resolved a very important question, the decision leaves unresolved a substantial grey area encompassing the numerous factual settings which did not exist in *Pennsylvania Glass Sand* and which will have to be addressed by other Pennsylvania state and federal courts in the future.

The questions left unresolved by *Pennsylvania Glass Sand* are numerous, and each will require resolution by an appellate court before the fine line of distinction between tort law and contract

104. *See* 652 F.2d at 1175. The court left open the question of whether Caterpillar's limited warranty precluded recovery in negligence or strict liability. *See id.* at 1176.

105. *See* W. PROSSER, *supra* note 6, at 494-96.

106. *See* 652 F.2d at 1174-75.

107. *See id.* at 1174.

108. *See* notes 82-90 & 97-101 and accompanying text *supra*.

law in commercial product liability controversies is ultimately established. The first and most obvious was recognized by the Third Circuit itself when it noted: "With some products, an 'accident' may not be clearly distinguishable from internal deterioration." [109] Within months of the Third Circuit's decision, a state trial court in Pennsylvania was called upon to resolve this very issue.

In *Industrial Uniform Rental Co. v. International Harvester Co.*,[110] the court was called upon to determine whether the purchaser of nineteen trucks, the majority of which developed cracks and failures in their frames, could recover in tort from the manufacturer for the expense of making repairs and replacements.[111] Confronted with the question of whether the damage to the trucks constituted compensable "physical harm," the court, citing *Pennsylvania Glass Sand,* declared: "A 402A claim for physical harm is maintainable where the plaintiff suffers 'losses stemming from defects that cause accidents of violence or collision with external objects.' " [112] The court, however, characterized the cracked frames as "defects of quality, evidenced by internal deterioration or breakdown" which constitute economic loss, and thus held that the plaintiff's damages were not recoverable under strict liability principles.[113]

Where, then, should the line be drawn? Should recovery depend on the nature of the physical damage sustained? Should it depend on whether an accident has actually occurred, whether the accident is large or small, or whether there has been a series of small accidents? Or should it depend on whether the safety hazard created by a defective product is substantial or minimal?

While it is clear that damages sustained as a result of a defect that does not render a product dangerous, such as the allegedly defective carpeting involved in *Santor,*[114] the allegedly defective film involved in *Posttape,*[115] or the allegedly defective electrobase

109. 652 F.2d at 1171 n.19 (citations omitted).

110. 61 Phila. 141 (C.P. Phila. 1981).

111. *See id.* at 144-45.

112. *Id.* at 149 (citation omitted).

113. *Id.*

114. For a discussion of *Santor,* see notes 36-44 and accompanying text *supra.*

115. For a discussion of *Posttape,* see notes 93-95 and accompanying text *supra.*

stock paper involved in *Plainville Paper Co., Inc. v. Pram, Inc.*,[116] constitute "economic losses" which the Third Circuit has held are not compensable in tort under Pennsylvania law, does a cracked frame, a key structural element of a motor vehicle which could obviously cause further damage to the vehicle itself as well as to persons or property, constitute physical damage for which the tort remedy should lie? Is the cracking of the frame of a truck properly classified as "deterioration" or is it an accident, albeit a small one, in which physical damage is sustained? Was it necessary that one of the Industrial Uniform trucks first be involved in a collision as a result of a cracked frame before the tort remedy would be available, or is it enough that a crack in a truck frame creates a safety hazard? While *Pennsylvania Glass Sand* does not specifically answer these questions, its reliance on Justice Traynor's analysis in *Seely,* of the types of risks which are to be protected by contract law as well as the policy questions to be addressed in determining who should bear the risk of loss, warrants repetition and may indeed be instructive to courts called upon in the future to resolve these issues: "The distinction that the law has drawn between tort recovery and warranty recovery for economic loss is not arbitrary and does not rest on the 'luck' of one plaintiff in having an accident causing physical injury." [117]

Other questions left unresolved in *Pennsylvania Glass Sand* are whether there must actually be a sudden and calamitous injury before one can recover in tort, and what will be deemed to constitute physical harm.

As noted above, the Alaska Supreme Court in *Cloud* permitted the owner of a mobile home that was badly damaged by the ignition of highly flammable polyurethane foam rug padding to maintain a strict liability action against the manufacturer of the mobile home on the grounds that the extremely inflammable nature of the carpet padding constituted a defect.[118] Having upheld a determination that a consumer whose house trailer is destroyed by its defective carpet padding may sue the manufacturer in tort, will a court, following the approach of *Seely* and *Pennsylvania Glass Sand,* permit a manufacturer to sue the supplier of the defec-

116. 430 F. Supp. 1386 (W.D. Pa. 1977). The product involved in *Plainville Paper,* photocopying paper, was rendered unusable by a high penetration of solvents which exceeded the parties' contract specifications. *Id.* at 1387.

117. 63 Cal. 2d at 18, 403 P.2d at 151, 45 Cal. Rptr. at 23. For a discussion of *Seely,* see notes 21-35 & 51 and accompanying text *supra.*

118. For a discussion of *Cloud,* see notes 77-80 and accompanying text *supra. See also* note 79 *supra.*

tive padding, in tort, for the cost of replacing the padding in its unsold trailers before they were involved in fires or before other property damage or serious personal injuries or deaths were sustained?

This issue was addressed by Judge Weiner of the Eastern District of Pennsylvania in his unpublished opinion in the *Celotex Corp. "Technifoam" Products Liability Litigation* [119] involving the product "Technifoam." [120] Some of the plaintiffs in the litigation sought damages for the costs which would be incurred in replacing Technifoam insulation installed in their buildings.[121] They alleged in their complaints that the buildings in which Technifoam had been installed had been rendered hazardous, unsuitable for their intended use, dangerous in use and habitation, and that as a result thereof they had suffered serious depreciation in the value of their buildings.[122] The defendant filed a motion for summary judgment on the grounds that the installation of Technifoam, although admittedly inflammable, constituted mere economic loss without causing any compensable physical harm to the plaintiffs' property.[123]

Rejecting the defendant's arguments, Judge Weiner declared:

> Here it cannot be gainsaid that the installation and integration of highly flammable insulating material into farm buildings does not cause a reduction in their market value and pose substantial, unanticipated risks. *The fact of property damage here is clear.* We cannot agree with defendant that plaintiffs' claims under strict liability and negligence are judicially cognizable only when a fire occurs.[124]

While Judge Weiner's decision was based on the law of Minnesota and of Wisconsin,[125] it is noteworthy that he too predicated his decision in large part on Justice Traynor's approach in *Seely*.[126]

119. No. 76-210 (E.D. Pa. Apr. 14, 1976).

120. *Id.*, slip op. at 3. "Technifoam" was described by Judge Weiner as a highly inflammable cellular plastic polyurethane board product used as interior insulation. *Id.*, slip op. at 2-3.

121. *Id.*, slip. op. at 4.

122. *Id.*

123. *Id.*, slip op. at 3.

124. *Id.*, slip op. at 7 (emphasis added).

125. *See id.*, slip op. at 1.

126. *See id.*, slip op. at 4-7. For a discussion of *Seely*, see notes 21-35 & 51 and accompanying text *supra*.

If Judge Weiner's conclusion that property damage is sustained by virtue of the sale of a defective product which poses a substantial risk of danger is correct,[127] then it would appear that, regardless of whether there is sudden and calamitous damage, one who must repair or replace defective products which are dangerous or potentially dangerous to users may secure recompense in tort. Such a result would appear to have the strong support of the Third Circuit which, in *Pennsylvania Glass Sand,* declared:

> When the defect is of a type that creates a safety hazard . . . "physical injury is so akin to personal injury that there is no reason for distinguishing them."
>
> . . . .
>
> . . . [T]ort law imposes a duty on manufacturers to produce safe items, regardless of whether the ultimate impact of the hazard is on people, other property, or the product itself.[128]

Although an analysis of *Pennsylvania Glass Sand* demonstrates that the decision leaves a number of questions unresolved, it is clear that, under Pennsylvania law, purchasers of defective products which are dangerous and cause physical harm will be accorded redress in tort for the injuries that they sustain.[129] Whether the Pennsylvania Supreme Court will expand the presently uncharted boundaries of tort law to the extent accomplished by the New Jersey Supreme Court in *Santor* [130] or whether it will choose to embrace the *Seely* distinction [131] remains to be seen.

In November 1981, the Pennsylvania Superior Court handed down its decision in *Lobianco v. Property Protection, Inc.,*[132] a case in which the parameters of what actually constitutes physical harm were discussed in detail by a sharply divided court.

In *Lobianco,* the plaintiff, who had purchased a burglar alarm system from the defendant, sought to recover under principles of strict liability when the system failed to work and the plaintiff suffered a loss of jewelry by theft.[133] The trial court had held that

127. *See* note 124 and accompanying text *supra.*

128. 652 F.2d at 1170-73.

129. *See* notes 82-90 & 97-101 and accompanying text *supra.*

130. For a discussion of *Santor,* see notes 36-44 and accompanying text *supra.*

131. For a discussion of *Seely,* see notes 21-35 & 51 and accompanying text *supra.*

132. _ Pa. Super. Ct. _, 437 A.2d 417 (1981).

133. *Id.* at _, 437 A.2d at 418.

the only products which fall under strict liability are those which are dangerous and actually cause physical harm.[134] However, Judge Spaeth, announcing the decision of the superior court, declared:

> [T]he expression "physical harm" as used in Section 402A should not be construed as requiring that the plaintiff —"the user or consumer"—prove damage to the property.
>
> . . . .
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> . . . The reason Section 402A was adopted was not to protect property from damage but to protect the user or consumer of the property from the loss. Whether the loss is caused by damage to the property or by its disappearance is immaterial.
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> . . . .
>
> A product may by itself be entirely innocuous—harmless—and yet, because in conjunction with some other thing or event it caused physical harm, strict liability may be imposed.
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> . . . .
>
> . . . The intended use and purpose of a burglar alarm system is to sound an alarm if a burglar enters the house. If because of defective batteries, the system does not sound an alarm, with the result that a burglar is able to enter the house undetected and do physical harm to jewelry inside, the issue of the manufacturer's strict liability may not be resolved by saying, as did the lower court, that although defective, the system was not "dangerous" to the jewelry it was supposed to protect.[135]

While it is clear that Judge Spaeth's opinion in *Lobianco* broadly defined the parameters of what constitutes physical harm, the *Lobianco* court held that the plaintiff could not prevail in her action against the supplier of her security system under strict liability principles.[136] In reaching its decision, the court's rationale

134. *See id.* at _, 437 A.2d at 418-19.

135. *Id.* at _, 437 A.2d at 422-24.

136. *Id.* at _, 437 A.2d at 425. The difficulty in evaluating the impact of the *Lobianco* decision is the split among the judges of the superior court. Judge Spaeth announced the decision of the court. *See id.* at _, 437 A.2d at 418-26. President Judge Cercone wrote a concurring statement. *See id.* at _, 437 A.2d at 426 (Cercone, P.J., concurring). Judge Brosky filed a concurrence, in which Judge Cavanaugh joined. *See id.* at _, 437 A.2d at 426-27 (Brosky, J., concurring). Judge Montgomery, joined by Judge Hester, dissented. *See id.* at _, 437 A.2d at 427-31 (Montgomery, J., dissenting). Finally, the reported decision does not indicate that Judge Price, the seventh judge on the *Lobianco* court, joined in any of the five opinions.

was not that there was no physical harm or property damage, but rather that "as between the homeowner and the manufacturer, the manufacturer is more 'defenseless' than the homeowner" since the consumer can secure homeowner's insurance.[137] While it is unclear whether the plaintiff in *Lobianco* was indeed insured or whether the action in question was a subrogation action, it is crystal clear that some members of the superior court believed that the plaintiff was insured, and that she was thus in a better position to bear the risk of loss than was the manufacturer.[138]

In a concurring opinion, Judge Brosky, joined by Judge Cavanaugh, declared: "I do not believe that the insurability of appellants' loss provides a basis for the denial of strict liability recovery. Rather I would find that the injury suffered by appellant is not of the type for which strict liability ought to be imposed." [139] Judge Brosky opined that the relief sought by the plaintiff was compensation for the loss of her bargain rather than her property loss.[140] As Judge Brosky stated, while "the appellant's economic situation is worsened . . . there is no evidence that the property was harmed. . . . [A]ny 'harm' to the property was not the result of an unsafe condition of the alarm, but, rather, . . . its malfunctioning." [141]

Although it is clear that sellers of defective products will be held liable after *Pennsylvania Glass Sand* for physical damage caused to dangerously defective products, sellers of products in a commercial setting are not without the opportunity to insulate themselves contractually from liability for damages from pure economic loss or other types of physical property damage. In *Neville Chemical Co. v. Union Carbide Corp.*,[142] the Third Circuit, reviewing Pennsylvania law, held that a seller may limit its exposure to liability if "the provisions and terms of the contract clearly and unequivocally spell out the intent to grant such immunity and relief from liability." [143] Subsequently, in *Keystone Aeronautics Corp. v. R. J.*

Since Judge Brosky's concurring opinion withheld his support from Judge Spaeth's § 402A analysis, it therefore appears that Judge Spaeth's view represents the consensus of at most three members of the *Lobianco* court. *See id.* at _, 437 A.2d at 426 (Brosky, J., concurring). As such, Judge Spaeth's opinion is not binding as precedent. *See* Beron v. Kramer-Trenton Co., 402 F. Supp. 1268, 1276-77 (E.D. Pa. 1975), *aff'd without opinion*, 538 F.2d 318 (3d Cir. 1976), *citing* Commonwealth v. Silverman, 422 Pa. 211, 275 A.2d 308 (1971).

137. _ Pa. Super. Ct. at _, 437 A.2d at 425.

138. *See id.* at _, 437 A.2d at 426 (Brosky, J., concurring).

139. *Id.* at _, 437 A.2d at 426 (Brosky, J., concurring).

140. *See id.* at _, 437 A.2d at 427 (Brosky, J., concurring).

141. *Id.* at _, 437 A.2d at 427 (Brosky, J., concurring).

142. 422 F.2d 1205 (3d Cir.) *cert. denied*, 400 U.S. 826 (1970).

143. *Id.* at 1217.

Enstrom Corp.,[144] the Third Circuit concluded that Pennsylvania law would recognize a freely negotiated and clearly expressed waiver of liability between business entities of relatively equal bargaining strength.[145] Thereafter, in *Posttape*, the Third Circuit indicated that an agreement which restricts the types of damages which may be recovered as a result of the sale of a defective product will be enforced if such an intention of the parties is articulated with particularity.[146]

Keystone and *Posttape* were both cited with approval by the Third Circuit in *Pennsylvania Glass Sand*, and the Pennsylvania Supreme Court has not held to the contrary. Thus, while it is clear that manufacturers of defective products face liability for physical damage to a defective product itself, it is equally clear that commercial entities of relatively equal bargaining strength may limit their exposure in contract or tort by utilizing properly drafted contractual limitations of liability.[147] To be effective, however, these limitations must be drawn to reflect the intent or understanding of the parties and must specifically address the type of remedy and form of redress which they seek to limit or indeed eliminate.[148] Although *Pennsylvania Glass Sand* may be the subject of more unfavorable comment in the offices of some corporate risk managers than *Lobianco*,[149] if carefully drafted limitations of liability are incorporated within the sales documents, exposure for physical property damage including damage to a defective product itself in a commercial setting may be sharply reduced or eliminated.[150]

It can therefore be safely concluded that, unless manufacturers of defective products sold to corporate customers of relatively equal bargaining strength properly limit their liability in their sales contracts, they face exposure in tort for physical damage caused by the sale of a defective product even if the damage to the product itself is substantial. At the present time, however, under Pennsylvania

144. 499 F.2d 146 (3d Cir. 1974).

145. *Id.* at 149. *See generally*, Donnelly, *After the Fall of the Citadel: Exploitation of the Victory or Consideration of All Interests?*, 19 SYRACUSE L. REV. 1 (1967); Prosser, *The Fall of the Citadel*, 50 MINN. L. REV. 791 (1966); Speidel, *Products Liability, Economic Loss, and the UCC*, 40 TENN. L. REV. 309 (1973).

146. For a discussion of *Posttape*, see notes 93-95 and accompanying text *supra*.

147. *See* note 91 *supra*.

148. *Id.*

149. For a discussion of *Lobianco*, see notes 132-41 and accompanying text *supra*.

150. *See* note 91 *supra*.

law, manufacturers will not be held liable in strict liability for a buyer's loss of his bargain from the product's failure to meet his expectations. Although this line of distinction is still not crystal clear, it has indeed been more sharply defined by the Third Circuit in *Pennsylvania Glass Sand.*