EXCLUSIONS FROM COVERAGE FOR WEAR AND TEAR, DETERIORATION, INHERENT VICE, LATENT DEFECT, AND MECHANICAL BREAKDOWN

Amber S. Finch and C. Dennis Hughes

I.	Introduction	50
II.	Typical Policy Language	50
III.	Fortuitous, Direct, and Externally Caused Losses versus	
	Non-Fortuitous, Gradual, and Internally Caused Losses	53
IV.	Illustrative Decisions	55
	A. Wear and Tear	55
	1. Cases Defining and Rejecting Wear and Tear Exclusion	55
	2. Cases Enforcing Wear and Tear Exclusion	57
	3. Ensuing Loss Exception to Wear and Tear Exclusion	
	and Notable Cases	59
	B. Deterioration and Corrosion	61
	1. Deterioration	61
	a. Cases Enforcing the Deterioration Exclusion	62
	b. Cases Declining to Enforce the Deterioration	
	Exclusion	64
	2. Corrosion	66
	a. Cases Enforcing the Corrosion Exclusion	67
	b. Cases Declining to Enforce the Corrosion	
	Exclusion	69
	C. Inherent Vice	72

Amber S. Finch (afinch@reedsmith.com) is a partner in the Los Angeles office of Reed-Smith LLP, where she focuses on insurance recovery advice and litigation, environmental compliance and litigation, and complex commercial litigation. C. Dennis Hughes (cdhughes @handarendall.com) is a member in the Birmingham, Alabama, office of Hand Arendall LLC, where he concentrates on the defense of bad faith, fraud, and punitive damage and class actions as well as complex litigation.

D. Latent Defect	76
E. Mechanical Breakdown	77
1. Mechanical versus Non-Mechanical	78
2. External versus Internal	78
3. Cause or Effect Cases	79
4. Ensuing Loss Exception	81
. Conclusion	82

I. INTRODUCTION

Nothing lasts forever, and all good things must come to an end. Considering that most property insurance policies are designed to indemnify the insured only for the sudden and accidental lost or damage of insured property, it would seem that the exclusion of wear and tear, deterioration, inherent vice, latent defect, and mechanical breakdown from coverage under a first-party property insurance policy could fairly be assumed. Indeed, these excluded causes typically occur over the course of time as a result of the expected use and exposure of property. Yet most property insurance policies are designed to indemnify the insured for the sudden and accidental loss of or damage to insured property. However, under an all-risk property insurance policy, there is a presumption of coverage unless the cause of loss is specifically excluded. Thus, insurers usually incorporate an express exclusion of these wear and tear causes into their all-risk policy forms, which based upon the particular facts of a given loss and the specific policy language at issue, are generally enforced as written. Although the conceptual basis for the wear and tear group of exclusions appears to be abundantly clear, a considerable body of case law has developed around this subject, providing useful insight into the application of these exclusionary terms.

This article explores the subject of the wear and tear group of exclusions from coverage under the all-risk policy, both conceptually and as specifically applied in significant cases from a variety of jurisdictions.

II. TYPICAL POLICY LANGUAGE

In some forms of policies, the wear and tear group of exclusions appears as an exception from the general grant of coverage; in others, the wear and tear group of exclusions appears among the General Exclusions from coverage. For example, the wear and tear group of exclusions appears as an exception from coverage in a commonly used Dwelling Property policy form:

50

V

PERILS INSURED AGAINST

A. Coverage A-Dwelling and Coverage B-Other Structures

- 1. We insure against the risk of direct physical loss to property described in Coverages A and B.
- 2. We do not insure, however, for loss:

. . . .

c. Caused by:

. . . .

- (8) Any of the following:
 - (a) Wear and tear, marring, deterioration;
 - (b) Mechanical breakdown, latent defect, inherent vice, or any quality in property that causes it to damage or destroy itself;
 - (c) Smog, rust or other corrosion, mold, wet or dry rot;
 - (d) Smoke from agricultural smudging or industrial operations;
 - (e) Discharge, dispersal, seepage, migration, release or escape of pollutants unless the discharge, dispersal, seepage, migration, release or escape is itself caused by a Peril Insured Against named under Coverage C. Pollutants means any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed;
 - (f) Settling, shrinking, bulging or expansion, including resultant cracking, of bulkheads, pavements, patios, footings, foundations, walls, floors, roofs or ceilings; or
 - (g) Birds, vermin, rodents, insects or domestic animals.¹

A commonly used Businessowners Coverage Form includes the wear and tear exclusion among the General Exclusions from coverage:

SECTION I-PROPERTY

A. Coverage

We will pay for direct physical loss of or damage to Covered Property at the premises described in the declarations caused by or resulting from any Covered Cause of Loss.

. . . .

^{1.} Insurance Services Office, Inc. (ISO), Dwelling Property (DP) Form No. 00 03 12 02 (2003). Other common Personal Lines policy forms in which the wear and tear group of exclusions appear as an exception from the grant of coverage are the Homeowners 3—Special Form (ISO Form No. HO 00 03 10 00) and the Homeowners 5—Comprehensive Form (ISO Form No. HO 00 05 10 00).

3. Covered Cause of Loss

Direct physical loss unless the loss is excluded or limited under Section I—Property.

. . . .

B. Exclusions

. . . .

2. We will not pay for loss or damage caused by or resulting from any of the following:

. . . .

- 1. Other Types of Loss
 - (1) Wear and tear;
 - Rust or other corrosion, decay, deterioration, hidden or latent defect of any quality in property that causes it to damage or destroy itself;
 - (3) Smog;
 - (4) Settling, cracking, shrinking or expansion;
 - (5) Nesting or infestation, or discharge or release of waste products or secretions, by insects, birds, rodents or other animals;
 - (6) Mechanical breakdown, including rupture or bursting caused by centrifugal force. This exclusion does not apply with respect to the breakdown of "computer(s);"
 - (7) The following causes of loss to personal property:
 - (a) Dampness or dryness of atmosphere;
 - (b) Changes in or extremes of temperature; or
 - (c) Marring or scratching.

But if an excluded cause of loss that is listed in Paragraphs (1) through (7) above results in a "specified cause of loss" or building glass breakage, we will pay for the loss or damage caused by the "specified cause of loss" or business glass breakage.²

Whether the exclusionary language appears as an exception from the grant of coverage or as part of the general exclusions does not affect the applicable presumptions and burden of proof.³ If the terms of an insurance contract are "unambiguous, clear, and capable of only one reasonable construction, they must be taken in their plain, ordinary and popular

^{2.} ISO Form No. BP 00 03 07 13 (2012). Other common commercial lines policy forms including the wear and tear group of exclusions among the general exclusions are the Builders Risk Coverage Form (ISO Form No. IH 00 70 04 11), Commercial Property Causes of Loss Special Form (ISO Form No. CP 10 30 06 07), and the Watercraft Policy (ISO Form No. WT 00 01 01 10).

^{3.} See York Ins. Co. v. Williams Seafood of Albany, Inc., 223 F.3d 1253 (11th Cir. 2000); 10A STEVEN PLITT ET AL., COUCH ON INSURANCE § 148:68 (3d ed. 2012).

sense as may be supplied by common dictionaries."⁴ While it is the burden of the insured to demonstrate the existence of a loss under an "allrisk" policy, it is the burden of the insurer to establish the applicability of any exclusions from coverage.⁵

III. FORTUITOUS, DIRECT, AND EXTERNALLY CAUSED LOSSES VERSUS NON-FORTUITOUS, GRADUAL, AND INTERNALLY CAUSED LOSSES

Because of the nature of the loss often associated with the wear and tear group of exclusions, coverage analysis must begin with fortuity. Although not among the exclusions in modern all-risk policies, the fortuity requirement acts as a threshold bar to recovery for certain inevitable risks.⁶ The requirement flows from a basic insurance concept: coverage protects against risks, not inevitabilities.⁷

As originally understood, the requirement precluded recovery for losses flowing from covered property's inherent vices, wear and tear, and natural deterioration, i.e., losses certain to occur over time.⁸ This was true regardless of whether the insured knew of the injury-causing defects or vices because "fortuity" was originally measured objectively.⁹

Intervening decisions have changed the meaning of "fortuity" and the resulting coverage analysis. Although commentators express doubt that "a single, simple definition is possible,"¹⁰ as currently interpreted, a fortuitous loss generally includes one that, as far as the contracting parties are concerned, depends on chance.¹¹ Under this subjective test, a loss is

^{4.} See York Ins. Co., 223 F.3d at 1254 (quoting Lemieux v. Blue Cross & Blue Shield of Ga., Inc., 453 S.E.2d 749, 751 (Ga. Ct. App. 1994)).

^{5.} See Int'l Multifoods Corp. v. Commercial Union Ins. Co., 309 F.3d 76 (2d Cir. 2002); In re Balfour MacLaine Int'l Ltd., 85 F.3d 68 (2d Cir. 1996); Morrison Grain Co. v. Utica Mut. Ins. Co., 632 F.2d 424 (5th Cir. 1980); Hudson v. Prudential Prop. & Cas. Ins. Co., 450 So. 2d 565 (Fla. Dist. Ct. App. 1984); Shalimar Contractors, Inc. v. Am. States Ins. Co., 975 F. Supp. 1450 (M.D. Ala. 1997), aff'd without opinion, 158 F.3d 588 (11th Cir. 1998); 10A COUCH ON INSURANCE, supra note 3, § 148:52.

^{6.} See Andrew C. Hecker, Jr. & M. Jane Goode, *Wear and Tear*, *Inberent Vice*, *Deterioration, Etc.: The Multi-Faceted All-Risk Exclusions*, 21 TORT & INS. L.J. 634, 634–35 (1986); 4 JEFFREY E. THOMAS & AVIVA ABRAMOVSKY, NEW APPLEMAN ON INSURANCE LAW LIBRARY EDI-TION § 42.02 (2012); 10A COUCH ON INSURANCE, *supra* note 3, § 148:58.

^{7.} See Hecker & Goode, supra note 6, at 634-35.

^{8.} See id. at 634-36.

^{9.} See id.

^{10. 10}A COUCH ON INSURANCE, supra note 3, § 148:58.

^{11.} See Compagnie des Bauxites de Guinee v. Ins. Co. of N. Am., 724 F.2d 369, 372 (3d Cir. 1983) ("A fortuitous event . . . is an event which so far as the parties to the contract are aware, is dependent on chance. It may be beyond the power of any human being to bring the event to pass; it may be within the control of third persons; it may even be a past event, such as the loss of a vessel, provided that the fact is unknown to the parties." (quoting RESTATE-MENT (FIRST) OF CONTRACTS § 291 cmt. a (1932)); see also Univ. of Cincinnati v. Arkwright

generally non-fortuitous only if the insured knew of the defect or vice inherent to the insured property when it obtained insurance, took some discretionary loss-causing act, or engaged in fraud or misconduct.¹² Thus,

As the Second Circuit explained in City of Burlington v. Indemnity Insurance Co. of North America:

Various explanations can be given for this changed view of fortuity. One is that courts incorrectly applied the Restatement of Contract's subjective definition of "fortuity" to insurance law, where the term had a previously fixed objective meaning. Another is that courts increasingly came to adopt interpretations of insurance policies that were friendly to the insured, *i.e.*, interpretations that broadened the scope of coverage." Finally, the expansive reading of "fortuitous" in all-risk policies could be viewed as a "penalty default." *See* Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 Yale L.J. 87 (1989). On this account, expanded coverage to the detriment of insurers in all-risk policies is justified since such expansions give insurers, who presumably have better knowledge of insurance laws than do insureds, a powerful incentive to insert explicit language into policies, thereby informing the insureds as to the precise scope of coverage.

City of Burlington, 332 F.3d at 49.

Courts have construed "accidental" requirements similarly. See, e.g., Nat'l Sec. Ins. Co. v. Ingalls, 323 So. 2d 384, 386 (Ala. Civ. App. 1975) (explaining that the term "accidental" means "that which is unexpected and unintended, happening by chance"); Preis v. Lexington Ins. Co., 508 F. Supp. 2d 1061, 1071 (S.D. Ala. 2007) ("[a]n 'all risk' policy creates coverage of a type not ordinarily present under other types of insurance, and recovery is allowed for fortuitous losses unless the loss is excluded by a specific policy provision." (quoting 10A COUCH ON INSURANCE, supra note 3, § 148:50)); Aetna Ins. Co. v. Webb, 251 So. 2d 321, 322 (Fla. Dist. Ct. App. 1971) (defining "accidental" as "that which happens by chance or fortuitously, without intention or design, and which is unexpected, unusual, and unforeseen"); Britt v. All Am. Assurance Co. of La., 333 So. 2d 629, 632 (Miss. 1976) (same); Lamar Homes, Inc. v. Mid-Continent Cas. Co., 242 S.W.3d 1, 8 (Tex. 2007) (defining "[a]n accident [as] a fortuitous, unexpected, and unintended event . . . which occurs not as the result of natural routine, but as the culmination of forces working without design, coordination, or plan" and explaining that "a deliberate act, performed negligently, is an accident if the effect is not the intended or expected result; that is, the result would have been different had the deliberate act been performed correctly") (quoting 2 ALAN D. WINDT, INSURANCE CLAIMS & DISPUTES § 11.3 at 296 (4th ed. 2001)).

12. See 10A COUCH ON INSURANCE, *supra* note 3, § 148:58 ("[u]nder all-risk policies, major causes of non-fortuitous losses are fraud or misconduct on the part of the insured"); THO-MAS & ABRAMOVSKY, *supra* note 6, § 42.02 (describing fortuity's subjective construction and explaining that "where an insured makes a deliberate decision to take an action that produces

54

Mut. Ins. Co., 51 F.3d 1277, 1281 (6th Cir. 1995); Ins. Co. of N. Am., Inc. v. U.S. Gypsum Co., 870 F.2d 148, 151 (4th Cir. 1989); Adams–Arapahoe Joint Sch. Dist. No. 28-J v. Cont'l Ins. Co., 891 F.2d 772, 775 (10th Cir. 1989; Morrison Grain Co. v. Utica Mut. Ins. Co., 632 F.2d 424, 430–31 (5th Cir. 1980); Icarom, PLC v. Howard County, Maryland, 981 F. Supp. 379, 390 (D. Md. 1997), *aff'd*, 178 F.3d 1284 (4th Cir. 1999); Underwriters Subscribing to Lloyd's Ins. Cert. No. 80520 v. Magi, Inc., 790 F. Supp. 1043, 1048 (E.D. Wash. 1991); Kilroy Indus. v. United Pac. Ins. Co., 608 F. Supp. 847, 858 (C.D. Cal. 1985); Standard Structural Steel Co. v. Bethlehem Steel Corp., 597 F. Supp. 164, 193 (D. Conn. 1984); Fid. & Guar. Ins. Underwriters, Inc. v. Allied Realty Co., 384 S.E.2d 613, 615 (Va. 1989); Sentinel Mgmt. Co. v. N.H. Ins. Co., 453 N.W.2d 296, 300 (Minn. Ct. App. 1997); Mattis v. State Farm Fire & Cas. Co., 454 N.E.2d 1156, 1164 (III. App. Ct. 1983); Millers Mut. Fire Ins. Co. v. Murrell, 362 S.W.2d 868 (Tex. Civ. App. 1962), *writ denied*, 367 S.W.2d 667 (Tex. 1963) (per curiam). See generally 10A COUCH ON INSURANCE, supra note 3, § 148:58; THOMAS & ABRAMOVSKY, supra note 6, § 42.02.

while fortuity's original function overlapped many of the modern all-risk exclusions discussed below, those exclusions today are the only barrier to recovery for certain and inevitable losses about which the insured was reasonably unaware.¹³

IV. ILLUSTRATIVE DECISIONS

A. Wear and Tear

As explained in *Cyclops Corp. v. Home Insurance Co.*,¹⁴ the authoritative wear and tear case, unless otherwise defined in the policy, the phrase wear and tear only precludes coverage for "ordinary" or "natural" deterioration arising from the insured property's expected uses.¹⁵

1. Cases Defining and Rejecting Wear and Tear Exclusion

In *Cyclops*, an insured sought coverage under an all-risk boiler and machinery policy after one of its electric motors suffered damage.¹⁶ For a year after installation, the motor, which had an expected twenty-year operating life, worked with no problems.¹⁷ On start-up one day in the second year, however, the motor generated "severe vibrations, which necessitated shutdown and repair."¹⁸ The machine's maintenance company concluded that the problem resulted from an improperly installed part.¹⁹ The insurer claimed that the loss fell within the policy's wear and tear exclusion. In

13. As noted by two commentators:

Hecker & Goode, supra note 6, at 635-36 (footnotes omitted).

14. 352 F. Supp. 931, 936 (W.D. Pa. 1973).

19. See id. at 933.

known consequences and causes predictable damage to the insured's property, those damages are not [fortuitous]").

At first blush, it appears that the fortuity requirement, as a necessary element of the concept of risk, would render many of the exclusions a redundant and unnecessary addition to the all-risk policy. Common experience teaches that it is inevitable that objects deteriorate over time and wear out. However, interpretation of the fortuity requirement in recent years has undergone such dramatic changes that even inherent vice of the insured property—a condition certain to result in loss—rarely falls within the parameters of a nonfortuitous loss. This remarkable state of affairs has been brought about by the enunciation and apparent acceptance of a subjective test of fortunity.

^{15.} See id. at 936; Meridian Leasing, Inc. v. Associated Aviation Underwriters, Inc., 409 F.3d 342, 350 (6th Cir. 2005) ("Courts frequently interpret wear and tear exclusions to connote the popular meaning of the expression, and may imply adjectives such as 'ordinary' and 'natural' to limit the breadth of exclusions"). From the insurer's perspective, the wear and tear exclusion ensures that it will only be responsible for unexpected losses, not the inevitable losses occurring from the property's normal use. Before "fortuity" took on its current subjective construction, courts previously rejected coverage for wear and tear losses as non-fortuitous. *City of Burlington*, 332 F.3d at 47–48.

^{16.} See Cyclops Corp., 352 F. Supp. at 932.

^{17.} See id. at 933.

^{18.} Id. at 931.

arguing for the exclusion, the insurer maintained that policies that specifically exclude "ordinary" or "natural" wear and tear were limited by those qualifiers, but that exclusions for wear and tear without any qualifiers, such the one in Cyclops, were broader and thus had no limitations on the type of wear and tear excluded.²⁰ The insurer further argued that unqualified wear and tear clauses applied to any wear and tear, whether natural, ordinary, or otherwise.²¹ The Cyclops court rejected the insurer's theory, holding instead that "the words 'wear and tear' mean simply and solely that ordinary and natural deterioration or abrasion which an object experiences by its expected contacts between its component parts and outside objects during the period of its natural life expectancy."22 The court "d[id] not find that the modifiers 'ordinary' or 'natural' add anything to the commonly understood meaning of 'wear and tear.'"23 Because "the 'cause' of the damage [wa]s alleged to be an improper initial fit of wheel and axle, which produced gradual weakening and loosening of the fit," and not the deterioration expected from the machine's normal operation, "the essential elements of coverage [were] established and none of the exclusions [applied]."24

More recent wear and tear cases also demonstrate the scope of the exclusion's applicability. In *Meridian Leasing, Inc. v. Associated Aviation Underwriters, Inc.*,²⁵ the Sixth Circuit held that damage to the insured's airplane engine was not excluded as wear and tear after construing two interrelated provisions in the parties' all-risk policy.²⁶ There, the insured purchased an all-risk policy for coverage on a new plane.²⁷ Five months later, the plane's exhaust stacks began shooting flames as a pilot attempted to start the engine.²⁸ Although the pilot initially attempted to kill the engine, at the mechanic's instruction, he restarted the engine and thereby extinguished the flames.²⁹ For several seconds while the fire burned, however, the engine operated at a temperature beyond the range in which it was designed to operate safely, causing extensive damage.³⁰ During litigation, the insurer maintained that two wear and tear provisions excluded the engine damage: (1) "[t]his policy does not apply to . . . wear and tear";³¹ and (2) "damage caused by heat which

20. See id. at 936.

- 21. Id.
- 22. Id.
- 23. Id.
- 24. Id. at 937.
- 25. 409 F.3d 342 (6th Cir. 2005).
- 26. See id. at 344.
- 27. See id. 28. See id.
- 29. See id. 29. See id.
- 30. See id. at 344-45.
- 31. Id. at 348.

56

results from the operation, attempted operation or shutdown of the engine shall be considered to be 'wear and tear.'³² The insurer argued that the combined provisions together excluded all heat-related engine damage.³³

On appeal, the Sixth Circuit disagreed, affirming the district court's earlier decision that the wear and tear exclusion did not apply.³⁴ Construing the provisions, the court explained that the policy cast "the heat limitation as a subset of 'wear and tear.'"³⁵ The court further opined that because the parties intended wear and tear to retain its ordinary meaning, the combined provisions only precluded damage caused by "heat [or other perils] generated through the engine's normal operation" and, because the fire resulted from an engine defect rather than the engine's normal operation, the wear and tear exclusion did not apply.³⁶

2. Cases Enforcing Wear and Tear Exclusion

Notwithstanding the breadth of opinions rejecting the exclusion, courts have found the wear and tear exclusions to bar coverage even where arguably the loss was not caused by normal operation, but rather negligent use. In Arawak Aviation Inc. v. Indemnity Insurance Co. of North America,³⁷ the Eleventh Circuit held that an insured cannot rely on antecedent negligence to avoid a wear and tear provision where doing so would nullify the exclusion.³⁸ In Arawak, a pilot operating an airplane insured under an all-risk policy did not tighten the oil cap after a preflight check-up, and the resulting loss of oil and overheating caused substantial engine damage.³⁹ The insured argued that even if the engine damage resulted in part from wear and tear, which was defined in the policy to include "damage caused by the heat that results from the operation . . . of the engine,"40 it should nonetheless be covered because the wear and tear itself resulted from the pilot's covered negligence.⁴¹ Both the district and appellate courts rejected this argument, the latter opining that the insured's interpretation ran contrary to "Florida['s] law of contract interpretation and, just as importantly, common sense."42 According to the Eleventh Circuit, under the insured's logic, "any 'wear and tear' damage due to me-

- 36. *Id.*
- 37. 285 F.3d 954 (11th Cir. 2002).
- 38. See id. at 957.
- 39. See id. at 955.
- 40. *Id.* at 956. 41. *Id.* at 957.
- 42. *Id.* at 959.

^{32.} Id.

^{33.} See id.

^{34.} See id. at 353.

^{35.} Id. at 352.

chanical failure, which would normally be excluded from coverage under the policy, would be covered if the mechanical failure was the product of some antecedent negligence."⁴³ The court explained that because "[m]echanical components, like the engine in this case, are not designed to break down or overheat, but do so when they are not maintained,"⁴⁴ reading the policy in this way would effectively nullify the wear and tear exclusion.⁴⁵ The court further noted that such a reading of the policy would also encourage insureds to avoid upkeep to maximize coverage.⁴⁶ Thus, the court reasoned, "the policy interpretation that [the insured] suggests would not only eviscerate the exclusionary clauses, but also encourage policy holders . . . dangerously to forego maintenance on their aircraft in order to ensure maximum coverage."⁴⁷ Because "[s]uch a result would be absurd and therefore unacceptable under Florida law," the court rejected the insured's interpretation and held the engine damage was excluded under the policy's wear and tear exclusion.⁴⁸

Courts have also found the wear and tear exclusion to bar coverage even where the damaged property had not reached its expected life span. In 2013, the U.S. District Court for the District of Idaho in Crandall v. Hartford Casualty Insurance Co49 held on summary judgment that a wear and tear exclusion precluded recovery for computer damage even though the computer had not reached the end of its expected life. Advancing an argument lurking in the background (and sometimes the foreground) of several other wear and tear cases, the insured tried to create a "genuine issue of [material] fact" that the damaged computer system "had not reached its expected useful life."50 According to the insured, this showed that the computers could not have failed from ordinary wear and tear.⁵¹ While "mindful" of the argument, the court ultimately found no material dispute given the insurer's expert report and granted summary judgment for the insurer.⁵² In so holding, the court implicitly rejected the argument that property must be at or near the end of its useful life to fall within the wear and tear exclusion.

- 44. Id.
- 45. *Id*.
- 46. See id. 47. Id.
- 48. *Id*.
- 49. 2013 WL 502194 (D. Idaho Feb. 8, 2013).
- 50. See id. at *7.
- 51. See id.
- 52. See id. at *7-8.

^{43.} Id at 957.

3. Ensuing Loss Exception to Wear and Tear Exclusion and Notable Cases

Of course, even where a peril falls within the wear and tear exclusion, an exception to the exclusion may nonetheless restore coverage. For example, ISO's CP 10 30 form provides that if a wear and tear loss results in a "specified cause of loss," the insurer will "pay for the loss or damage caused by that specified cause of loss."⁵³ Other polices state that "any ensuing loss not excluded is covered."⁵⁴ These ensuing or resulting loss clauses "bring[] within coverage a loss that follows as a consequence of an excluded peril."⁵⁵

Yale University v. Cigna Insurance Co.⁵⁶ illustrates the ensuing loss exception. In Yale, the insured sought coverage under its all-risk policy for, among other things, clean-up costs for lead and asbestos contamination in its buildings.⁵⁷ The insurer argued that these costs were excluded under the policy's "faulty workmanship, materials, and design" clause as well as its wear and tear clause.⁵⁸ Regarding the wear and tear clause, the insurer argued that "natural deterioration" caused the lead and asbestoscontaining materials to "degrade slowly over time, thus releasing" the fibers and paint chips for which Yale sought clean-up expenses; accordingly, the clean-up expenses resulted from ordinary wear and tear.⁵⁹

The U.S. District Court for the District of Connecticut summarized the insured's argument as follows: "Yale does not actually seek coverage for the mere presence of materials containing asbestos and lead in its buildings [which would be excluded]."⁶⁰ The court continued:

Rather, Yale . . . argues that the amounts it spent to remediate the lead and asbestos *contamination* . . . are losses that resulted from the [defective materials] and/or from ordinary wear and tear, not the actual faulty or deteriorated materials themselves. In other words, Yale argues, the *contamination* itself is a distinct property loss ensuing from the otherwise excluded [defective materials] and/or the wear and tear to the building materials containing those substances.⁶¹

^{53.} As defined in subsection G, "specified causes of loss" include: fire, lightning, explosion, windstorm or hail, smoke, aircraft or vehicles, riot or civil commotion, vandalism, leakage from fire-extinguishing equipment, sinkhole collapse, volcanic action, falling objects, weight of snow, ice or sleet, and water damage. ISO Form CP 10 30G.

^{54.} See, e.g., Schloss v. Cincinnati Ins. Co., 54 F. Supp. 2d 1090, 1094 (M.D. Ala. 1999). 55. THOMAS & ABRAMOVSKY, *supra* note 6, § 43.03 (quoting Sentinel Mgmt. Co. v. New Hampshire Ins. Co., 563 N.W.2d 296, 301 (Minn. Ct. App. 1997)).

^{56. 224} F. Supp. 2d 402 (D. Conn. 2002).

^{57.} See id. at 404.

^{58.} Id. at 417.

^{59.} Id.

^{60.} *Id*.

^{61.} Id. (emphasis added).

The court agreed with Yale, finding that the contamination clean-up costs were ensuing losses and, therefore, not excluded under the policy.⁶² As the court explained, "Yale does not seek coverage for the damage caused by gradual wear and tear or deterioration of [lead and asbestos-containing] materials [, but rather,] it seeks coverage for the ensuing contamination, which contamination may itself have been caused by the wear and tear or deterioration of those materials."⁶³ "Thus, the plain language of the applicable exclusions would exclude coverage for any damage to the lead- or asbestos-containing building materials themselves caused by either the use of faulty materials or wear and tear, but would not exclude any damage to Yale's buildings caused by the resulting contamination."⁶⁴

In part, *Yale* relied on *Sentinel Management Co. v. New Hampshire Insurance Co.,⁶⁵ a seminal ensuing loss case from Minnesota. In <i>Sentinel*, the insured sought coverage under an all-risk policy for asbestos contamination in its residential properties.⁶⁶ The policy excluded damage caused by wear and tear "unless loss by a peril not otherwise excluded ensues, and then the company shall be liable for only such ensuing loss."⁶⁷ The insured argued that "the release of asbestos fibers in its buildings, while ensuing from ordinary wear and tear, also constitutes a distinct peril [that the policy does not exclude]."⁶⁸ The Minnesota Court of Appeals agreed, explaining that "the wear and tear and ensuing loss provisions, read together, exclude from coverage the normal results of wear and tear, but cover distinct, separable, ensuing losses like the asbestos contamination."⁶⁹ Because "[d]amage to the buildings arising from wear and tear, such as holes in the ceilings and abrasions on the walls, is separable from the [resulting] asbestos contamination," "the ensuing loss clause excepted [the insured's]

Id. at 421.

69. Id. at 302.

60

^{62.} See id. at 418.

^{63.} Id.

^{64.} Id. After a lengthy intervening discussion, the court in the Yale case later summarized its entire ensuing loss analysis as follows:

[[]The insurer] incorrectly argues that Yale seeks coverage for the excluded loss itself, and not a "resulting" or "ensuing" loss. Rather, as discussed above, Yale seeks coverage for "physical loss of or damage to" its buildings in the form of contamination. Thus, for example, while gradual wear and tear may have caused flaking or chipping of lead based paint, and such damage to the paint would be excluded, the resulting contamination of the buildings constitutes separate "physical loss of or damage to" the buildings. Similarly, although piping insulation containing asbestos is inherently defective or faulty because it contains asbestos, Yale does not seek coverage to replace the insulation with non-defective material. Rather, Yale seeks coverage for the separate contamination damage caused to its buildings that results from deterioration of the asbestos-containing insulation.

^{65. 563} N.W.2d 296 (Minn. Ct. App. 1997).

^{66.} See id. at 297-98.

^{67.} Id. at 298.

^{68.} *Id.* at 301.

as bestos contamination from the policy exclusion for damage caused by wear and tear." 70

B. Deterioration and Corrosion

1. Deterioration

Courts have held that the term "deterioration" is ambiguous and, in so holding, have determined that the term "affords at least two objectively reasonable interpretations."⁷¹ According to the Ninth Circuit, "[t]he California courts have found deterioration to include all 'slow-moving disintegration or corrosion of the [insured material] because of external forces.'"⁷²

The scope of the "deterioration" exclusion varies among jurisdictions. Some courts have interpreted the terms "deterioration" and "corrosion" as synonymous, applying the deterioration exclusion to losses caused by corrosives in the soil, even when the term "corrosion" is not expressly included in the policy. For example, in *Brodkin v. State Farm Fire & Casualty Co.*,⁷³ a California appellate court held that the fact that State Farm did not use the term "corrosion" among the policy's exclusions did not mean it was not excluded, when the "plain meaning" of the deterioration exclusion "is the insurer will not cover slow-moving disintegration or corrosion . . . because of external forces."⁷⁴

Some courts have applied the exclusion to "any type of deterioration." For example, in *Murray v. State Farm Fire* & *Casualty Co.*,⁷⁵ another California court held that the deterioration exclusion to coverage under a homeowners policy was not limited to deterioration that was "usual, ordinary, or normal," where the term "deterioration" in the exclusion was unqualified.⁷⁶

^{70.} Id. at 301-02.

^{71.} Cavalier Grp. v. Strescon Indus., Inc., 782 F. Supp. 946, 956 (D. Del. 1992). This court stated as follows:

Black's Law Dictionary defines "deterioration," "with respect to a commodity, consists of a constitutional hurt or impairment, involving some degeneration in the substance of the thing, such as that arising from decay, corrosion, or disintegration." *Black's Law Dictionary* 450 (6th ed. 1990). The American College Dictionary defines "deterioration" as the noun form of "deteriorate." "Deteriorate" is defined: "to make or become worse; make or become lower in character or quality." *American College Dictionary* 330 (1970). Webster's Third International Dictionary defines "deterioration" as "the action or process of deteriorating or state of having deteriorated: gradual impairment." *Webster's Third International Dictionary* 616 (1971).

Cavalier Group, 782 F. Supp. at 955.

^{72.} Berry v. Commercial Union Ins. Co., 87 F.3d 387, 389 (9th Cir. 1996) (citations omitted).

^{73. 265} Cal. Rptr. 710 (Cal. Ct. App. 1989).

^{74.} Id. at 714.

^{75. 268} Cal. Rptr. 33 (Cal. Ct. App. 1990).

^{76.} Id. at 36.

In contrast, other jurisdictions have taken a narrower approach, interpreting the "deterioration" exclusion to preclude only recovery of damages caused by naturally occurring deterioration, not damages caused by abnormally or negligently caused deterioration. For example, in *Cavalier Group v. Strescon Industries, Inc.*,⁷⁷ the U.S. District Court for the District of Delaware held that "it is reasonable to associate the term [deterioration] with natural events, not deterioration caused by abnormal events" and this position "is consistent with Black's [Law Dictionary] and Webster's [Third International Dictionary] definitions" of the term.⁷⁸

Other jurisdictions have held that when deterioration was caused by an external event, as opposed to an inherent quality of the damaged property, an insured may recover under the policy, regardless of the deterioration exclusion.⁷⁹

a. Cases Enforcing the Deterioration Exclusion—The First Circuit applied the deterioration exclusion to bar coverage in Gargano v. Vigilant Insurance Co.,⁸⁰ a case in which the insureds sued their insurance company seeking "coverage for the cost to remedy defective exterior staining on shingles on their house and barn."81 The stain peeled off the shingles as a consequence of trapped moisture.⁸² Vigilant denied coverage on the basis of two policy exclusions. The first excluded coverage for "gradual deterioration . . . however caused, or any loss caused by . . . gradual deterioration," and the other excluded losses resulting from "faulty acts, errors or omissions of [the insured] or any other person in planning, construction or maintenance."83 Affirming summary judgment for the insurer, the First Circuit rejected the plaintiffs' contention that the gradual deterioration exclusion was ambiguous.⁸⁴ Given the "stretch of time," the court held that their claim that the deterioration was progressing "rapidly," not gradually, "did not rise above word play."⁸⁵ Elaborating on this point, the court stated, "[w]hile, to be sure, 'gradual' has no mathematically fixed range, the pace of the detaching stain was a long way from a lightning bolt or a falling tree, and in calling it gradual the district court was drawing no

85. Id.

62

^{77. 782} F. Supp. 946 (D. Del. 1992).

^{78.} Id. at 956.

^{79.} *See, e.g.*, City of Burlington v. Indem. Ins. Co. of N. Am., 346 F.3d 70, 75 (2d Cir. 2003) (holding that under Vermont law provision in "all-risk" insurance policies excluding losses caused by the typical wear and tear events such as corrosion and deterioration sufficed to limit coverage to externally caused losses and hence to exclude from coverage intrinsically caused failed welds in boiler unit of a city-owned electric energy generating facility).

^{80. 494} F.App'x 98 (1st Cir. 2012).

^{81.} Id. at 99.

^{82.} Id.

^{83.} Id. The term "construction" was defined as including "materials [and] workmanship . . . used for construction or repair." Id.

^{84.} See id. at 101.

fine line."86 The court also held that, in applying the faulty construction or maintenance exclusion, "'faulty' here does not mean negligent or blameworthy on part of a homeowner or his contractor, but simply tainted by imperfection."87

In Fireman's Fund Insurance v. Oregon Cold Storage LLC,88 the Ninth Circuit affirmed summary judgment in favor of Fireman's Fund, enforcing the policy exclusion of losses "caused by or resulting from, among other things, gradual deterioration, mold, and wet or dry rot."89 Oregon Cold Storage (OCS) discovered that the support beams and posts under the floors of its recently purchased building had extensive rot damage.⁹⁰ On appeal of the summary judgment in favor of Fireman's Fund, the court agreed that the loss was excluded by the policy language.⁹¹ On appeal, OCS argued that "the rotting was the damage, not the cause of the damage;⁹² the court, however, rejected this argument as "untenable," stating that, "[allthough moisture and condensation may have been causes of the rotting, this does not eliminate rotting as a cause of the damage."93

In Schloss v. Cincinnati Insurance Co.,94 the U.S. District Court for the Middle District of Alabama enforced substantially similar exclusions under multiple policies to bar coverage for deterioration and rot of the wooden structure of a residence. Schloss discovered significant rot damage to the wooden stud structure while renovating and repairing his home.95 The rot was due to "faulty installation of a clay tile roof and an exterior insulation finishing system (EIFS) and/or faulty design," which had allowed water to leak through.⁹⁶ Removal and replacement of the damaged studs, as well as the EIFS and roof, was required to repair the damage.⁹⁷ Schloss sought coverage for these damages under his homeowner's insurance policies.98 However, his policies did not cover "deterioration, rust, mold, wet or dry rot," although they did insure ensuing loss not otherwise excluded.99 Schloss argued that his direct loss was incurred in removing and replacing the roof and the EIFS to repair the rot, and thus his loss was not "caused by

97. Id.

99. See id. at 1094, 1098.

^{86.} Id.

^{87.} Id. (citing In re Chinese Manufactured Drywall Prods. Liab. Litig., 659 F. Supp. 2d 822, 844 (E.D. La. 2010).

^{88. 11} F.App'x 969 (9th Cir. 2001).

^{89.} Id. at 970.

^{90.} Id.

^{91.} See id.

^{92.} Id. 93. Id.

^{94. 54} F. Supp. 2d 1090 (M.D. Ala. 1999).

^{95.} Id. at 1093. 96. Id. at 1093.

^{98.} Id.

rot" but was the "rot itself."¹⁰⁰ The court found Schloss's interpretation to be "strained at best" and that adopting his rationale would "gut the listed exclusions."¹⁰¹ Additionally, the court found Schloss's " argument defining the costs to remove and replace the roof and EIFS as their own losses unpersuasive."¹⁰² In this respect, the court held that the ensuing loss provision applies only if there is a separate, additional loss not otherwise excluded from coverage.¹⁰³ In short, the repair of the rot damage was "simply part and parcel of the loss caused by the rot."¹⁰⁴

In Merrimack Mutual Fire Insurance Co. v. McCaffree, 105 the insured bought a house where the shower stall had been constructed without a shower pan. The absence of the pan allowed water to leak onto the wood under and around the shower stall.¹⁰⁶ The wood rotted and deteriorated, leading to the growth of fungus and the attraction of termites.¹⁰⁷ The all-risk policy issued by Merrimack contained an exclusion for loss caused by "inherent vice, wear and tear, deterioration, rust, rot, mold or other fungi, dampness of atmosphere, extremes of temperature, contamination, vermin, termites, moths, or other insects."108 The Court of Civil Appeals of Texas reversed the trial court judgment in favor of the insureds and rendered judgment for the insurer, holding, "[s]ince the damage or deterioration to the property was admittedly directly caused by fungi, and to some extent termites, such would bring it clearly within the exclusion of the contract."109 In addition, the appellate court rejected the insured's argument that the damage was covered by the ensuing loss of water damage, holding that the ensuing loss clause did not apply because the loss to the house was caused by rot, mold, and fungus.¹¹⁰

b. Cases Declining to Enforce the Deterioration Exclusion—In Park Center III Ltd. v. Pennsylvania Manufacturers' Association,¹¹¹ an apartment complex owner sought coverage for hurricane-related damage to the structures under construction. The complex was insured under an all-risk policy that excluded loss or damage "caused by or resulting from . . . deterioration, . . . changes in or extremes of temperature, or dampness or dryness of

103. See id. at 1094-95, 1098.

- 105. 486 S.W.2d 616 (Tex. Civ. App. 1972).
- 106. See id. at 618.
- 107. See id.
- 108. Id. at 619 (emphasis added).
- 109. Id.
- 110. See id. at 620.
- 111. 30 F.App'x 64 (4th Cir. 2002).

^{100.} Id. at 1094.

^{101.} Id. at 1095-96.

^{102.} See id. at 1094-95.

^{104.} *Id.* at 1098. The court further declared that the negligent planning or design exclusion was applicable and ruled that the ensuring loss (the rot)—caused by negligent planning or design—also was excluded by the policy. *Id.* at 1099.

atmosphere."¹¹² The insurer denied coverage for the complex, asserting that the thousands of unprotected gypsum boards used in sheathing the structures that were damaged by the hurricane had already deteriorated and needed to be replaced prior to the storm.¹¹³ The District Court for the Eastern District of Virginia, however, entered judgment for the insured based on a factual finding that the gypsum boards were damaged by the storm, not by prior deterioration.¹¹⁴ The Fourth Circuit affirmed, finding that the district court's factual findings were not clearly erroneous and thus the exclusion for deterioration did not preclude coverage for the loss of exposed gypsum panels due to hurricane damage.¹¹⁵ The Fourth Circuit rejected the insurer's argument that the loss should be excluded if an excluded peril contributed in any way to the loss, finding that such a result would be proper under controlling Virginia authority only if the exclusion contained an anti-concurrent cause provision, which was not included in the insurer's deterioration exclusion.¹¹⁶

In Egan v. Washington General Insurance Corp.,¹¹⁷ the Florida District Court of Appeal reversed a summary judgment entered in favor of the insurers finding that questions of fact precluded the enforcement of a policy's deterioration exclusion as a matter of law.¹¹⁸ The "thru bolt" securing the sea strainer to the insured yacht's hold was replaced in the course of repairing the sea strainer.¹¹⁹ The replacement bolt corroded and deteriorated, "allowing water to flow into the hold unchecked," and the yacht sunk while docked.¹²⁰ The hull policy was an all-risk form but excluded "[w]ear and tear, gradual deterioration, inherent vice, marine borers, vermin, repair or replacement of a part in which a latent defect is found."¹²¹ Reversing summary judgment, the court found that there were fact issues concerning whether the loss resulted from the excluded cause of deterioration, as argued by the insurer, or whether a negligent repair caused the loss, as argued by the insured.¹²² Similarly, the court found that

122. See id. at 878.

^{112.} Id. at 70.

^{113.} See id. at 66-67.

^{114.} *Id.* In this respect, the Fourth Circuit noted that the evidence demonstrated that photographs showed only isolated pre-hurricane damage among the more than 17,000 panels that were in need of replacement post-hurricane and that the insured's general contractor had planned to use all of the sheathing, with only minor repairs, before the hurricane struck. *Id.* at 69.

^{115.} Id. at 69-70.

^{116.} Id. at 70-71 (distinguishing Lower Chesapeake Assocs. v. Valley Forge Ins. Co., 532 S.E.2d 325 (Va. 2000)).

^{117. 240} So. 2d 875 (Fla. Dist. Ct. App. 1970).

^{118.} Id. at 879.

^{119.} See id. at 876.

^{120.} See id.

^{121.} Id.

fact issues existed as to whether the deterioration that occurred was "gradual" so that the exclusionary provision might apply.¹²³

2. Corrosion

Courts have given the term "corrosion" its plain and usual meaning in finding the "corrosion" exclusion to be unambiguous.¹²⁴ The corrosion exclusion, in contrast to the "deterioration" exclusion, is often applied more liberally, and courts generally do not take into account the cause of the corrosion or how suddenly the corrosion occurred.¹²⁵ Hence, courts generally do not limit the corrosion exclusion to naturally caused corrosion.¹²⁶

Pioneer Chlor, 863 F. Supp. at 1235 (footnotes omitted).

125. See 11 STEVEN PLITT ET AL., COUCH ON INSURANCE § 153:80 (3d. ed. 2012). This treatise contains the following list of cases with explanatory parantheticals:

Id. § 153.80, n.6; *see also* Gilbane Bldg. Co. v. Altman Co., 2005 WL 534906, at *5 (Ohio Ct. App. Mar. 8, 2005) (holding corrosion and rust exclusion covered not only gradually forming rust but also fast-forming rust).

126. See 11 COUCH ON INSURANCE, supra note 114, § 153:80 (citing Bettigole v. Am. Empl'rs Ins. Co., 567 N.E.2d 1259, 1261 (Mass. App. Ct. 1991), where the court held

^{123.} See id. at 879.

^{124.} See TravCo Ins. Co. v. Ward, 736 S.E.2d 321, 328 (Va. 2012) (finding the term "corrosion" to be unambiguous); Pioneer Chlor Alkali Co. v. Nat'l Union Fire Ins. Co. of Pittsburg, Pa., 863 F. Supp. 1226 (D. Nev. 1994). In *Pioneer Chlor*, the court stated as follows:

The Court feels that an ordinary person coming across the term "corrosion" would not find it to be ambiguous. Corrosion means "the action, process, or effect of corroding." *Webster's Third New International Dictionary* (unabridged 1986) at 512 (hereinafter "Webster's"). Corrode means "to eat away by degrees as if by gnawing . . . wear away or diminish by gradually separating or destroying small particles or converting into an easily disintegrated substance; esp: to eat away or diminish by acid or alkali reaction or by chemical alteration." Webster's provides this sample sentence: "the caustic substance corroded the material so that it fell apart in the hands."

Adams-Arapahoe Joint Sch. Dist. No. 28-J v. Continental Ins. Co., 891 F.2d 772, 777 (10th Cir. 1989) (holding that "under Colorado law the word 'corrosion' unambiguously refers to all corrosion, however brought about."); Arkwright-Boston Mfrs. Mut. Ins. Co. v. Wausau Paper Mills Co., 818 F.2d 591, 595 (7th Cir. 1987) (holding that "the speed at which the corrosion took place here is not relevant to whether it falls under the corrosion exclusion" and that the exclusion for damages resulting from corrosion prevented recovery since the insured could not point to any specific act of negligence which caused the corrosion); Pioneer Chlor Alkali Co., Inc. v. Nat'l Union Fire Ins. Co. of Pittsburgh, Pa., 863 F. Supp. 1226, 1236 (D. Nev. 1994) (holding that "[w]hether corrosion takes a matter of days, twenty-five years, or 100 years does not change the fact that it is corrosion."); Alex R. Thomas & Co. v. Mut. Serv. Cas. Ins. Co., 119 Cal. Rptr. 2d 401, 399 (Cal. Ct. App. 2002) (holding that "[n]o matter how the corrosion occurred, however, it was nevertheless corrosion-an excluded peril-which caused the loss"); Twin City Hide v. Transam. Ins. Co., 358 N.W.2d 90, 92 (Minn. Ct. App. 1984); but see Cyclops Corp. v. Home Ins. Co., 352 F. Supp. 931, 937 (W.D. Penn. 1973) (holding that "although the 'cause' of the damage is alleged to be an improper initial fit of wheel and axle, which produced gradual weakening and loosening of the fit, the essential elements of coverage have been established and none of the exclusions [for depletion, deterioration, corrosion, and wear and tear] have been established as applicable").

For example, in *Bettigole v. American Employers Insurance Co.*,¹²⁷ the Appeals Court of Massachusetts found that the poor and potentially dangerous condition of a parking deck was not covered under the insured's special all-risk policy where the deck's steel reinforcing rods and other steel supporting elements had been attacked or "corroded" by chloride ions "brought onto the deck by car wheels carrying ice, water, and deicing salts."¹²⁸ In so finding, the court held that it saw "no reason . . . for confining the term corrosion in the context of the policy to a wearing away by 'natural' means of weather or the like, or in consequence of conduct of the insured rather than an outsider."¹²⁹

In some instances, in arguing that the corrosion exclusion does not apply, insureds have relied on the argument that the corrosion is the loss, and not the cause of the loss. Several courts have rejected this argument, finding that such an interpretation of the corrosion exclusion would essentially render it meaningless.¹³⁰

a. Cases Enforcing the Corrosion Exclusion—In Central International Co. v. Kemper Insurance Cos.,¹³¹ the U.S. District Court for the District of Massachusetts enforced the exclusion for "corrosion" found in an all-risk marine policy insuring a shipment of steel coils. The plaintiff insured a shipment of steel coils from Spain to the West Indies.¹³² The all-risk policy insuring the shipment stated "[h]owever, as respects steel products and all metals: excluding rusting, oxidation, discoloration and corrosion; also excluding bending, twisting, crimping, and end-damage."¹³³ It was undisputed that the "coils shipped in good condition and arrived damaged, or

- 131. 1999 WL 694048 (D. Mass. Apr. 22, 1999).
- 132. See id. at *1.
- 133. Id.

there was "no reason . . . for confining the term corrosion in the context of the policy to a wearing away by 'natural' means of weather or the like, or in consequence of conduct of the insured rather than an outsider'"); see also In re Chinese Manufactured Drywall Prods. Liab. Litig., 759 F. Supp. 2d 822, 848 (E.D. La. 2010) (finding no "reason to draw a distinction between the chemically created corrosion in the present cases and corrosion that occurs in nature"); *Pioneer Chlor*, 863 F. Supp. at 1235 (noting that the plain and ordinary meaning of the term "corrosion," given by various dictionaries, "contain[s] no element of time"); *Ward*, 736 S.E.2d at 328 (noting that the common understanding of the term "corrosion. There is similarly no basis for reading a temporal element into the instant corrosion exclusion; the plain language of the policy and commonly understood definition of corrosion do not warrant such an interpretation.") (internal footnote omitted).

^{127. 567} N.E.2d 1259 (Mass. App. Ct. 1991).

^{128.} Id. at 1261-62.

^{129.} Id. at 1261.

^{130.} See, e.g., In re Chinese Manufactured Drywall, 759 F. Supp. 2d at 848 ("declin[ing] to create a distinction between corrosion as a loss and corrosion as a cause of the loss for purposes of the corrosion exclusion," and finding its interpretation of the corrosion exclusion "consistent with the ordinary meaning of corrosion which is expansive, encompassing the action, process, effect and product of corroding").

that the damage occurred in transit aboard the vessel during a period when the goods were covered by the insurance policy."¹³⁴ The insurer relied on the insured's own inventory survey that established the steel was damaged and discolored, as well as a laboratory analysis that concluded the steel was "serverely corroded."¹³⁵ Although it was understood that the ship traveled "heavy seas" en route, which the insured argued caused the damage to the cargo, the court nevertheless found that the efficient cause of the loss was corrosion, which was specifically excluded from coverage under the policy.¹³⁶

In Gilbane Building Co. v. Altman Co., 137 the Ohio Court of Appeals affirmed summary judgment for the insurer based on enforcement of the exclusion of corrosion from coverage under an all-risk policy of builder's risk insurance. A subcontractor used an improper dilution of a muriatic acid product to etch concrete floors in a commercial construction project.¹³⁸ This resulted in the rapid release of an acidic vapor, causing discoloration, rust, and corrosion of stainless steel hardware and copper piping in the affected rooms.¹³⁹ Affirming the summary judgment entered by the trial court, the appellate court found that the loss was excluded from coverage by the policy's exclusionary provisions.¹⁴⁰ In this respect, the allrisk policy specifically excluded "[r]ust, corrosion, fungus, decay, deterioration, hidden or latent defect or any quality in the property that caused it to damage or destroy itself."141 The court rejected the argument that the corrosion exclusion was inapplicable to this loss, which was characterized as a "fast-acting, acid-based chemical reaction," as opposed to the commonsense and ordinary understanding of "rust" and "corrosion" as a slow developing loss of property.¹⁴² The court stated "[the] policy excludes coverage for loss due to rust and corrosion, and does not qualify the exclusion by limiting its application only to long-term rust or corrosion as opposed to rust or corrosion that forms quickly."¹⁴³

In *Central Louisiana Electric Co. v. Westinghouse Electric Corp.*,¹⁴⁴ the Louisiana Court of Appeal held that the exception of corrosion from coverage under a policy of boiler and machinery insurance applied to damage to turbines in a power plant. The turbine blades had developed corrosion

136. See id. at *2-3.

- 138. See id. at *1.
- 139. See id.
- 140. See id. 141. Id. at *3.
- 142. *Id.* a
- 143. Id. at *4.

^{134.} Id.

^{135.} Id.

^{137. 2005} WL 534906 (Ohio Ct. App. Mar. 8, 2005).

^{144. 569} So. 2d 120 (La. Ct. App. 1990), aff'd, 579 So. 2d 981 (La. 1991).

pitting and corrosion cracking that required that the turbines be replaced.¹⁴⁵ Central Louisiana Electric (CLECO) successfully argued in the trial court that, although corrosion was excluded from the coverage definition in the policy, damage caused by corrosion was not.¹⁴⁶ The policy generally covered damage to property from an accident, but the policy definition of "[a]ccident" specifically provided that it "shall not mean . . . corrosion. . . .^{"147} Reversing the trial court, the appellate court found the exclusionary provision applicable to corrosion to be unambiguous in clearly reflecting that "the parties did not intend to include in the coverage any damages directly caused by corrosion."¹⁴⁸ Because "expert testimony established that corrosion caused the cracks" in the turbines, the court held that the damage was not the result of an accident as defined by the policy, and thus the damage was not covered.¹⁴⁹

In *Resorts International, Inc. v. American Home Assurance Co.*,¹⁵⁰ a case cited favorably in *Central Louisiana*,¹⁵¹ the Florida District Court of Appeal also found that damage to an insured air conditioning unit that resulted from corrosion was not covered under an all risk boiler and machinery policy. The policy generally insured any "sudden and accidental breakdown" of the insured equipment, but specifically excluded "[c]orrosion or erosion of material" from the definition of "accident."¹⁵² Holding that "the record on appeal demonstrate[d] that it [was] undisputed that the air-conditioning failures were the result of corrosion, a cause which is specifically excluded" from coverage under the policy, the court affirmed the summary judgment entered in favor of the insures as "eminently correct."¹⁵³

b. Cases Declining to Enforce the Corrosion Exclusion—The Tenth Circuit held in Adams-Arapahoe Joint School District No. 28-J v. Continental Insurance Co.¹⁵⁴ that the corrosion exclusion in an all-risk policy would not apply if the corrosion were shown to be fortuitous. The school district purchased an all-risk policy of insurance on a newly constructed high school.¹⁵⁵ During construction, the concrete supplier had warned the roofing subcontractor, who, in turn, had advised the general contractor, the architect, and the school district, that use of a gypsum-based concrete on the metal roof

- 147. Id.
- 148. Id. (citation omitted).
- 149. See id.
- 150. 311 So. 2d 806 (Fla. Dist. Ct. App. 1975).
- 151. Cent. La. Elec. Co., 569 So. 2d at 122.
- 152. Resorts Int'l, 311 So. 2d at 806-07.
- 153. Id. at 806-07.
- 154. 891 F.2d 772 (10th Cir. 1989).
- 155. See id. at 773.

^{145.} Id. at 121.

^{146.} Id. at 122.

structure could lead to corrosion.¹⁵⁶ The policy excluded any loss caused by "'wear and tear, deterioration, *rust or corrosion*, mould, wet or dry rot; *inherent or latent defect*; . . . *unless such loss results from a peril not excluded in this policy*. . . .'"¹⁵⁷ Following a partial collapse of the school's roof, it was discovered that significant corrosion had developed throughout that portion of the roof where gypsum based concrete had been applied to the metal roof decking.¹⁵⁸ Replacement of the roof cost the school district \$8.8 million, and Continental denied the district's claim for coverage.¹⁵⁹

In the ensuing litigation, the district court granted the school district partial summary judgment, finding that the corrosion damage to the roof would be covered if found by the trier of fact to have been fortuitous.¹⁶⁰ In a later jury trial, a verdict was returned for the school district in the amount of \$8,674,778.¹⁶¹

On appeal, the Tenth Circuit affirmed in part and reversed in part. The court affirmed the district court's partial summary judgment holding that, although the policy excluded corrosion from coverage and "corrosion unambiguously referred to all corrosion," the "unless clause" appended to the exclusion revived coverage for the defective design and construction of the roof, which was not specifically excluded and thus was a covered cause of loss under this all-risk policy.¹⁶² Thus, the court agreed that the school district's corrosion loss was covered if it was fortuitous.¹⁶³ However, the Tenth Circuit reversed the jury's verdict on fortuity, finding that the district court's instruction on that issue was erroneous and prejudicial.¹⁶⁴ In this respect, the court found that it was error to instruct the jury that the insurer had the burden of proving the insured's knowledge of the risk of collapse due to corrosion; instead, held the court, the insured's lack of knowledge was subsumed within its burden of proving that the loss was fortuitous.¹⁶⁵

In Pioneer Chlor Alkali Co. v. National Union Fire Insurance Co. of Pittsburgh, Pennsylvania,¹⁶⁶ the U.S. District Court for the District of Nevada

^{156.} See id.

^{157.} Id. at 773-74 (emphasis in original).

^{158.} See id. at 774.

^{159.} See id.

^{160.} See id.

^{161.} See id.

^{162.} See *id.* at 776–77. As a warning to litigators, it must be noted that in the course of reaching this conclusion, the court found that the insurer waived the policy exclusion of loss by "inherent or latent defect"—a cause that arguably supplanted coverage for defective design or construction—by not specifically raising it in the trial court and by not expressly preserving it on appeal through its docketing statement and initial brief. *Id.* at 775–76.

^{163.} See id. at 777.

^{164.} See id. at 779-80.

^{165.} See id.

^{166. 863} F. Supp. 1226 (D. Nev. 1994).

denied competing motions for summary judgment concerning the application of the exclusion of corrosion from coverage under an all-risk policy. Pioneer insured its liquid chlorine manufacturing plant through an all-risk policy of insurance issued by National Union, which expressly excluded, among other things, "'[g]radual deterioration . . . rust, corrosion, erosion . . . unless such loss is caused directly by physical damage not otherwise excluded in this Policy to the property covered."¹⁶⁷ In the manufacturing process, chlorine gas traveled through 780 small steel tubes that passed through a secondary liquefier. Brine, chilled to a temperature of -10° F, was forced into the liquefier chamber to surround the steel tubes and thus cool the chlorine gas in the tubes to its liquefied state.¹⁶⁸ "At some point, a rag became lodged in the secondary liquefier, . . . diverted the flow of the brine, [which] concentrated on only a few of the steel tubes."169 This concentration of brine resulted in small holes forming in some of the steel tubes, which allowed the brine to mix with the chlorine gas, "forming a highly corrosive acidic solution."¹⁷⁰ On these facts, National Union sought summary judgment, arguing that the loss was caused by corrosion, an excluded cause.¹⁷¹ In its cross motion for summary judgment, Pioneer sought a determination that the loss was covered, arguing that it was caused by the negligent placement of the rag in the liquefier.¹⁷² In summary, the issue presented by the competing motions was "if the efficient proximate cause of the loss was corrosion, or if the rag is a remote cause, then National Union is entitled to summary judgment."173

Confronted with an issue so stated, the court predictably denied National Union's motion for summary judgment, holding that it was equally possible that a jury would find either "corrosion or the rag to be the efficient proximate cause of the loss."¹⁷⁴ This same reasoning was sufficient to support the denial of Pioneer's motion for summary judgment.¹⁷⁵ However, the court went on to hold, contrary to Pioneer's argument, that "corrosion" is not an ambiguous term.¹⁷⁶

175. See id. at 1233.

176. Id. at 1235–37 (citing Webster's THIRD New INTERNATIONAL DICTIONARY 512 (un-abridged 1986)).

^{167.} Id. at 1229 (emphasis in original).

^{168.} See id. at 1228.

^{169.} Id. at 1229.

^{170.} See id. at 1229.

^{171.} See id.

^{172.} See id. at 1234.

^{173.} Id. at 1231. Leading up to this observation, the court wrote an excellent analysis of the doctrine of efficient proximate cause and proximate cause. See id. at 1230-31.

^{174.} See id. at 1232. The court specifically observed that it was "confident" that corrosion was involved in the loss, but "involvement is not enough." Id.

C. Inherent Vice

Inherent vice has been defined as "any existing defects, diseases, decay or the inherent nature of the commodity which will cause it to deteriorate with a lapse of time" or "as a cause of loss not covered by the policy, does not relate to an extraneous cause but to a loss entirely from internal decomposition or some quality which brings about its own injury or destruction."¹⁷⁷ As summarized by another court, the "inherent vice . . . exclusion applies to a loss due to any quality in property that causes property to damage or destroy itself that results from something within the property itself as opposed to some outside force."¹⁷⁸

Thus, in *GTE Corp. v. Allendale Mutual Insurance Co.*,¹⁷⁹ the inherent vice exclusion was held to bar recovery by a telecommunications provider under all-risk coverages for its efforts to protect its systems from Y2K date recognition problems. The record showed the insured undertook "an extensive Y2K program at a cost of about \$350 million to protect data, records and to ensure continued business operations."¹⁸⁰ At the time, the company was insured under multiple layers insurance, the first two layers of which provided all-risk coverage up to \$400 million.¹⁸¹ Both the primary and excess policies, however, contained exclusion from coverage for inherent vice, among other things.¹⁸² Affirming summary judgment for the insurer, the Third Circuit agreed with the district court's finding that "the insured property, [the insured's] computer systems, do contain their own 'seeds of destruction'—that is, the two-digit date limitation.... [The insured] is not threatened by any external force; the threat is entirely internal."¹⁸³

Similarly, in Archer-Daniels-Midland Co. v. Phoenix Assurance Co. of New York,¹⁸⁴ a claim for degradation of grain contained on barges stranded on the Mississippi River during the flood of 1993 was held to be excluded by the inherent vice exclusion in a Difference in Conditions policy.¹⁸⁵

^{177.} GTE Corp. v. Allendale Mut. Ins. Co., 372 F.3d 598, 611 (3d Cir. 2004) (quoting Port of Seattle v. Lexington Ins. Co., 48 P.3d 334, 338–39 (Wash. Ct. App. 2002) (internal quotations and citations omitted)); Bishop v. Alfa Mut. Ins. Co., 796 F. Supp. 2d 814, 820 (S.D. Miss. 2011) (quoting *GTE Corp.*, 372 F.3d at 611); see 11 COUCH ON INSURANCE, supra note 114, § 153:77.

^{178.} Finger v. Audubon Ins. Co., 2010 WL 1222273, at *6 (La. Civ. Dist. Ct. Mar. 22, 2010) (quoting FC&S Online, Processors Coverage Form, Insurance Services Office Non-filed IM Coverage (Dec. 2005)).

^{179. 372} F.3d 598 (3d Cir. 2004).

^{180.} See id. at 603.

^{181.} See id. at 604.

^{182.} See id. at 605.

^{183.} Id. at 611 (citation omitted). The Third Circuit went on to hold that the policies' ensuing loss provisions did not apply. Id. at 613–14.

^{184. 975} F. Supp. 1129 (S.D. III. 1997).

^{185.} See id. at 1136-37.

The policy provided excess coverage on an all-risk basis for losses exceeding \$10 million but less than \$50 million.¹⁸⁶ The U.S. District Court for the Southern District of Illinois held, however, that the grain was not covered by the excess policy, explaining two grounds for this conclusion. First, the court found that the grain was not covered because it was not located at "the scheduled locations" at the time it was stored on the stalled barges.¹⁸⁷ Additionally, even if the grain had been covered by the policy, the court found that this claim would be barred under the inherent vice exclusion found in the policy.¹⁸⁸ In this respect, the court noted that it was undisputed that "the inherent nature of grain is to deteriorate or degrade with the passage of time."¹⁸⁹

In ABI Asset Corp. v. Twin City Fire Insurance Co., 190 the inherent vice exclusion also was found to bar coverage for the collapse of an apartment building in New York City that was covered by an all-risk policy.¹⁹¹ Following the collapse of the structure, the insurer denied the policyholder's claim for insurance "on the grounds that (a) the loss did not result from an external cause, and (b) the loss resulted from design defect, deterioration, latent defect, inherent vice, wear and tear, and gradual deterioration."192 As support for its finding that the collapse resulted from inherent vice, the insurer relied on the report of the policyholder's expert engineer, who identified a phenomenon known as "creep" as the cause of the buckling of the walls and foundation system that led to the collapse.¹⁹³ As explained by the expert, creep is "a time-dependent deformation due to sustained load" and "an inherent and predictable property of cementicious material like mortar and concrete."194 Noting that inherent vice has been interpreted to mean "a natural defect in a material which causes failure to occur,"195 the court granted the insurer's motion for summary judgment finding, "[t]here can be no doubt that creep, as defined and described by [the insured's] own expert, is an inherent

^{186.} See id. at 1131, 1133.

^{187.} *Id.* at 1133–34. In reaching this conclusion the court rejected ADM's argument that a "transportation form" rider purchased with the primary Difference in Conditions policy was not enforceable as to the excess policy at issue. *Id.* at 1134–35.

^{188.} See id. at 1136-37.

^{189.} *Id.* at 1136. The court rejected ADM's argument that the exclusion was inapplicable because the proximate cause of the loss was a covered event, a flood, finding no such causation exception to the exclusion. *Id.* at 1136–37.

^{190. 1997} WL 724568 (S.D.N.Y. Nov. 18, 1997).

^{191.} See id. at *1.

^{192.} Id.

^{193.} See id. at *2.

^{194.} Id.

^{195.} Id. (citing Standard Structural Steel Co. v. Bethlehem Steel Corp., 597 F. Supp. 164, 197 (D. Conn. 1984)).

vice, and therefore falls under an exclusion to the insurance policy's coverage."¹⁹⁶

For similar reasons, the U.S. District Court for the Western District of Washington in City of Renton v. Lexington Insurance Co. 197 held that the inherent vice exclusion barred a claim for the cost of repairing a bridge containing a design defect. The City of Renton held a policy through Washington Cities Insurance Authority (WCIA) providing primary all-risk coverage of \$10 million for all insurable property of the city.¹⁹⁸ In turn, WCIA held facultative certificates of reinsurance through Lexington, which provided \$10 million in coverage on a follow-form basis.¹⁹⁹ In 1999, during the pertinent policy period, an engineering inspection of the Monster Road Bridge revealed "cracks [that] worsened to the point that the [b]ridge required extensive repairs in order to continue safely operating," which eventually cost the city \$690,643.41.²⁰⁰ Renton tendered a claim to WCIA, which presented its claim to Lexington. In separate letters for the policy periods of 1998-99 and 2003-04, Lexington denied the claim based on the reports of its engineering experts, citing as grounds that the claim was the result of "defective design" and "inherent vice," respectively.²⁰¹ In the resulting lawsuit, the court granted Lexington's motion for summary judgment, finding that, because the Lexington policy was a follow-form policy, its reinsurance liability followed the terms and conditions of the WCIA policy, which contained an exclusion from coverage for inherent vice, among other things.²⁰² The court held that the "design defect which caused the City's loss was an inherent vice," explaining that "[t]he ill-designed bridge '[brought] about its own injury' and no application of external events was necessary."203

The inherent vice exclusion, however, was found not to apply in *Bishop* v. *Alfa Mutual Insurance Co.* to a claim for damages allegedly resulting from the installation of defective Chinese-manufactured drywall in a residence.²⁰⁴ The Bishops held an all-risk homeowners insurance policy issued by Alfa.²⁰⁵ The policy specifically excluded any loss caused by inherent vice, latent defect, corrosion, and contamination, among other things.²⁰⁶

74

205. Id. at 817.

206. Id.

^{196.} Id.

^{197. 2007} WL 2751356 (W.D. Wash. Sept. 19, 2007).

^{198.} See id. at *5.

^{199.} See id. at *1, 5.

^{200.} See id. at *1.

^{201.} *Id.* at *2.

^{202.} *Id.* at *6–7.

^{203.} Id. at *8 (quoting Port of Seattle v. Lexington Ins. Co., 48 P.3d 334, 339 (Wash. Ct. App. 2002)).

^{204. 796} F. Supp. 2d 814, 820-21 (S.D. Miss. 2011).

The Bishops sought coverage under their policy due to the release of sulfuric gas from the drywall, which they claimed resulted in

damage to the home's HVAC system; discoloration of the electrical wiring and the copper lines on the hot water heater; damaged personal property, including a television and direct TV converter; respiratory illness and severe headaches experienced by family members; and the purchase of a travel trailer in late June 2009 when the home became uninhabitable.²⁰⁷

Alfa denied the claim on grounds that there was no accidental direct physical loss to personal property, and the loss fell within one or more exclusions from coverage, including the inherent vice exclusion.²⁰⁸ The U.S. District Court for the Southern District of Mississippi rejected Alfa's contention that the claim was barred by the inherent vice exclusion.²⁰⁹ In this regard, the court found that there was no evidence that the drywall in the home was damaging or destroying itself, and thus, under accepted interpretations of the exclusion, the inherent vice exclusion did not apply.²¹⁰ The court, however, found that other exclusions, namely, the "exclusions for losses from faulty materials, contamination and corrosion appl[ied] to preclude coverage . . . [of the] claimed losses," resulting in summary judgment for the Alfa.²¹¹

Similarly, in *Gerawan Farming Partners v. Westchester Surplus Lines Insurance Co.*,²¹² the U.S. District Court for the Eastern District of California found that the claim of a commercial farming operator for a loss associated with its nectarine produce was not barred by the exclusion from coverage applicable to inherent vice. The insurer had issued an allrisk commercial insurance policy to its insured with \$2.5 million in coverage.²¹³ The insured's 2003 nectarine crop suffered from a condition called "pitting," which exhibited itself through "multiple small craters on the surface of the fruit [as well as] moderate to severe discoloration" of the fruit.²¹⁴ Following customer complaints, the insured placed its insurer on notice of a claim. The insured's preliminary evaluation of its loss exceeded \$2.2 million, and its final assessment of its damages was \$4.9 million.²¹⁵

^{207.} Id.

^{208.} Id. at 817–18.

^{209.} Id. at 820–21.

^{210.} Id. (quoting GTE Corp. v. Allendale Mut. Ins. Co., 372 F.3d 598, 611 (3d Cir. 2004)).

^{211.} Bishop, 796 F. Supp. 2d at 818.

^{212. 2008} WL 80711 (E.D. Cal. Jan. 4, 2008).

^{213.} *Id.* at *1. The Westchester policy was primary to excess coverage provided by other insurers.

^{214.} *Id.*

^{215.} Id. at *4.

In parallel expert investigations, both the insurer and its insured sought to determine the cause of the pitting.²¹⁶ In a series of four reports, the insurer's expert opined that the "growing conditions in 2003 predisposed the nectarine crop to pitting," but the pitting ultimately appeared to have been caused by "some mechanical operation on the packing line."²¹⁷ The insured's expert, on the other hand, opined that the cause of the pitting was unknown, and the insurer's expert lacked any scientific basis for his opinions.²¹⁸ The insurer denied the claim citing approximately fourteen exclusionary provisions as grounds for its decision.²¹⁹ Denying the insurer's motion for summary judgment, the court found, among other things, that the exclusion for "hidden or latent defect or quality in property that causes it to damage or destroy itself" was inapplicable to this loss.²²⁰ In this respect, the court found that the evidence suggested that the nectarines' predisposition alone did not cause the pitting, but the application of external forces in the packing process caused the pitting.221

D. Latent Defect

How broadly the term "latent defect" is defined depends on the jurisdiction. Some courts define it broadly and define the term "latent defect" as "one that is hidden and not readily observable or discoverable to any but the most searching examination; it is not limited to inherent defects in the materials used in construction."²²² When construing the term broadly, the critical inquiry becomes "whether the defect was easily discoverable."²²³

Others define the term "latent defect" more narrowly, limiting its meaning to "some inherent defect in the materials used in construction which could not be discovered by any known or customary test and [does] not include faulty design or construction."²²⁴ Still another court has ruled that pursuant to the "literal language" of the term, "'latent defects' are only

223. Peter E. Kanaris & Lawrence D. Mason, Common Exclusions in the First-Party Property Insurance Policy and Their Application to Environmental Claims, 30 TORT & INS. LJ. 809 (1995).

224. See, e.g., Mattis v. State Farm Fire & Cas. Co., 454 N.E.2d 1156, 1162 (Ill. App. Ct. 1983); Markham v. Nationwide Mut. Fire Ins. Co., 481 S.E.2d 349, 356–57 (N.C. Ct. App. 1997) (adopting the *Mattis* interpretation of the term "latent defect").

76

^{216.} Id. at *1-2.

^{217.} Id. at *3.

^{218.} Id. at *7-8.

^{219.} Id. at *5-6.

^{220.} Id. at *16 (adopting the definition of "inherent vice" as stated in Port of Seattle v. Lexington Ins. Co., 48 P.3d 334 (Wash. Ct. App. 2002)).

^{221.} Gerawan Farming, 2008 WL 80711, at *17 (citing City of Renton v. Lexington Ins. Co., 2007 WL 2751356 (W.D. Wash. Sept. 19, 2007)).

^{222.} See, e.g., Bd. of Educ. of Me. Township High Sch. Dist. 207 v. Int'l Ins. Co., 684 N.E.2d 978, 983 (Ill. App. Ct. 1997).

those integral to the damaged property by reason of *its* design or manufacture or construction."²²⁵

In any event, as explained in *City of Burlington v. Hartford Steam Boiler Inspection & Insurance Co.*,²²⁶ "[t]he majority of courts . . . have found 'latent defect' to be unambiguous in insurance policy provisions."²²⁷ The various definitions given to the term as mentioned above call into question this statement.

"Recent decisions construing th[e latent defect] exclusion have held that defects in design and construction may be latent defects if they are not discoverable upon reasonable inspection."228 For example, in Acme Galvanizing Co. v. Fireman's Fund Insurance Co., 229 an "all-risk" property insurer denied coverage for damage that occurred when a kettle ruptured, allowing the escape of several tons of molten zinc in the galvanizing process to spill onto the surrounding equipment.²³⁰ The California appellate court agreed with the insurer's argument that damage was excluded by the policy exclusion for inherent defect, based upon evidence indicating that a defective weld in the kettle was not detectable through a "reasonable inspection."231 However, in Seward Park Housing Corp. v. Greater New York Mutual Insurance Co., 232 the New York appellate court refused to apply the exclusion to preclude coverage when it addressed a situation where a garage, which did not have columns to properly support its weight, collapsed after a heavy rain. There, although the insurer argued that event was the result a latent defect, the court disagreed, holding that the insurer failed to establish the defect was hidden, i.e., latent, because the number of columns was easily observable.233

E. Mechanical Breakdown

While courts have used varying terminology, "mechanical breakdown" generally means a "functional defect in the moving parts of machinery

^{225.} U.S. West, Inc. v. Aetna Cas. & Sur. Co., 1997 WL 400081, at *5 (4th Cir. July 6, 1997) (Virginia).

^{226. 190} F. Supp. 2d 663 (D. Vt. 2002).

^{227.} Id. at 688. But cf. Markham v. Nationwide Mut. Fire Ins. Co., 481 S.E.2d 349, 356–57 (N.C. Ct. App. 1997).

^{228.} DAVID L. LEITNER ET AL., LAW AND PRACTICE OF INSURANCE COVERAGE LITIGATION § 45:34 (updated July 2012) (citing Derenzo v. State Farm Mut. Ins. Co., 533 N.Y.S.2d 195 (Sup. Ct., Rensselaer County, 1988); Chubb Grp. of Ins. Cos. v. Guyuron, 667 N.E.2d 23 (Ohio 1996); Patton v. McHone, 822 S.W.2d 608, 614 (Tenn. Ct. App. 1991)).

^{229. 270} Cal. Rptr. 405 (Cal. Ct. App. 1990).

^{230.} Id. at 406.

^{231.} Id. at 409.

^{232. 836} N.Y.S.2d 99 (N.Y. App. Div. 2007).

^{233.} Id. at 102-03.

which causes it to operate improperly or cease operating,"²³⁴ but only if the defect results from internal flaws, not external events.²³⁵ Seminal cases *National Investors Fire & Casualty Co. v. Preddy*²³⁶ and *Caldwell v. Transportation Insurance Co.* illustrate the basic framework.²³⁷

1. Mechanical versus Non-Mechanical

In Preddy, the insured sought coverage under an all-risk policy for costs incurred while converting from an underground to overhead heating system.²³⁸ Experts for both sides agreed that the underground system failed because the subsurface ventilation ducts collapsed.²³⁹ Based on expert testimony, the Arkansas Supreme Court described the ventilation ducts "made of fiber board, as opposed to metal; that it is in common usage; that in reality it constitutes a form which holds the concrete in place and 'actually the concrete becomes the shape and form of the duct work to a great extent."240 "Construing the phrase 'mechanical breakdown' in accordance with [its ordinary meaning]," the court had "no hesitancy in holding that the air duct, permanently imbedded in concrete, is not included within the phrase."241 As the court explained, "a mechanical breakdown [refers] to a failure in the working mechanism of the machinery-a functional defect in the moving parts of the equipment which causes the latter to cease functioning or to function improperly."242 Because the air duct collapse was not mechanical under the term's ordinary meaning, the exclusion did not apply.²⁴³

2. External versus Internal

Caldwell also examined the mechanical breakdown exclusion's contours, finding that it did not apply to mechanical failures resulting from external causes.²⁴⁴ In *Caldwell*, the insured well-driller broke a "reasonably brand

235. Caldwell v. Transp. Ins. Co., 364 S.E.2d 1, 3 (Va. 1988).

78

^{234.} Connie's Const. Co., Inc. v. Cont'l W. Ins. Co., 227 N.W.2d 204, 207 (Iowa 1975) (citing Nat'l Investors Fire & Cas. Co. v. Preddy, 451 S.W.2d 457 (Ark. 1970)). See Standard Structural Steel Co. v. Bethlehem Steel Corp., 597 F. Supp. 164, 196–97 (D. Conn. 1984).

^{236. 451} S.W.2d 457 (Ark. 1970).

^{237.} Caldwell, 364 S.E.2d at 3.

^{238.} Preddy, 451 S.W.2d at 458.

^{239.} See id.

^{240.} Id.

^{241.} Id.

^{242.} Id.

^{243.} The court in *Preddy* went on to provide another example of the mechanical/nonmechanical distinction based on its "very common usage of the term": "For example, when the thermostat on a motor vehicle sticks we refer to it as mechanical trouble; but when a tire goes flat we simply refer to it as tire trouble. In considering the phraseology of an insurance policy the common usage of terms should prevail when interpretation is required." *Id.* at 458.

^{244.} Caldwell, 364 S.E.2d at 1-2 (Va. 1988).

new" drilling bar when extracting it from a recently drilled well.²⁴⁵ The insured's uncontroverted expert opinion was that a change in the subsurface rock at 120 feet caused the "drilling bar to depart from a true vertical path," which in turn caused one of its sections to break.²⁴⁶ The insurer argued, among other things, that a provision excluding losses "caused by ... structural or mechanical ... breakdown or failure" should preclude recovery for the drilling bar.²⁴⁷ The Virginia Supreme Court disagreed, reasoning that the mechanical breakdown exclusion "is restricted to losses arising from internal or inherent deficiency or defect, rather than from any external cause."248 According to the court, "[t]hat interpretation is consonant with, rather than repugnant to, the insurance clause [since a] contractor may have recourse against the seller or manufacturer of equipment which fails from inherent defect, but his only protection against damage from external causes is ordinarily the purchase of insurance."249 Since an external cause resulted in the drilling bar's damage, the mechanical breakdown exclusion did not apply.

3. Cause or Effect Cases

Of course, while the definition that *Preddy* and *Caldwell* illustrate is generally accepted, courts applying the mechanical breakdown exception have reached varying, and sometimes inconsistent conclusions, often depending on whether they find that the mechanical breakdown was a cause or effect of the peril.

For example, in *Connie's Construction Co. v. Continental Western Insurance Co.*,²⁵⁰ the Iowa Supreme Court found a mechanical breakdown exclusion inapplicable after concluding that the mechanical failure was an effect, rather than a cause of the damage.²⁵¹ The evidence showed that workmen installed a "cable on the insured crane that was longer than the spool of the drum had the capacity to hold."²⁵² As the crane raised the boom towards its maximum elevation, "the spool became full. . . . [As] the drum continued to turn, the excess cable slipped off the side of the spool, caught in the gears of the crane, and was severed."²⁵³ The boom and its load fell onto a building.²⁵⁴ On appeal to the Iowa Supreme Court, the insurer argued that damage to the crane was excluded because

- 246. See id.
- 247. Id. at 3.
- 248. Id.
- 249. *Id.*
- 250. 227 N.W.2d 204 (Iowa 1975).
- 251. See id. at 205-07.
- 252. See id. at 206.
- 253. See id.
- 254. See id.

^{245.} See id. at 2.

it resulted from a mechanical breakdown, i.e., the severed cable.²⁵⁵ Rejecting that argument, the court explained that the broken cable "was the effect rather than the cause" of the crane's damage.²⁵⁶ Because the damage actually resulted from the employees' negligence-installing too much cable on the spool-which in turn caused the cable to slip and snap, the mechanical breakdown exclusion did not apply.²⁵⁷

Rust Tractor Co. v. Consolidated Constructors, Inc.²⁵⁸ found a mechanical breakdown provision inapplicable for the same reason. Rust Tractor was a somewhat unusual insurance case since it involved a dispute between lessee and lessor, rather than an insured and insurer.²⁵⁹ Nonetheless, it presented the question of whether engine damage resulting from the lessee's negligent failure to add oil fell within an all-risk policy's mechanical breakdown exclusion.²⁶⁰ Finding that it did not, the New Mexico Court of Appeals reasoned that "[m]echanical breakdown . . . can be the cause of loss or the effect of the loss itself."261 According to the court, under that case's facts, the "negligent failure to maintain oil level" caused the engine failure; thus, even if the negligence resulted in intervening mechanical breakdown, the loss was covered.²⁶²

In Little Judy Industries, Inc. v. Federal Insurance Co.,²⁶³ on the other hand, the Florida District of Court of Appeal reached the opposite conclusion, finding that mechanical breakdown occasioned by negligent maintenance was nonetheless excluded. In Little Judy, the insured sued its insurer to recover under an all-risk policy for loss or destruction to a plane engine that overheated mid-flight.²⁶⁴ The evidence developed in the trial court demonstrated that the engine damage resulted from negligent maintenance.²⁶⁵ On review, the court affirmed the trial court's decision that the mechanical breakdown exclusion precluded coverage,²⁶⁶ reasoning that, while "the failure was traceable to negligen[t] ... repair," that "did not make it other than a mechanical failure."267 In a passage later echoed by Arawak Aviation Inc. v. Indemnity Insurance Co. of North America,268 the court explained that "many, if not most instances of mechanical

- 259. Id. at 801.
- 260. Id.
- 261. Id. at 802. 262. Id.
- 263. 280 So. 2d 14 (Fla. Dist. App. 1973).
- 264. See id. at 14. 265. See id.
- 266. See id.
- 267. Id. at 15.
- 268. 285 F.3d 954, 959 (11th Cir. 2002).

^{255.} See id. at 207.

^{256.} See id.

^{257.} See id. at 206-07.

^{258. 526} P.2d 800 (N.M. Ct. App. 1974).

failure of an engine c[an] be attributed to [negligence]," but that does not justify avoiding the exclusion where the property damage resulted from mechanical breakdowns.²⁶⁹

4. Ensuing Loss Exception

The decision in Lake Charles Harbor & Terminal District v. Imperial Casualty & Indemnity Co.270 examined "mechanical breakdown" exclusion's ensuing loss exception, holding that losses ensuing from an excluded mechanical breakdown were nonetheless covered under the insured's all-risk policy.²⁷¹ In *Lake Charles Harbor*, the insured sought coverage for damage to a ship loader (a four-legged machine similar to a crane).²⁷² The ship loader's deck housed a boom, essentially an extendable conveyor belt that loaded and unloaded ship cargo.²⁷³ A motor inside the ship loader extended the boom when it was time to load/unload ships and recalled it when the loading was done.²⁷⁴ Although the ship loader was operating normally, it suffered damage when a worn-out cable in the boom caused the boom to crash back into the ship loader's base.²⁷⁵ The insurer argued that the ship loader's damage should be excluded under the policy's mechanical breakdown exclusion, which excluded losses "'caused by . . . [m]echanical or machinery breakdown; unless an insured peril ensues, and then only for the actual loss or damage caused by the ensuing peril."²⁷⁶ The insured argued that, even if the mechanical breakdown exclusion precluded coverage for the boom's losses, the ship loader's damage fell within the exclusion's ensuing loss exception.²⁷⁷ Relying heavily on Couch's treatise on insurance and the insured's expert's interpretation, the court concluded that the mechanical breakdown exclusion precluded coverage for routine losses, while the ensuing loss exception restored coverage for catastrophic losses resulting from mechanical breakdown.²⁷⁸ Applying this interpretation, the court held that the mechanical breakdown exclusion precluded the costs associated with replacing the broken cables and losing the use of the boom during repairs; but because resulting damage to the ship loader caused by the boom's failure was catastrophic, it fell within the exclusion's ensuing loss exception.²⁷⁹

^{269.} Little Judy, 280 So. 2d at 15.

^{270. 670} F. Supp. 189 (W.D. La. 1987), aff'd, 857 F.2d 286 (5th Cir. 1988).

^{271.} Id. at 194–95.

^{272.} See id. at 190.

^{273.} See id.

^{274.} Id.

^{275.} *Id.* at 191. 276. *Id.* On appeal, the Fifth Circuit described this (fairly common) provision as "selfcontradictory gibberish." *Id.* at 288.

^{277.} Id. at 192.

^{278.} See id. at 194.

^{279.} See id. at 194-95.

V. CONCLUSION

Exclusions from coverage for wear and tear, deterioration, inherent vice, latent defect, and mechanical breakdown do not always operate in a manner that comports to intuition. Courts have come to varying conclusions about whether a particular loss occurred as a result of a covered risk or an excluded inevitability. Indeed, the coverage determination under these wear and tear exclusions are complex, requiring multiple layers of analysis before an ultimate decision can be reached:

- 1. Was the loss fortuitous?
- 2. Did the insured know of the defect affecting the damaged property?
- 3. Did the insured take an intermediary step to create the loss?
- 4. Was the damage inevitable as part of the normal operation of the property?

This analysis is further complicated by the ensuing loss exception to certain wear and tear exclusions, providing for an opportunity to reinstate coverage for a loss that may otherwise have been excluded. To navigate through the coverage analysis, both insurers and insureds alike must be mindful not only of the loss at issue and the cause of the loss, but also the applicable jurisdiction and policy language.