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FROM CHEM-DYNE TO BURLINGTON NORTHERN: APPORTIONING CLEANUP COSTS IN THE NEW ERA OF JOINT AND SEVERAL CERCLA LIABILITY

Michael K. Foy, Santa Clara University
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Abstract

Though not explicitly endorsed in the statute’s text, courts have not hesitated to impose joint and several liability on defendants sued by the federal government under CERCLA, an environmental statute intended to enable cleanup of contaminated land and to impose liability on parties responsible for that contamination. However, because CERCLA cleanups cost many millions of dollars, CERCLA defendants vehemently contest joint and several liability by arguing the harm they caused is divisible from the broader contamination. Courts are ostensibly willing to accept these divisibility arguments whenever there is a “reasonable basis” for apportioning; yet in practice, nearly all courts render divisibility arguments untenable through their extreme reluctance to acknowledge this “reasonable basis” has been satisfied.

In Burlington Northern, the U.S. Supreme Court confronted this high-stakes and controversial issue. The Burlington Northern opinion upheld a district court’s holding that a reasonable basis for divisibility existed, despite the fact that its apportionment was based on factors more simplistic and tenuous than circuit courts believed necessary. Though this decision is of obvious importance, courts and commentators attempting to interpret it have reached discordant conclusions. This article solves these interpretational difficulties by extrapolating from Justice Stevens’ cryptically-worded opinion to articulate the standard that governs post-Burlington Northern apportionment. It observes striking parallels between Burlington Northern and the Restatement (Second) of Torts § 433A - long recognized as the “starting point” for CERCLA apportionment analysis - and argues Burlington Northern implicitly held that the Restatement is the ending point as well.

Because the Restatement (Second) § 433A endorses apportionment based on imprecise calculations, questions linger regarding the appropriate procedure to account for these calculation errors. This article proposes those uncertainties be quantified through margins of error, with defendants’ liabilities set at that margin’s uppermost point. Through this approach, Burlington Northern tempers the harsh standard for apportionment previously imposed on CERCLA defendants. However, by quantifying calculation uncertainties through upwardly-adjusted margins of error this approach furthers CERCLA’s ultimate goal of compensating the government for its cleanup expenditures by preventing defendants from using this uncertainty to their advantage.
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I. INTRODUCTION

This article interprets a recent United States Supreme Court decision addressing the apportionment of liability under CERCLA, a statute notorious for reducing frustrated courts to hoping that “if they stare at [it] long enough, it will burn a coherent afterimage on the brain.” Justice Stevens’ apportionment holding in *Burlington Northern & Santa Fe Railway Co. v. United States* reversed an apparent consensus among the federal circuit courts, creating important-but-uncertain ramifications that are “hotly debated” by courts and commentators. By reading between the lines of the opinion’s unforthcoming language, this article guides the numerous courts and practitioners searching for the elusive standard that governs post-*Burlington Northern* liability apportionment under CERCLA.

The United States Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act in 1980. Through CERCLA, Congress sought to enable the federal government to respond effectively to environmental problems caused by hazardous waste disposal, and to ensure the costs of these responses were ultimately borne by the parties that necessitated them. Effectuating these goals has caused much frustration for courts and for the Environmental Protection Agency

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6 See id.; see also Burlington N. & Santa Fe Ry. Co. v. United States, 129 S. Ct. 1870, 1874 (2009) (quoting Consol. Edison Co. of N.Y. v. UGI Util., Inc., 423 F.3d 90, 94 (2d Cir. 2005)) (“CERCLA was designed to promote the timely cleanup of hazardous waste sites and to ensure that the costs of such cleanup efforts were borne by those responsible for the contamination.”). When interpreting these policies, courts adopt a liberal approach: “since CERCLA is a remedial statute, it[ ] should be construed broadly to avoid frustrating the federal purpose.” United States v. Carolina Transformer Co., 978 F.2d 832, 837-38 (4th Cir. 1992).
(EPA) alike; this is largely because CERCLA’s text is “hastily drafted” and accompanied by a legislative history “shrouded with mystery.”

Despite this inept guidance, courts interpreting CERCLA’s liability scheme agree unanimously that CERCLA allows imposition of joint and several liability on parties potentially responsible for contaminating a CERCLA site. However, this consensus rapidly evaporates when courts address the burden parties must meet to avoid joint and several CERCLA liability through liability apportionment.

The Supreme Court of the United States recently confronted this apportionment issue in *Burlington Northern*, where it upheld the Eastern District of California’s apportionment of liability, despite its being based on calculations that would not satisfy the strict approach to apportionment applied by most circuit courts. Most courts and commentators interpret *Burlington Northern* to ease the burden CERCLA defendants must meet to apportion would-be joint and several liability.

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7 See, e.g., Artesian Water Co. v. Gov’t of Newcastle County, 851 F.2d 643, 848 (3d Cir. 1988) (“CERCLA is not a paradigm of clarity or precision.”).


9 Dedham Water Co. v. Cumberland Farms Dairy, Inc., 805 F.2d 1074, 1081 (1st Cir. 1986).

10 See United States v. Chem-Dyne Corp., 572 F. Supp. 802 (S.D. Ohio 1983) (reviewing CERCLA’s text and legislative history and concluding that it allows, but does not require, joint and several liability). The holding of *Chem-Dyne* has been adopted by every circuit court that has addressed joint and several CERCLA liability. See *Burlington N.*., 129 S. Ct. at 1881. (citing *In re Bell Petroleum Servs.*, Inc., 3 F.3d 889, 901-02 (5th Cir. 1993); United States v. Alcan Aluminum Corp., 964 F.2d 252, 268 (3d Cir. 1992); O’Neil v. Picillo, 883 F.2d 176, 178 (1st Cir. 1989); United States v. Monsanto Co., 858 F.2d 160, 171-73 (4th Cir. 1988)).

11 Compare, e.g., United States v. A & F Materials Co., 578 F. Supp. 1249 (S.D. Ill. 1984) (interpreting CERCLA to allow equitable considerations to be used in an apportionment analysis), with, e.g., *O’Neil*, 883 F.2d at 176 (adopting a strict approach to apportionment that ignores equitable considerations).


13 *Burlington N.*., 129 S. Ct. 1870.

14 The District Court’s apportionment calculations relied heavily upon the size of the land that the Defendant owned, and the period of time it occupied that land. See id. at 1876-77. In contrast, most lower courts required evidence that traced the chemicals from the time they left defendant’s possession. See, e.g., *O’Neil*, 883 F.2d at 179-80.

15 See, e.g., Appleton Papers, Inc. v. George A. Whiting Paper Co., No. 08-C-16, 2009 WL 3931036, at *2 (E.D. Wis. Nov. 18, 2009) (noting that *Burlington Northern* “eased the
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statement, however, the decision’s full scope and ramifications linger unanswered. Specifically, the opinion states there must be a “reasonable basis” for apportionment, yet does not elucidate precisely what constitutes a reasonable basis, or from where that standard derives. Moreover, the District Court used a “margin of error” in its apportionment calculations, but Justice Stevens’ opinion does not explain whether a margin of error approach was appropriate solely because of the case’s unique facts or, conversely, whether a margin of error should routinely be used by courts apportioning liability.

This article answers numerous questions raised by Burlington Northern by proposing interpretations that are consistent with congressional intent, fairness-related policy concerns, and the decision itself. Part II of this article explains CERCLA’s statutory background, discusses the milieu of apportionment decisions prior to Burlington Northern, and examines the Burlington Northern decisions in the lower courts and the U.S. Supreme Court. Part III presents several existing questions left unanswered, and identifies several new questions raised by the decision. In Part IV, this article analyzes these uncertainties through the lens of the congressional goals that form CERCLA’s backdrop, and reasonable extrapolations from Justice Stevens’ opinion. This culminates in Part V, which proposes Burlington Northern be viewed as a return to the apportionment principles

17 See id. The opinion cites section 433A of the Restatement (Second) of Torts, which uses the term “reasonable basis.” Id. at 1881 (citing RESTATEMENT (SECOND) OF TORTS § 433A(1)(b) (1963-64)). However, Justice Stevens refers to the Restatement (Second) as merely the “starting point” in an apportionment analysis, leaving it unclear whether the “reasonable basis” in his opinion has the same meaning as does “reasonable basis” under the Restatement (Second). See id. at 1881 (quoting United States v. Hercules, Inc., 247 F.3d 706, 717 (8th Cir. 2001)).
19 See generally Burlington N., 129 S. Ct. at 1883 (holding that the District Court’s calculation errors were “harmless” due to its use of a margin of error to arrive at the correct apportionment allocation).
20 See infra Part II.A.
21 See infra Part II.B.1.
22 See infra Part II.B.2.
23 See infra Part III.
24 See infra Part IV.
of the Restatement (Second) of Torts. Moreover, this article proposes, Burlington III repudiates the myriad decisions that paid lip-service to the Restatement (Second) while imposing a standard that was actually much harsher. Part V also proposes an interpretation that endorses the margin of error approach to apportionment, and preserves a possible future role for the Restatement (Third) of Torts in apportionment analysis under CERCLA.

II. BACKGROUND

CERCLA provides a “backward-looking” approach for remedying existing pollution caused by hazardous waste disposal; it is intended to complement the forward-looking Resources Conservation and Recovery Act (RCRA), enacted in 1976, which seeks to prevent future pollution caused by such disposal. Unlike RCRA, CERCLA applies retroactively to address existing contamination. In practice, RCRA and CERCLA collectively prevent unfettered contamination of the land, ostensibly sealing the “last remaining loophole in environmental law.” CERCLA was drafted to comprehensively regulate the processes through which the President of the United States, usually acting through the Environmental Protection

25 See generally RESTATEMENT (SECOND) OF TORTS (1965) [hereinafter RESTATEMENT (SECOND)].
26 See infra Part V.
28 See infra Part V.
33 H.R. Rep. No. 94-1491, at 4 (1976), reprinted in 1977 U.S.C.C.A.N. 6238, 6241 (referring to the unregulated state of pre-CERCLA-and-RCRA ground pollution). In enacting RCRA, Congress noted that heightened stress on the land was actually caused by other environmental laws; it stated that greater amounts of solid wastes were generated “as a result of the Clean Air Act, the Water Pollution Control Act, and other Federal and State laws respecting . . . the environment . . . .” 42 U.S.C. § 6901(b)(3) (2006) (emphasis added, internal citations omitted).
Agency (EPA), identifies contaminated sites, cleans them, funds their cleanup, and imposes liability on their contaminators.

A. Overview of CERCLA’s Statutory Framework

Governmental authority to act under CERCLA accrues when a hazardous substance “is released, or there is a substantial threat of such a release into the environment.” Hazardous substances, for CERCLA purposes, are defined broadly to encompass any substance deemed hazardous under RCRA, the Clean Air Act, or the Clean Water Act. Further, where a substance falls outside of this definition, CERCLA still applies if “there is a release or threat of release into the environment of any pollutant or contaminant which may present an imminent and substantial danger to the public health or welfare . . . .” Additionally, the release must be from a “facility,” broadly defined as any building or structure, as well as “any site or area where a hazardous substance has been deposited, stored . . . or otherwise come to be located . . . .”

1. Federal Authority to Identify and Clean Polluted Sites

Prior to cleaning contaminated sites, the EPA, as “the primary enforcer of CERCLA,” was required to develop the National Contingency Plan (NCP). This plan established procedures and standards for government responses to hazardous substance releases, specified methods for discovering and investigating contaminated facilities, and created processes for determining the appropriate removal and remedial action for contaminated sites. Aside from its independent investigations, the EPA

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37 See id. § 9601(14). Even if not listed as hazardous under these acts, the EPA Administrator may list CERCLA-specific hazardous substances. See id. Any amount of hazardous substance, however negligible, will trigger application of CERCLA. See United States v. Alcan Aluminum Corp., 964 F.2d 252, 261 (3d Cir. 1992).
39 42 U.S.C. § 9601(9)(A)-(B). Congress explicitly excluded consumer products and vessels from this broad definition. See id.
40 See Fuller, supra note 34, at 229.
41 See 42 U.S.C. § 9605(a). The EPA must regularly update this plan. See id.
42 See 42 U.S.C. § 9605(a)(1), (3). Notably, the NCP substantively affects the allocation of liability under CERCLA, as any plaintiff, including the EPA, seeking to
discovers contamination through information provided by polluters themselves via CERCLA’s requirement that managers of facilities notify the EPA when they have knowledge of a hazardous substance release. Based on procedures set forth in the NCP, the EPA maintains the National Priorities List, which identifies through consideration of “the relative potential of sites to pose a threat to human health or the environment” the known releases or threatened releases requiring the most urgent attention.

Section 104 of CERCLA empowers the federal government to perform contamination-eliminating actions at sites where a release or threatened release of a hazardous substance has occurred by implementing the methods set forth in the NCP. In addressing contamination stemming from the release or threatened release, the government is authorized to engage in removal and remedial actions. Removal actions entail “cleanup and removal of released hazardous substances from the environment . . . the disposal of removed material or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare.” In contrast, remedial actions encompass “actions consistent with permanent remedy taken instead of or in addition to removal actions . . . .” Accordingly, the difference is primarily one of timeframe: Removal actions concern short-term abatement of toxic waste hazards, while remedial actions pertain to long-term restoration of environmental quality.

recover funds expended during clean-up of a contaminated site may only recover expenditures that are consistent with the NCP. See id. § 9607(a)(4)(A)-(B).

See id. § 9603(a). Failure to report a release subjects the person in charge of the releasing facility to potential civil and criminal penalties. See id. § 9603(b).

See id. § 9605(a)(8)(B) (“[T]he President shall list as part of the plan national priorities among the known releases or threatened releases throughout the United States and shall revise the list no less often than annually.”).


See 42 U.S.C. § 9604(a)(1). Even where the released substance is not hazardous, federal response authority will accrue if the release or threatened release is of a pollutant or contaminant that “may present an imminent and substantial danger to the public health or welfare . . . .” Id.

Id. § 9604(a)(2).

Id. § 9601(23).

Id. § 9601(24) (emphasis added).

See City of N.Y. v. Exxon Corp., 633 F. Supp. 609, 614 (S.D.N.Y. 1986); see also State of N.Y. v. Shore Realty Corp., 759 F.2d 1032, 1040 (2d Cir. 1985) (“[CERCLA] distinguishes between two kinds of response: remedial actions - generally long-term or permanent containment or disposal programs - and removal efforts - typically short-term cleanup arrangements.”). Though remedial actions possess the obvious advantage of permanence, removal actions are nevertheless an important tool due to their aptitude for
2. **Federal Authority to Impose Liability for Cleanup Costs**

The EPA has authority to determine who must perform the cleanup: It may itself clean the contamination and later sue for restitution or, alternatively, may direct one or more potentially responsible parties to decontaminate the site.\(^{51}\) The former option allows rapid action, as the EPA is expressly granted authority to perform a cleanup; it can therefore forego prolonged litigation with third parties until after cleanup.\(^{52}\) When the EPA performs a cleanup, CERCLA allows the government to recover only those costs consistent with the NCP,\(^{53}\) but eases that requirement by presuming government cleanups to be NCP-harmonious.\(^{54}\) The latter option is available only after the EPA determines there may be an imminent and substantial endangerment to public health or welfare, or the environment, due to a release or threatened release.\(^{55}\) When the EPA finds an imminent endangerment, it may pursue either “civil judicial injunctive actions [or] unilateral EPA administrative orders.”\(^{56}\) Finally, the EPA may allow the responsible parties to voluntarily clean the site when it determines “such quickly addressing “immediate threats to public welfare or to the environment.” Arnold W. Reitze, Jr. et al., *Cost Recovery by Private Parties Under CERCLA: Planning a Response Action for Maximum Recovery*, 27 TULSA L.J. 365, 394-95 (1992).

\(^{51}\) Compare 42 U.S.C. § 9607(a)(4)(A) (imposing liability on certain enumerated classes of defendants for costs incurred by the government through its own cleanup efforts), with id. § 9606 (allowing the U.S. President, via the EPA, to issue cleanup orders or to require the Attorney General to seek such an order from a district court).

\(^{52}\) See 42 U.S.C. § 9604(a)(1)(B).

\(^{53}\) Id.

\(^{54}\) See, e.g., United States v. Ne. Pharm. & Chem. Co., 810 F.2d 726, 747 (8th Cir. 1985); United States v. Hardage, 982 F.2d 1436, 1422 (10th Cir. 1992) (“[T]he burden of proof of inconsistency with the NCP rests with the defendant when the government seeks recovery of its costs.”).

\(^{55}\) 42 U.S.C. § 9606(a).

\(^{56}\) Steven Ferrey, *Inverting the Law: Superfund Hazardous Substance Liability and Supreme Court Reversal of All Federal Circuits*, 33 WM. & MARY ENVTL. L. & POL’Y REV. 633, 642 (2009) (summarizing 42 U.S.C. § 9606(a)-(b)). Once an administrative order is issued, compliance is immensely incentivized – a party who willfully violates or refuses to comply with such an order is subject to a fine of up to $25,000 for each day of noncompliance. 42 U.S.C. § 9606(b)(1); see Wagner Elec. Corp. v. Thomas, 612 F. Supp. 736, 738 F. (D. Kan. 1985) (recognizing Congress’s intent that each enforcement option would carry its own incentive for compliance by a responding party). When an administrative order is met with an uncooperative party, the EPA may finance its own cleanup and then sue the noncompliant party for its expenses, and for punitive treble damages. 42 U.S.C. § 9607(c)(3). Similarly, where the EPA elects to pursue a court-issued injunction, compliance is incentivized by the threat of contempt sanctions for uncooperativeness. See Wagner Elec., 612 F. Supp at 738 (“Refusal to comply with a judicial cleanup order, of course, would carry a contempt sanction.”).
CERCLA liability attaches to four categories of Potentially Responsible Parties (PRPs) that are inculpated based on their relationship with the contaminated site. These PRPs include both the current owners of the site, and any prior owners who owned the facility during a time when hazardous substances were disposed thereon. Additionally, parties are liable as arrangers if they arranged for disposal or treatment of hazardous wastes located at the contaminated facility. Finally, parties are liable as transporters if they accepted hazardous substances to transport them to disposal or treatment facilities, and their activities caused a release or threatened release of that hazardous substance. Collectively, these four categories cut a broad swath of liability, “extending to the several links in the chain of waste disposition, origination through final placement, from which environmental pollution is generated.”

PRPs, which are subject to extensive liability, are not equipped with an analogously vast collection of defenses. Nevertheless, PRP liability is not absolute; rather, CERCLA makes available three defenses to PRPs. A PRP may avoid liability by demonstrating the release of hazardous substances was caused by an act of God or by an act of war. Additionally, PRPs may escape liability by proving the contamination was caused by a third party with whom the PRP had no relationship (contractual or otherwise), and the PRP exercised due care with respect to the substance

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58 See 42 U.S.C. § 9607(a).
59 42 U.S.C. § 9607(a)(1). Owner liability is independent of causation, and does not require the government to demonstrate the current owner contributed to the contamination. See State of N.Y. v. Shore Realty Co., 759 F.2d 1032, 1043-46 (2d Cir. 1985).
60 42 U.S.C. § 9607(a)(2).
63 B.F. Goodrich Co. v. Murtha, 754 F. Supp. 960, 963 (D. Conn. 1991) (citing State of N.Y. v. Gen. Elec., 592 F. Supp. 291, 297 (N.D.N.Y. 1984)). Courts have explored the limits of these PRP categories through inquiry into who may be considered a PRP under CERCLA, and have generally found that liability extends broadly to, for example, individual officers of PRP corporations. See United States v. Carolina Transformer Co., 978 F.2d 832, 837-38 (4th Cir. 1992) (holding the relevant inquiry is whether the officer in question had the ability to control the release, not whether the officer actually controlled it).
64 See infra Part II.B (examining the breadth of CERCLA liability).
66 See 42 U.S.C. § 9607(b).
67 Id. § 9607(b)(1).
68 Id. § 9607(b)(2).
itself and with respect to the foreseeable effects of the third party’s dealings with that substance.\(^69\) In 1986, through the Superfund Amendments and Reauthorization Act,\(^70\) Congress created an additional defense that purportedly shields from liability “innocent landowners” who unwittingly purchase contaminated land, and do not contribute to further contamination.\(^71\) This expanded the “third party” defense by allowing purchasers to escape liability who, due to their sales contract with the prior landowners, were previously unable to satisfy the “no relationship” requirement of that defense.\(^72\)

B. Joint and Several CERCLA Liability.

PRPs may be held liable for up to the entire cost of cleanup.\(^73\) Although previously-drafted references to joint and several liability were stricken from the final draft of CERCLA,\(^74\) courts have uniformly held the statute allows it.\(^75\) The Chem-Dyne Corp. v. United States Court extensively

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\(^69\) See 42 U.S.C. § 9607(b)(3). Due to the strict requirements of this defense, and particularly the requirement of no contractual relationship, it applies primarily to atypical circumstances, such as when “contamination [is] caused by a vandal or an upgradient property owner.” Craig N. Johnston, Current Landowner Liability Under CERCLA: Restoring the Need for Due Diligence, 9 FORDHAM ENVTL. L.J. 401, 401 (1998).


\(^71\) See 42 U.S.C. § 9601(35).

\(^72\) See 42 U.S.C. § 9601(35) (excluding contracts for sale of previously contaminated land from CERCLA’s definition of “contract”).

\(^73\) See United States v. Chem-Dyne Corp., 572 F. Supp. 802 (S.D. Ohio 1983). The correctness of the Chem-Dyne Court’s application of joint and several liability accuracy was “subsequently confirmed as correct by Congress . . . .” United States v. Monsanto Co., 858 F.2d 160, 171 n.23 (4th Cir. 1988).

Generally, joint and several liability is appropriate whenever a “joint tort” has occurred. See William L. Prosser & W. Page Keeton, Prosser & Keeton on the Law of Torts 322-23 (5th ed. 1984). A joint tort is present where the defendants acted concertedly, where a common duty was owed the plaintiffs by defendants, where there was a special relationship among defendants, or where acts of independently-acting defendants combine to create the harm at issue. See 1 F. Harper & F. James, The Law of Torts § 10.1 692-94 (1956).

\(^74\) See Chem-Dyne, 772 F. Supp. at 807 (“The fact that the term joint and several liability was deleted from a prior draft of the bill . . . in and of itself, is not dispositive of the scope of liability under CERCLA.”).


CERCLA liability is not only joint and several, but also strict. See United States v. Atl.
analyzed the appropriateness of imposing joint and several liability on PRPs, and recognized CERCLA liability was governed by “traditional and evolving principles of common law.” With that guidance in mind, the Court surmised that these “principles” referred to federal principles of common law, since CERCLA addressed a “complex problem of national magnitude involving uniquely federal interests.” Turning to relevant federal common law, the Court observed that another federal environmental statute, the Clean Water Act, was widely interpreted to impose joint and several liability on its violators. The Court, however, eschewed a blanket adoption of the Clean Water Act’s approach to joint and several liability, and instead embraced a refracted version of the approach advanced in the Restatement (Second). This Restatement-influenced rule presumes each PRP jointly and severally liable for the entire cost of cleanup. However, this presumption is rebuttable because under the Restatement (Second) and common law tradition, where “there is a reasonable basis for division according to the contribution of each [PRP], each is subject to liability only for the portion of the total harm that he has himself caused.”

1. Decisions Addressing Apportionment of CERCLA Liability

By demonstrating their contribution to the contamination is divisible

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76 Chem-Dyne, 772 F. Supp. at 807-08.
77 Id. at 808 (emphasis added).
79 RESTATEMENT (SECOND) (1965); see Chem-Dyne, 572 F. Supp. at 809-11 (S.D. Ohio 1983); see also Lynda J. Oswald, New Directions in Joint and Several Liability Under CERCLA?, 28 U.C. DAVIS L. REV. 299, 328 (1995) (describing the Chem-Dyne Court’s application of the Restatement (Second) approach due to its “hesita[nce] to adopt a rule that would impose joint and several liability in every instance . . . .”).
81 Id. (citing RESTATEMENT (SECOND) §§ 433A, 881 (1976)).
from the entire contamination, PRPs may avoid joint and several liability. 82 Divisibility is a concept deeply-rooted in post-Chem-Dyne CERCLA jurisprudence, 83 and is based on the Restatement (Second) approach that Chem-Dyne interpreted as governing apportionment. 84 Under the Restatement (Second), harm is divisible when, and only when, there are either distinct harms, 85 or there is a single harm with a reasonable basis for determining each party’s contribution to that harm. 86 The party seeking to avoid joint and several liability bears the burden of proving divisibility. 87

The Fourth and First Circuits in United States v. Monsanto Co. 88 and O’Neil v. Picillo, 89 respectively, applied this standard; these holdings collectively imposed an exacting burden on PRPs seeking apportionment. 90 In Monsanto, the Fourth Circuit rejected a PRP’s assertion that liability could be divided based on amount of substance that the PRP contributed, 91 holding that quantity of emission was insufficient without proving quality of the damages caused by those emissions. 92 In O’Neil, the First Circuit rejected a PRP’s proposed apportionment 93 and suggested that, in situations where pollutants from multiple PRPs have intermingled, a divisibility showing requires “specific evidence documenting the whereabouts of [the PRP’s] waste at all times after it left their facilities . . . .” 94 The Court termed this the “stringent burden placed on [PRPs] by

83 See Burlington N. & Santa Fe Ry. Co. v. United States, 129 S. Ct. 1870, 1880-81 (2009) (citing Chem-Dyne, 572 F. Supp. 802). The Supreme Court observed that Chem-Dyne is universally followed, and that under its approach, PRPs are not jointly and severally liable if they can demonstrate the harm is divisible. See id.
84 See United States v. Hercules, Inc., 247 F.3d 706, 717 (8th Cir. 2001) (“The universal starting point for divisibility of harm analysis in CERCLA cases is the Restatement (Second) of Torts . . . .”).
85 RESTATEMENT (SECOND) § 433A(1)(a) (1965).
86 See id. § 433A(1)(b).
87 See Chem-Dyne, 772 F. Supp. at 810 (citing id. § 433B).
88 United States v. Monsanto Co., 858 F.2d 160 (4th Cir. 1988).
90 See Monsanto, 858 F.2d at 171-73; O’Neil, 883 F.2d at 179-80. This rigorous standard reflected the widespread judicial belief that CERCLA liability should be liberally construed. See, e.g., B.F. Goodrich Co. v. Murtha, 958 F.2d 1192, 1198 (2d Cir. 1992); United States v. Mottolo, 605 F. Supp. 898, 902 (“[T]he remedial intent of CERCLA requires a liberal statutory construction . . . .”).
91 See Monsanto, 858 F. 2d at 171-73.
92 See id. at 172 & n.25 (“[V]olumetric apportionment based on the overall quantity of waste, as opposed to the quantity and quality of hazardous substances contained in the waste . . . . ma[kes] little sense.”).
93 O’Neil, 883 F.2d at 179-80.
94 Id. at 182.
Congress.” Due to these and similar holdings, the period following Chem-Dyne was characterized by joint and several liability that was, in practical effect, unavoidable.

Ensuing decisions sought to clarify the nature of the showing required to demonstrate that apportionment is possible. Regarding the threshold question of theoretical amenability to apportionment, the Second Circuit held in Alcan Aluminum that contamination is not per se indivisible merely because sources of the contamination have commingled. In re Bell Petroleum Services confronted the degree of sureness required for apportionment, holding that only a reasonable, rather than certain, basis is necessary. Notwithstanding these apportionment-friendly decisions, courts continued to treat apportionment as “a very difficult proposition.” Furthermore, courts imposed stringent standards on the types of evidence supporting apportionment, requiring evidence be “concrete and specific.” Courts ascribed this burden to congressional intent, since one of CERCLA’s objectives is ensuring the government is

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95 Id. at 183.
96 See, e.g., City of N.Y. v. Exxon Corp., 766 F. Supp. 177, 191-92 (citing Monsanto 858 F.2d at 169).
97 See Oswald, supra note 79, at 333 (“[T]he practical effect of the majority approach [to divisibility] has been blanket application of joint and several liability for CERCLA cleanup costs.”).
98 See generally United States v. Alcan Aluminum Co., 990 F.2d 711 (2d Cir. 1993); In re Bell Petroleum Servs., 3 F.3d 889 (5th Cir. 1993). When evaluating divisibility of harm, courts generally perform a two-stage inquiry: First they determine whether the harm is theoretically capable of apportionment, then they consider whether the harm is actually capable of apportionment based on the evidence presented. See Frank Prager, Apportioning Liability for Cleanup Costs Under CERCLA, 6 STA. ENVTL. L.J. 198, 213 (1987) (observing that it is possible for a harm to be theoretically capable of apportionment, while not being actually capable of apportionment due to the circumstances of the case).
99 See Prager, supra note 98, at 213 (explaining the difference between theoretical apportionment and actual apportionment, and congressional recognition of this difference).
100 Alcan Aluminum, 990 F.2d 711.
101 See id. at 722 (“[C]ommingling is not synonymous with indivisible harm, and Alcan should have the opportunity to show that the harm . . . was capable of reasonable apportionment.”).
102 Bell Petroleum, 3 F.3d 889.
103 Id. at 903 (stating apportionment may be proper even where a PRP’s contribution to the harm cannot be proved to an absolute certainty). The Court further noted that “evidence sufficient to permit a rough approximation is all that is required under the [Restatement (Second)].” Id. at 904 n.19.
104 Control Data Corp. v. S.C.S.C. Corp., 53 F.3d 930, 934 n.4 (8th Cir. 1995); see also United States v. Hercules, Inc., 247 F.3d 706, 716 (8th Cir. 2001).
105 Hercules, 247 F.3d at 718 (citing United States v. Alcan Aluminum Corp., 892 F. Supp. 648, 657 (M.D. Pa. 1995)).
fully compensated for its cleanup costs.\(^{106}\)

Despite this apportionment-hostile climate, a few courts applied a more lenient approach that allowed equitable considerations to influence the apportionment inquiry.\(^{107}\) In *United States v. A & F Materials Co.*,\(^{108}\) the Southern District of Illinois held that joint and several liability was appropriate under CERCLA, but rejected a strict application of the *Restatement (Second)* approach; it instead held that certain equitable factors could be considered in the apportionment analysis.\(^{109}\) Similarly, the Northern District of Illinois rejected by-the-book application of the *Restatement (Second)* approach, reasoning that judicial discretion is necessary to avoid inequity.\(^{110}\) Accordingly, it held “[t]he appropriate approach to the problem of liability in cases such as the present one is that taken by the A & F court.”\(^{111}\) The Supreme Court recently discredited this approach,\(^{112}\) however, equitable considerations survive in section 113(f) of CERCLA.\(^{113}\) Section 113(f), along with section 107(a)(4)(B),\(^{114}\) enables PRPs unable to assert a statutory defense with a means to avoid liability for the entire cleanup by seeking contribution from other PRPs.\(^{115}\) Thus inequities created by strict, joint and several liability are alleviated through

\(^{106}\) See *United States v. Reilly Tar & Chem. Co.*, 546 F. Supp 1100, 1112 (“Congress intended that those responsible for problems caused by the disposal of chemical poisons bear the costs and responsibility for remediating the harmful conditions they created.”); see also *Memphis Zane May Assocs. v. IBC Mfg. Co.*, 952 F. Supp. 541, 548 (W.D. Tenn. 1996) (“By design, this task [of demonstrating a reasonable basis] is difficult.”).


\(^{108}\) Id.

\(^{109}\) Id. at 1256 (reviewing the legislative history and concluding that a rigid application of the *Restatement (Second)* approach to joint and several liability is inappropriate).

\(^{110}\) *Allied Corp. v. Acme Solvents Reclaiming, Inc.*, 691 F. Supp. 1100, 1117 (N.D. Ill. 1988) (observing that Congress was concerned with the inequities of joint and several CERCLA liability, and therefore did not intend to forbid courts from using equitable considerations in their apportionment analysis).

\(^{111}\) Id. at 1118.

\(^{112}\) See *Burlington N. & Santa Fe Ry. Co. v. United States*, 129 S. Ct. 1870, 1882 n.9 (2009) (“Equitable considerations play no role in the apportionment analysis . . . .”).


\(^{114}\) *Id.* § 9607(a)(4)(B). Under section 9607(a)(4)(B) of CERCLA, any person who incurs cleanup costs that are necessary and consistent with the NCP may seek recovery of those costs from PRPs. *Id.* Based on the plain meaning of “any person,” the U.S. Supreme Court interpreted this to apply to PRPs themselves, thus PRPs may recover cleanup costs expended in excess of their actual contribution to the contamination. See *United States v. Atl. Research Corp.*, 551 U.S. 128, 136 (2007) (“[T]he plain language of subparagraph (B) authorizes cost-recovery actions by any private party, including PRPs.”); see also *Amcal Multi-Hous., Inc. v. Pac. Clay Prods.*, 518 F. Supp. 2d 1194, 1195 (C.D. Cal. 2007).

section 113(f) and the “similar and somewhat overlapping remedy in [section] 107.” ¹¹⁶

2. Burlington Northern: From the Eastern District of California to the Supreme Court of the United States

The U.S. Supreme Court recently confronted the issue of apportioning liability among PRPs in Burlington Northern & Santa Fe Railway Co. v. United States. ¹¹⁷ Burlington III stemmed from contamination at an agricultural chemical storage and distribution facility in Arvin, CA (Arvin site), owned partially by PRP Brown & Bryant (B & B), and partially by PRPs Burlington Northern and Santa Fe Railway and Union Pacific Transportation Company (Railroads). ¹¹⁸ The District Court found the site’s contamination was attributable chiefly to Dichloropropane-dichloropropene (D-D), ¹¹⁹ which was stored in “leak-prone trailers

¹¹⁶ Key Tronic Corp. v. United States, 511 U.S. 809, 816 (1994); see Karen Fox, Casenote, Aviall Services v. Cooper Industries: From Bad to Worse, is There any Hope for PRPs Conducting Voluntary Cleanups?, 18 VILL. ENVTL. L.J. 235, 247-48 (2007) (examining the interrelatedness of these two contribution provisions). Though overlapping, there is a crucial difference between the subsections regarding who may bring an action: while under section 107 anybody may sue for contribution, PRP or otherwise, the U.S. Supreme Court held that section 113 contribution is available to PRPs already subjected to an EPA-initiated cost recovery action or cleanup order only. Cooper Indus., Inc. v. Aviall Serv., Inc., 543 U.S. 157 (2004). While section 107 determines the amount of contribution based solely on actual contamination caused by PRPs, section 113 allows courts to examine equitable concerns when allocating liability. See In re Tutu Wells Contamination Litig., 994 F. Supp. 638, 662 n.34 (D.V.I. 1998) (“[W]hile a defendant in a [section] 107 action can only avoid joint and several liability by demonstrating that the harm at a given site is divisible, parties to a [section] 113 action may allocate among potentially responsible persons based on equitable considerations.”). Though section 113 provides relief for PRPs that have already over-contributed as a result of joint and several liability, PRPs currently facing EPA-initiated cost recovery actions under section 107 must wrestle with this morass of apportionment jurisprudence when attempting to avoid joint and several liability. See supra notes 82-106 and accompanying text.


¹¹⁸ See United States v. Atchison, Topeka & Santa Fe Ry. Co., Nos. CV-F-92-5068 OWW, CV-F-96-6226 OWW, CV-F-96-6228 OWW, 2003 WL 25518047, at *2 (E.D. Cal. July, 15, 2003), aff’d in part, rev’d in part sub nom. United States v. Burlington N. & Santa Fe Ry. Co., 479 F.2d 1113 (9th Cir. 2007), rev’d, 129 S. Ct. 1870 [hereinafter Burlington I]. The site totals 4.7 acres, 3.8 acres of which were owned by Brown & Bryant, and .9 acres of which were owned by the Railroads. Id.

¹¹⁹ D-D is a pesticide that causes diseases in animals and respiratory problems in humans. See Benjamin J. Rodkin, Casenote, Deciphering CERCLA’s Vocabulary: United States v. Burlington – “Reasonable” Division and “Arranger” Liability, 20 VILL. ENVTL.
throughout the Arvin site, including the Railroads’ parcel."120 Acting jointly, the EPA and the California State Department of Toxic Substances Control (Agencies) performed cleanup at the Arvin site, and brought a cost recovery action121 against B & B, the Railroads, and Shell Oil Company (Shell), the company that delivered the contamination-causing agricultural products.122

The District Court found in favor of the Agencies, holding B & B and the Railroads liable as owners123 and Shell liable as an arranger.124 Rather than impose joint and several liability on these newly-branded PRPs, the Court determined the damages were divisible as to the Railroads and Shell and therefore held them liable for only their respective contributions.125 Although neither the Railroads nor Shell comprehensively briefed the issue of apportionment, preferring a “scorched earth, all-or-nothing approach to liability”126 wherein they denied liability entirely,127 the Court “nonetheless proceeded to perform the equitable apportionment analysis demanded by the circumstances of the case.”128

The District Court found as a threshold matter that, theoretically, apportionment was possible.129 It then held there existed a reasonable basis for actual apportionment130 based on three figures: percentage of the total

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120 See id.; see also Burlington I, 2003 WL 25518047 at *4. In addition to D-D, hazardous substances such as Demagon and Dinoseb contributed to the contamination. Burlington III, 129 S. Ct. at 1874; Rodkin, supra note 119, at 280.
121 See supra notes 51-54 and accompanying text (describing the statutory authority for government-initiated cost recovery actions).
122 See Burlington I, 2003 WL 25518047 at *1.
123 See id. at *4.
125 See id. (describing the methods used by the District Court to apportion liability).
126 Burlington I, 2003 WL 25518047 at *82 (internal quotation marks omitted).
127 See id.
128 Burlington II, 520 F.3d at 932 (internal quotation marks omitted).
129 See Burlington I, 2003 WL 25518047 at *84. The Court observed that apportionment is proper where two or more defendants contribute to the same harm, yet their contributions are separable in terms of amount, and no single defendant is responsible for any harm contributed by the other defendants. See id. at *83 (citing In re Bell Petrol. Servs., 3 F.3d 880, 895 (5th Cir. 1993)). Under that reasoning, the Court determined the matter was “a classic ‘divisible in terms of degree’ case, both as to the time period in which defendants’ conduct occurred, and ownership existed, and as to the estimated maximum contribution of each party’s activities that released hazardous substances that caused Site contamination.” Id. at *84. See Prager, supra note 98, at 213 (distinguishing harms capable of theoretical apportionment from those capable of actual apportionment).
130 See Burlington III, 129 S. Ct. 1870, 1876 (2009) (“The court found that the site contamination created a single harm but concluded that the harm was divisible and
area of the site owned by the Railroads (nineteen percent),\textsuperscript{131} duration of the site’s use as a chemical storage facility divided by the length of the Railroads’ lease (forty-five percent),\textsuperscript{132} and percentage of the site’s contamination attributable to the types of chemicals stored on the Railroads’ portion of the site (sixty-six percent).	extsuperscript{133} The Court then multiplied .19, .45, and .66 to determine the Railroads were liable for six percent of the cleanup costs\textsuperscript{134} and, to avoid underestimating their liabilities, allocated to them nine percent of cleanup costs by accounting for “calculation errors” of fifty percent.\textsuperscript{135} Regarding Shell’s liability, the Court volumetrically analyzed its contribution by “multipl[y]ing the percentages of leaks attributable to Shell to determine that Shell was liable for [six percent] of the total cleanup costs.”\textsuperscript{136} Finding no basis for apportioning B & B’s liability, the District Court held it jointly and severally liable.\textsuperscript{137}

The Agencies appealed from the judgment to the U.S. Court of Appeals for the Ninth Circuit, asserting apportionment was inapposite in this case and that the Railroads and Shell should be held jointly and severally liable.\textsuperscript{138} Shell also appealed, arguing its activities were insufficient to warrant “arranger” PRP status, and therefore the District Court erred in assigning it any liability.\textsuperscript{139}

Regarding the apportionment issue, the Ninth Circuit viewed the District Court’s apportionment methods as insufficient for both the Railroads and Shell.\textsuperscript{140} In examining the District Court’s land area-based calculation of the Railroads’ liability, the Ninth Circuit expressed skepticism as to whether PRP-owned land area could ever constitute a

\begin{footnotes}
\item[131] Id.
\item[132] Id.
\item[133] Id.; see Burlington I, 2003 WL 25518047 at *88-91.
\item[134] Burlington I, 2003 WL 25518047 at *91.
\item[135] Id.
\item[136] Amy L. Gleghorn, Environmental Update: United States Court of Appeals, 14 Mo. EnvTL. L. & POL’Y REV. 423, 423 (2007). Though Shell denied liability outright on grounds that it was not a PRP, the District Court characterized Shell as an “arranger” PRP. See id.
\item[137] See id. This imposition of joint and several liability, however, was in practical effect meaningless because B & B had since become defunct. See id. As a result, the “agencies were . . . left holding the bag for a great deal of money.” Burlington II, 520 F.3d 918, 930 (9th Cir. 2008), rev’d 129 S. Ct. 1870 (2009).
\item[138] Id. (“Seeking to hold the Railroads and Shell jointly and severally liable for the entire judgment, the agencies appeal.”).
\item[139] Id.
\item[140] See id. at 943, 947.
\end{footnotes}
reasonable basis. Particularly, it rejected a geographical apportionment as to the Railroads since “the synergistic use of different parts of the Arvin site makes division based on percentage of land ownership particularly untenable.” Similarly, the Court held the “simple fraction based on the time that the Railroads owned the land cannot be a basis for apportionment.” Finally, the Court rejected based on evidentiary inadequacy the District Court’s volumetric apportionment, holding that “[t]here is no evidence as to which chemicals spilled on the parcel, where on the parcel they spilled, or when they spilled.”

The Railroads appealed from the Ninth Circuit’s reversal to the U.S. Supreme Court. They argued the District Court’s apportionment comported with the “evolving” common law principles under which, per the universally-followed Chem-Dyne decision, CERCLA liability is governed. They asserted this common law evolution has led to near-
unanimous endorsement of the *Restatement (Second)* approach to apportioning liability, which condones apportionment based on reasonable assumptions and approximations – such as those relied on by the District Court.\(^\text{150}\) The EPA’s argument, conversely, iterated that the temporal, geographical, and volumetric calculations the District Court relied on were “unsubstantiated assumptions and gross approximations.”\(^\text{151}\)

Justice Stevens’ *Burlington III* opinion, joined by all except Justice Ginsburg,\(^\text{152}\) reversed the Ninth Circuit and reinstated the District Court’s apportionment of the Railroads’ liability.\(^\text{153}\) The opinion noted that traditional and evolving concepts of common law control liability apportionment under CERCLA.\(^\text{154}\) Even though the American Law Institute drafted the *Restatement (Third) of Torts* during the period between *Chem-Dyne* and *Burlington III*, which contains several provisions regarding apportioning liability,\(^\text{155}\) Justice Stevens still applied section 433A of the older *Restatement (Second).*\(^\text{156}\) Under section 433A, liability may be

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\(^\text{150}\) See Brief for Petitioners, *supra* note 149, at 31. Under the *Restatement (Second)* approach, courts may make reasonable assumptions when apportioning the evidence by quantifying a defendant’s involvement with the harm, and then employing the “reasonable assumption that the respective harm done is proportionate to that number.” *Restatement (Second)* § 433A, cmt. d (1965).


\(^\text{152}\) See generally *Burlington III*, 129 S. Ct. at 1884-86 (Ginsburg, J., dissenting).

\(^\text{153}\) See id. at 1882-83 (“[W]e conclude that the facts contained in the record reasonably supported the apportionment of liability.”) (majority opinion).

\(^\text{154}\) See id. at 1881 (citing United States v. Chem-Dyne Corp., 572 F. Supp. 802 (S.D. Ohio 1983)).

\(^\text{155}\) *Restatement (Third) of Torts: Apportionment of Liab.* (2000). The *Restatement (Third)* elaborated upon the *Restatement (Second)*’s endorsement of apportioning where “there is a reasonable basis for determining the contribution of each cause to a single harm.” *Restatement (Second)* § 433A(1)(b) (1965). It did this by explaining that apportionment is proper where “legally culpable conduct of a party . . . was a legal cause of less than the entire damages for which the plaintiff seeks recovery” and those less-than-entire damages are calculable. *Restatement (Third) of Torts: Apportionment of Liab.* § 26(b) (2000).

\(^\text{156}\) See *Burlington III*, 129 S. Ct. at 1881 (citing United States v. Hercules, Inc., 247 F.3d 706, 717 (8th Cir. 2001)). The Court observed that *Restatement (Second)* § 433A is the “universal” starting point for analyzing divisibility of harm under CERCLA. See id. The Railroads argued that the district court’s apportionment comported with the liability-apportionment of the *Restatement (Third)*. See Brief for Petitioners, *supra* note 149, at 33. However, Stevens’ opinion applied section 433A of the *Restatement (Second)* without addressing this argument. See *Burlington III*, 129 S. Ct. at 1881 (applying the *Restatement (Second)* approach to apportionment).
apportioned when there is a reasonable basis for doing so. The party seeking to apportion bears the burden of demonstrating that basis. Applying this standard, the Court held the District Court’s apportionment was reasonable:

The District Court’s detailed findings make it abundantly clear that . . . the spills of hazardous chemicals that occurred on the Railroad parcel contributed to no more than [ten percent] of the total site contamination . . . . With those background facts in mind, we are persuaded that it was reasonable for the court to use the size of the leased parcel and the duration of the lease as the starting point for its analysis.

Justice Stevens, however, found the evidence insufficient to calculate the District Court’s volumetric-related basis for apportionment. Even so, the District Court’s nine percent apportionment, by including the fifty-percent margin of error, corresponded with the apportionment it would have reached had it not erroneously included the volumetric multiplicand (.19 x .45 ≈ 9%). The Court upheld the apportionment because “the District Court's ultimate allocation of liability is supported by the evidence . . .”

Justice Stevens also addressed the Agencies’ arguments that the apportionment was erroneous because it inappropriately used equitable analysis, and because it conducted the apportionment sua sponte rather than placing the burden of proof on the Railroads. The Court agreed the

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157 Restatement (Second) § 433A (1965).
159 Id. at 1883 (emphasis added). The Court further noted that, ironically, the Ninth Circuit’s opinion conceded that percentage of land area owned by a PRP and the duration of that ownership were relevant, under the appropriate circumstances, to demonstrating apportionment. Id. (citing Burlington II, 520 F.3d 918, 936 n.18, 943 (9th Cir. 2008), rev’d 129 S. Ct. 1870 (2009)) (emphasis added).
160 See id. at 1883.
161 See id.
162 Id. (emphasis added); accord Brief for Petitioners, supra note 149, at 47 (arguing that the fifty percent margin of error ensures that uncertainty in the evidence supporting apportionment does not prejudice the Agencies in the least).
163 See Brief for the United States, supra note 151, at 38 (“The district court's decision to undertake that apportionment without the parties' assistance rested on . . . legal errors.”); Brief for the State of California, supra note 151, at 48 (“[T]he district court engaged in an equitable allocation, an exercise not properly part of an apportionment determination.”).
164 See Brief for the State of California, supra note 151, at 22 (“The district court's unprecedented approach runs counter to the law that places the burden of proof for apportionment on parties held liable under CERCLA . . . .”; see generally Burlington III,
District Court erred in using equitable considerations, but reasoned that “despite the District Court's reference to equity, its actual apportionment decision was properly rooted in evidence that provided a reasonable basis for identifying the portion of the harm attributable to the Railroads.”

Although the District Court, rather than the Railroads, advanced the apportionment theory, Stevens held the apportionment proper. Justice Ginsburg’s dissent, on the other hand, viewed the District Court’s method as contrary to a litigant’s obligation to assert its own interests – a fundamental tenet of American civil procedure.

3. Diverging Interpretations Among Courts and Commentators

Several courts have interpreted the “hotly debated” import of Burlington III’s apportionment holding. Appleton Papers Inc. v. George A. Whiting Paper Co. contains the most thorough treatment. That
Court interpreted *Burlington III* to “significantly ease[] the burden on defendants who seek to avoid joint and several liability by allowing courts more leeway in determining whether the damage in question is capable of being apportioned and, then, in divvying up the damage.” Nevertheless, that Court read *Burlington III* narrowly as merely *allowing*, rather than *requiring* an apportionment inquiry. Consistent with *Appleton Papers*, which interpreted *Burlington III* as a grant of judicial discretion, one court cited *Burlington III* as authority for apportioning liability *sua sponte*. Regarding certainty of evidence needed to apportion, one court interpreted *Burlington III* to allow apportioning even though “[t]he measurement is not the exact amount of . . . contamination for which each [PRP] was responsible . . . .” With respect to the standard applicable to apportionment, another court interpreted Justice Stevens’ extensive citations to the *Restatement (Second)* as disallowing consideration of the *Restatement (Third)* approach to apportionment.

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3931036 (E.D. Wis. Nov. 18, 2009).

172 See id. at *1-4.

173 Id. at *1.

174 See id. at *2 (“[T]here is nothing within [*Burlington III*] that requires courts to make some sort of threshold determination regarding joint and several liability.”).

175 See generally id.


177 Reichhold, 2009 WL 1806668, at *49.


179 See RESTATEMENT (THIRD) OF TORTS: APPORTIONMENT OF LIAB (2000). The *Restatement (Third)* approach is notable for its receptiveness to apportionment, and for its reluctance to impose joint and several liability. *See id.* § 26, cmt. a (supporting apportionment whenever a party can prove that it is liable for less than the entire amount of damages). By encouraging apportionment, the *Restatement (Third)* approach mirrors the broader trend away from joint and several liability. *See* Richard L. Cupp, Jr., *Asbestos Litigation and Bankruptcy: A Case Study For Ad Hoc Public Policy Limitations on Joint and Several Liability*, 31 PEPP. L. REV. 203, 213-15 (2003) (noting the majority of states have abandoned the “traditional doctrine” of joint and several liability). This trend is partially ascribable to the biased targeting of deep-pocketed defendants that tends to accompany joint and several liability. *See* Joanna M. Shepherd, *Tort Reforms’ Winners and Losers: The Competing Effects of Care and Activity Levels*, 55 UCLA L. REV. 905, 920 (2008) (“Critics argue that these [joint and several liability] rules are unfair because they
Interpretation among commentators diverges on whether *Burlington III* should be interpreted broadly or narrowly. Some interpret the apportionment holding to significantly lower the burden defendants must meet to apportion liability. Conversely, one commentator narrowly viewed the apportionment holding as unique to the facts of *Burlington III* and therefore largely irrelevant to most CERCLA cases, which tend to be far more factually complex. In light of the relative simplicity of the factors the District Court used to apportion, one observer reasoned that “future litigants . . . may not need to use scientific facts or evidence to demonstrate a reasonable estimate of the amount of contamination for which [they are] responsible.” Regarding *sua sponte* apportionment, Professor Alfred R. Light noted in his proposed “Restatement” of apportioning CERCLA liability that, after *Burlington III*, “a court may independently perform an apportionment analysis and limit liability even if not advanced by [a PRP].” Professor Light further asserted that *Burlington III* lowers the showing necessary for apportionment: Though PRPs still bear

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180 Loving v. Sec’y of the Dept. of Health & Human Servs., No. 02-469V, 2009 WL 3094883, at *26 n.26 (Fed. Cl. July 30, 2009) (citing *Burlington III*, 129 S. Ct. at 1881) (“With regard to apportionment, whether section 433A of the [*Restatement (Second)*] differs from section 26 of the [*Restatement (Third)*] is not clear. If there is a difference between the two editions, the [*Restatement (Second)*] appears controlling.”).


183 See John C. Cruden, Acting Assistant Att’y Gen., Envir. & Natural Res. Div., *The Supreme Court’s Decision in Burlington Northern & Santa Fe, Railway Co. v. United States*, May 29, 2009, available at http://www.justice.gov/enrd/1306.htm (theorizing that the burden for apportionment remains the same after *Burlington III*, and that the holding was specific to the case’s facts, which were “not typical” of CERCLA cases).

184 Misiorowski & Eagle, *supra* note 181, at 17.

the burden of proving divisibility, their burden of production is relaxed.\textsuperscript{186}

III. A STATE OF CONFUSION: NEW QUESTIONS RAISED, EXISTING QUESTIONS UNANSWERED

\textit{Burlington III} is, to put it conservatively, fraught with loose ends. In the apportionment portion of the holding, Justice Stevens applied the “\textit{Chem-Dyne approach}”\textsuperscript{187} that the circuit courts have universally applied to CERCLA apportionment,\textsuperscript{188} yet upheld an apportionment that was based on less precise calculations and derived from less sophisticated evidence than was previously thought necessary.\textsuperscript{189} The reticent wording of the opinion made clear that apportionment required a “reasonable basis,”\textsuperscript{190} but left unexplained the source of this standard and the types of evidence that PRPs may use to meet this standard.\textsuperscript{191} Divergence has characterized the decision’s short history, as commentators disagree on the requirements for a post-\textit{Burlington III} divisibility showing\textsuperscript{192} and, more broadly, on whether \textit{Burlington III} substantially alters the divisibility inquiry, or merely reaffirms prior apportionment jurisprudence.\textsuperscript{193}

The District Court’s apportionment employed a considerably large “margin of error” to account for its “calculation errors.”\textsuperscript{194} However, it is unclear whether \textit{Burlington III} intended to ratify margin of error-based apportionment, or conversely, whether Justice Stevens upheld the District Court’s margin of error solely because it fortuitously arrived at the same

\textsuperscript{186} Light, supra note 176, at 11,058.

\textsuperscript{187} \textit{Burlington III}, 129 S. Ct. 1870, 1881 (2009).

\textsuperscript{188} See id. at 1881 (citing \textit{In re Bell Petroleum Servs.}, 3 F.3d 889, 901-02 (5th Cir. 1993); United States v. Alcan Aluminum Corp., 964 F.2d 252, 268 (3d Cir. 1992); O’Neil v. Picillo, 883 F.2d 176, 178 (1st Cir. 1989); United States v. Monsanto Co., 858 F.2d 160, 171-73 (4th Cir. 1988)).

\textsuperscript{189} See id.; cf. Oswald, supra note 79, at 333 (“[T]he practical effect of the majority approach [to divisibility] has been blanket application of joint and several liability for CERCLA cleanup costs.”).

\textsuperscript{190} See \textit{Burlington III}, 129 S. Ct. at 1181 (citing United States v. Chem-Dyne Corp., 572 F. Supp. 802, 810 (S.D. Ohio 1983)) (“CERCLA defendants seeking to avoid joint and several liability bear the burden of proving that a reasonable basis for apportionment exists.”).

\textsuperscript{191} See supra note 19 and accompanying text.

\textsuperscript{192} Compare Vroman et al., supra note 182, with Cruden, supra note 183.

\textsuperscript{193} See Misiorowski & Eagle, supra note 181, at 17 (summarizing the competing approaches for interpreting \textit{Burlington III}).

result it would have without the margin. This uncertainty is encapsulated by the current disagreement among commentators concerning whether the holding should be broadly or narrowly construed, and there currently is no clear answer.\textsuperscript{195}

Stevens acknowledged that “traditional and evolving principles of common law” control the scope of CERCLA liability.\textsuperscript{196} Therefore, even after deciphering the standard applied in \textit{Burlington III},\textsuperscript{197} whether the Court intended that standard to remain controlling if these “evolving principles” move away from the \textit{Burlington III} standard is ambiguous.\textsuperscript{198} Notably, the Supreme Court declined to apply the \textit{Restatement (Third)} to apportionment,\textsuperscript{199} yet the \textit{Restatement (Third)} approach, which is decidedly pro-apportionment, is becoming increasingly widespread.\textsuperscript{200} Therefore, the future role of the \textit{Restatement (Third)} in CERCLA apportionment requires clarification.

\section*{IV. MAKING SENSE OF \textit{BURLINGTON III}}

\subsection*{A. A Return to the Pure Restatement (Second) Approach to Liability Apportionment.}

Through its extensive references to Section 433A of the \textit{Restatement (Second)}, \textit{Burlington III} makes clear that the \textit{Restatement} figures prominently in apportionment analysis under CERCLA.\textsuperscript{201} Using the \textit{Restatement (Second)} corresponds with the approach ostensibly taken by the circuit courts,\textsuperscript{202} but in itself does nothing to quell the oft-expressed

\begin{itemize}
\item \textsuperscript{195} See Misiorowski & Eagle, \textit{supra} note 181, at 17 (summarizing the competing approaches for interpreting \textit{Burlington III}).
\item \textsuperscript{197} See \textit{id.} at 1881-84 (applying the “reasonable basis” standard to the district court’s apportionment).
\item \textsuperscript{198} See \textit{id.}
\item \textsuperscript{199} Justice Stevens’ opinion makes no mention of the \textit{Restatement (Third)} even though it was briefed by the Railroads. See Brief for Petitioners, \textit{supra} note 149, at 33. One court interpreted this to mean that the \textit{Restatement (Third)} does not apply to apportionment analysis under CERCLA. See Loving v. Sec’y of the Dept. of Health & Human Servs., No. 02-469V, 2009 WL 3094883, at *26 n.26 (Fed. Cl. July 30, 2009) (citing \textit{Burlington III}, 129 S. Ct. at 1881).
\item \textsuperscript{200} See sources cited \textit{supra} note 179 and accompanying text (explaining the policy rationales underlying the judicial trend toward the \textit{Restatement (Third)}).
\item \textsuperscript{201} See \textit{generally Burlington III}, 128 S. Ct. at 1880-81.
\item \textsuperscript{202} See United States v. Hercules, Inc., 247 F.3d 706, 717 (8th Cir. 2001) (“The universal starting point for divisibility of harm analysis in CERCLA cases is the
trepidation courts experience when attempting to meld section 433A with CERCLA. This unease derives from the disparate purposes underlying the provisions – as one court explained, “the ‘fit’ between § 433A and CERCLA is actually quite unclear: § 433A focuses on causation while CERCLA is a strict liability statute.” Due to this confusion, Burlington III was decided amongst an ironic backdrop where courts view apportionment as “a rare scenario,” yet heavily base their analysis on a standard that will apportion whenever there is “an estimate based on reasonable assumptions . . . .”

On its face, Justice Stevens’ opinion does not inform the reader of anything not otherwise discernable from the cluster of circuit court decisions addressing the apportionment inquiry. It recites the now-familiar maxims that CERCLA “[does] not mandate joint and several liability in every case,” that Restatement (Second) section 433A is “the universal starting point” for divisibility analysis under CERCLA, and that “CERCLA defendants seeking to avoid joint and several liability bear the burden of proving that a reasonable basis for apportionment exists.” Thus, one might easily conclude, Burlington III leaves intact confusion surrounding the interplay between section 433A and CERCLA.

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203 See United States v. Capital Tax Corp., 545 F.3d 525,535 n.9 (7th Cir. 2008); see also Aaron Gershonowitz, Joint and Several Liability in Superfund Actions: When is Environmental Harm Divisible? PRPs Who Want to be Cows, 14 FORDHAM ENVTL. L. REV. 207, 236 (2003) (“A number of courts have suggested that a rule of divisibility based on causation is problematic . . . .”).

204 United States v. Capital Tax Corp., 545 F.3d 525 (7th Cir. 2008) (citing Hercules, 247 F.3d at 715-16).

205 Metro. Water Reclamation Dist. of Greater Chi. v. N. Am. Galvanizing & Coatings, Inc., 473 F.3d 824, 827 n.3 (7th Cir. 2007); see also Centerier Serv. Co. v. Acme Scrap Iron & Metal Corp., 153 F.3d 344, 348 (6th Cir. 1998) (“[R]arely if ever will a PRP be able to demonstrate divisibility of harm, and therefore joint and several liability is the norm.”); Illinois v. Grigoleit Co., 104 F. Supp. 2d 967, 979 (C.D. Ill 2000) (“[I]t is rare for a responsible party to be able to demonstrate divisibility of harm, and therefore joint and several liability is the norm.”).

206 Gershonowitz, supra note 203, at 231 (citing RESTATEMENT (SECOND) § 433A, cmt. d (1965)) (emphasis added);

207 See generally cases cited supra note 10.


209 Id.

210 Id. (citing Chem-Dyne, 572 F. Supp. at 810).

211 Cf. United States v. Capital Tax Corp., 545 F.3d 525 (7th Cir. 2008) (citing Hercules, 247 F.3d at 715-16) (“[T]he ‘fit’ between § 433A and CERCLA is actually quite
Burlington III, however, is illuminating not for what it says, but for what it does: While it recites the same law as the Ninth Circuit (and, for that matter, all circuit courts that had addressed CERCLA divisibility), it reached an opposite result. Therefore, ascertaining the governing apportionment standard post-Burlington III requires analyzing the facts and outcomes of Burlington III to determine which legal framework the opinion corresponds with. Viewed from that perspective, it is clear the Restatement (Second) governs apportionment cases under CERCLA.

1. Achieving Equitable Results While Banning Equitable Considerations: Irony in the Restatement (Second) Approach.

As A & F Materials and similar holdings demonstrate, several courts believed consideration of equitable principles necessary to avoid gross unfairness to PRPs threatened with the entire cost of a cleanup. Even courts following the majority approach, which rejected equitable considerations, sometimes lamented the inherent unfairness and rigidity of the Chem-Dyne approach. This approach is criticized particularly...
heavily for its (arguably) unfair targeting of defendants with deep pockets,\textsuperscript{218} even when they are no more culpable than their shallow-pocketed counterparts.\textsuperscript{219} Notwithstanding these criticisms, \textit{Burlington III} makes clear the majority approach towards the role of equity is correct, and reliance on equitable factors in the apportionment analysis is error.\textsuperscript{220} Yet despite spurning equitable considerations, \textit{Burlington III} has an overall effect of ameliorating the harsh results inherent in joint and several CERCLA liability by easing the burden PRPs must meet in order to apportion liability – a result that is decidedly equitable.\textsuperscript{221}

\textit{Burlington III} accomplishes this relaxation of the preconditions for apportioning liability by aligning the apportionment burden for CERCLA PRPs with the \textit{Restatement (Second)}.\textsuperscript{222} Under the \textit{Restatement (Second)}, apportionment should be performed when there is a rough approximation of a defendant’s contribution to the damage.\textsuperscript{223} Furthermore, when a defendant contributes in some quantifiable manner to a harm having multiple causes, there is a “reasonable assumption that the respective harm done is proportionate to that number.”\textsuperscript{224} \textit{Burlington III} effectively mimics this assumption of proportionality by upholding as reasonable the District

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\textit{Chem-Dyne}, federal courts that have adopted the \textit{Chem-Dyne} approach are doing precisely what they acknowledge Congress intended to avoid. Rather than actually examining the facts of a particular case, a court following \textit{Chem-Dyne} places an enormously heavy burden on defendants . . . .


\textsuperscript{218} See Shepherd, supra note 179, at 920 (“[Joint and several liability] allows plaintiffs to collect all of their damages from a deep-pocket defendant, even if that defendant contributed only modestly to causing the damages.”).

\textsuperscript{219} See Panzer, supra note 179, at 451 (“[T]he EPA only focuses on a few financially viable PRPs to shoulder the entire cost of the EPA’s remediation or removal measures under [section] 107(a).”); \textit{Liability Issues in CERCLA Cleanup Actions}, 99 HARV. L. REV. 1511, 1530 (1986) (“[T]he EPA has no incentive to sue all potential defendants if it can rely on joint and several liability to recover from a few wealthy defendants.”).

\textsuperscript{220} See Burlington III, 129 S. Ct. 1870, 1882 n.9 (2009) (“Equitable considerations play no role in the apportionment analysis . . . .”).

\textsuperscript{221} See Appleton Papers, Inc. v. George A. Whiting Paper Co., No. 08-C-16, 2009 WL 3931036, at *2 (E.D. Wis. Nov. 18, 2009) (noting that \textit{Burlington III} “eased the standards” for apportionment).

\textsuperscript{222} See \textit{Restatement (Second)} § 433A (1965); cf. \textit{Burlington III}, 129 S. Ct. at 1881 (citing exclusively to the \textit{Restatement (Second)} and courts following it in detailing the law governing the case’s apportionment issue).

\textsuperscript{223} See \textit{In re Bell Petroleum Servs.}, 3 F.3d 889, 904 n.19 (5th Cir. 1993) (citing \textit{Restatement (Second)} § 433A (1965)) (“[E]vidence sufficient to permit a rough approximation is all that is required under the \textit{[Restatement (Second)]}.”).

\textsuperscript{224} \textit{Restatement (Second)} § 433A cmt. d (1965) (emphasis added).
Court’s assumption that the harm attributable to the Railroads was proportionate to the time that the Railroads owned the site, and to the portion of land they owned.\footnote{See Burlington III, 129 S. Ct. at 1876-77 (describing the district court’s calculations that were based on geographical and temporal variables); cf. Restatement (Second) § 433A cmt. d (stating that it is reasonable to assume that harm done to a crop by two persons’ cattle is proportionate to the number of cattle each allowed onto the cropland).} This markedly contrasts with the Ninth Circuit’s approach, which demanded “precision”\footnote{Burlington II, 520 F.3d 918, 944-45 (9th Cir. 2008), rev’d 129 S. Ct. 1870 (2009).} and exemplifies the more-stringent-than-the-Restatement mentality widely adopted by the circuit courts.\footnote{See id; see also, e.g., United States v. Monsanto Co., 858 F.2d 160 (4th Cir. 1988); O’Neil v. Picillo, 883 F.2d 176 (1st Cir. 1989).} The Ninth Circuit’s heightened requirements are particularly transparent in its rejection of the District Court’s time-based allocation. In rejecting this variable, the Ninth Circuit observed that “[t]he fraction [based on time] it chose assumes constant leakage on the facility as a whole or constant contamination traceable to the facility as a whole for each time period . . . .”\footnote{Burlington II, 520 F.3d at 945.} In contrast, the Restatement (Second), as applied by the Supreme Court,\footnote{See generally Burlington III, 129 S. Ct. 1870.} expressly condones apportionment based on precisely these sorts of reasonable assumptions.\footnote{See id; Restatement (Second) of Torts § 433A cmt. d (1965).} Therefore, it appears the Restatement (Second) – long recognized as the “starting point” for joint and several liability \footnote{Notably, Justice Stevens observed that the courts of appeals have acknowledged that “[t]he universal starting point for divisibility of harm analyses in CERCLA cases” is § 433A of the Restatement (Second) of Torts.” Burlington III, 129 U.S. at 1881 (citing United States v. Hercules, Inc., 247 F.3d 706, 717 (8th Cir. 2001); United States v. R.W. Meyer, Inc., 889 F.2d 1497, 1507 (6th Cir. 1989)) (internal quotation marks omitted). Having acknowledged that “starting point,” his opinion continued to outline the applicable law. See id. The remainder of the opinion’s explanation of the applicable law contained nary one citation to a source differing from the Restatement (Second) that could indicate the “end point” in apportionment analysis differed from this “starting point.” See id.} is also its ending point in the post-Burlington III era for apportioning liability based on divisibility of harm.\footnote{See Burlington III, 129 S. Ct. at 1880 (citing United States v. Chem-Dyne Corp., 572 F. Supp. 802 (S.D. Ohio 1983)).}

In aligning the divisibility inquiry with the Restatement (Second), Stevens’ opinion cited with approval the apportionment approach of Chem-Dyne.\footnote{See supra note 76 and accompanying text.} As discussed above, that opinion held CERCLA liability should dovetail with “traditional and evolving principles of common law.”\footnote{See supra note 76 and accompanying text.}
Therefore, Justice Stevens’ apportionment opinion represents his interpretation of the current, “evolved” doctrine of common law liability apportionment. By upholding an apportionment that relied on factors sufficient to satisfy the “reasonable assumptions” and “rough approximations” of the Restatement (Second), yet insufficient to meet the Ninth Circuit’s heightened requirements, Justice Stevens implicitly held that common law liability apportionment has evolved to (and not beyond) the Restatement (Second) approach. Because, in contrast, the heightened burden applied by several circuit courts demanded more than the Restatement (Second), Burlington III appears to discredit their standards for apportionment by heralding a return to the pure Restatement (Second) approach.

2. The Restatement (Second) Comments as a Source of Interpretive Guidance

Pre-Burlington III circuit court opinions imposed inordinately demanding requirements on PRPs seeking apportionment. These courts were especially wary of apportioning liability under circumstances “where wastes of varying (and unknown) degrees of toxicity and migratory potential commingle” since in those cases it “simply is impossible to determine the amount of environmental harm caused by each party.” The now-overturned Burlington II opinion mirrored this sentiment by expressing concern that a PRP’s contribution to a contamination may be unascertainable, depending on the “relative toxicity, migratory potential,

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236 See In re Bell Petroleum Servs., 3 F.3d 889, 904 n.19 (5th Cir. 1993) (“[E]vidence sufficient to permit a rough approximation is all that is required under the [Restatement (Second)]
237 See Burlington II, 520 F.3d 918, 952 (9th Cir. 2008) (reversing the district court’s apportionment).
238 See supra notes 231-32 and accompanying text; accord Oswald, supra note 79, at 308 (“The Restatement reflects the modern common law approach to joint and several liability.”).
239 See Burlington III, 129 S. Ct. at 1880 (requiring only a reasonable basis for apportionment). But see, e.g., O’Neil v. Picillo, 883 F.2d 176, 178-79 (1st Cir. 1989) (assuming that “responsible parties rarely escape joint and several liability” due to the very strenuous burden of proving divisibility).
240 See, e.g., United States v. Monsanto Co., 858 F.2d 160 (4th Cir. 1988); O’Neil, 883 F.2d at 176; see generally supra Part II.B.1.
241 O’Neil, 883 F.2d at 179.
242 Id.
and synergistic capacity of the hazardous substances.”

In light of the starring role played by the Restatement (Second) in the unanimously-followed Chem-Dyne opinion, it is unsurprising that this judicial aversion to apportioning in “chemical intermingling” cases finds apparent support in the Restatement (Second). Specifically, comment i to Restatement (Second) § 433A recognizes that “[c]ertain kinds of harm, by their very nature, are normally incapable of any logical, reasonable, or practical division.” Such harms occur when more than one party contributes to damage incapable of being reasonably divided by cause if “either cause would have been sufficient in itself to bring about the result” or “both [causes] are essential to the harm . . . .” Viewed from this perspective, it becomes clear pre-Burlington III courts applying the Chem-Dyne approach equated contamination caused by multiple PRPs’ wastes intermingling as “comment i” situations. Furthermore, since comment i

243 Burlington II, 520 F.3d 918, 946 (9th Cir. 2008) (quoting Monsanto, 858 F.2d at 172).
244 See United States v. Chem-Dyne Corp., 572 F. Supp. 802, 810 (S.D. Ohio 1983) (repeatedly citing RESTATEMENT (SECOND) § 433A (1965)) (“An examination of the common law reveals that when two or more persons acting independently caused a distinct or single harm for which there is a reasonable basis for division according to the contribution of each, each is subject to liability only for the portion of the total harm that he has himself caused.”); see also Burlington III, 129 S. Ct. 1870, 1880-81 (2009) (noting that Chem-Dyne has been universally followed). The suspicious treatment of these chemical intermingling situations finds support in Chem-Dyne itself. See Chem-Dyne, 572 F. Supp. at 811. There, the court observed in the course of rejecting a proposed apportionment that “[t]he fact of the mixing of the wastes raises an issue as to the divisibility of the harm.” Id. at 811.
245 See supra notes 141-43 and accompanying text (describing the wariness courts expressed when presented with apportionment defenses in situations where multiple PRPs’ wastes have intermingled within a single harm).
246 RESTATEMENT (SECOND) cmt. i (1965); see Burlington III, 129 S. Ct. at 1881 (citing id.) (“When two or more causes produce a single, indivisible harm, courts have refused to make an arbitrary apportionment for its own sake, and each of the causes is charged with responsibility for the entire harm.”) (internal quotation marks omitted).
247 RESTATEMENT (SECOND) cmt. i (1965).
248 This implication made clear by comparing the bases available for apportioning comment d harms with courts’ refusal to apply those bases in chemical intermingling cases. Specifically, comment d provides that “where two or more factories independently pollute a stream, the interference . . . may be apportioned among the owners of the factories, on the basis of . . . quantities of pollution discharged into the stream.” Id. at cmt. d. Under the circuit court test, however, “merely establishing the ‘respective quantities dumped’ is insufficient to prove divisibility of injury in CERCLA cases” where chemicals have intermingled. Bruce C. Jenkins, Comment, Divisibility of Injury Under CERCLA: Reaching for the Unreachable Goal, 5 B.Y.U. J. PUB. L. 195, 208 (construing Monsanto, 858 F.2d at 172). Accordingly, Monsanto and similar holdings clearly deemed comment d inapplicable.
states only that these harms are “normally incapable of apportionment.”\footnote{RESTATEMENT (SECOND) cmt. i (emphasis added).} It is not inconsistent that pre-\textit{Burlington III} courts were willing to apportion in the rare situations where PRPs presented to them “specific evidence documenting the whereabouts of [the PRP’s] waste at all times after it left their facilities . . . .”\footnote{E.g., O’Neil v. Picillo, 883 F.2d 176, 182 (1st Cir. 1989).}

By apportioning cleanup costs where the Railroads and Shell each released chemicals that subsequently intermingled to cause a single harm, \textit{Burlington III} makes clear comment i is not the appropriate framework for approaching this type of CERCLA case.\footnote{Compare \textit{id.}, with RESTATEMENT (SECOND) cmt. d.} Moreover, Justice Stevens recognized that comment i forecloses “mak[ing] an arbitrary apportionment for its own sake” where “two or more causes produce a single, indivisible harm,” yet nevertheless upheld the district court’s (apparently) non-arbitrary apportionment.\footnote{\textit{Burlington III}, 129 S. Ct. at 1881 (quoting RESTATEMENT (SECOND) § 433A cmt. i (1965)).}

Consistent with its reliance on the \textit{Restatement (Second)}, the holding directly corresponds not with comment i, but rather with comment d to \textit{Restatement (Second)} § 433A. Comment d recognizes the possibility that harms “not so clearly marked out as severable into distinct parts are still capable of division upon a reasonable and rational basis.”\footnote{\textit{Monsanto}, 858 F.2d at 172 (“[T]he district court [can]not . . . reasonably [apportion] liability without some evidence disclosing the individual and interactive qualities of the substances deposited there.”).}

Thus where the wastes of two PRPs combine, their contributions are no longer “severable into distinct parts,” yet by using reasonable bases – such as time period and land area – the damage is nevertheless apportionable, per comment d.\footnote{\textit{RESTATEMENT (SECOND) § 433A cmt. d (1965) (“There are other kinds of harm which, while not so clearly marked out as severable into distinct parts, are still capable of division upon a reasonable and rational basis, and of fair apportionment among the causes responsible.”).}

Any ambiguity surrounding the relationship between comment d and chemical intermingling cases is rectified by that comment’s accompanying illustrations, one of which uncannily resembles a typical CERCLA scenario:

\begin{quote}
Oil is negligently discharged from two factories, owned by A and B, onto the surface of a stream. As a result C, a lower
riparian owner, is deprived of the use of the water for his own industrial purposes. There is evidence that 70 per cent of the oil has come from A’s factory, and 30 per cent from B’s. On the basis of this evidence, A may be held liable for 70 per cent of C’s damages, and B liable for 30 per cent.255

In this illustration, separate chemicals are discharged, and intermingle in the water. However, rather than require owners A and B to demonstrate the precise course their oil’s respective flows, the Restatement (Second) standard is satisfied by reliance on a reasonable basis – namely, the amount released.256

This fifth illustration to comment d offers an imprecise and uncertain calculation. For example, a tributary downstream from owner A but upstream from owner B could conceivably have diverted a quantity of owner A’s discharge, preventing A’s oil from reaching Owner C’s land. These theoretically possible uncertainties, however, are disregarded under the Restatement (Second) in favor of reasonable and logically-grounded assumptions.257 In CERCLA cases where various PRPs’ wastes have intermingled, courts seem to have considered these hypothetical uncertainties as bases for their denial of apportionment; comment d as applied by Burlington III, however, informs courts that these “what if” scenarios are unwarranted.258 Justice Stevens’ implicit differentiation between these comments supports the broader point, discussed above, that the holding evinces intent to return to the unadulterated Restatement (Second) approach: The opinion contravenes circuit court decisions that were “well aware of comment d,” but nevertheless ignored it in favor of a more stringent standard derived from outside the Restatement.259

255 Restatement (Second) cmt. d, illus. 5 (1965).
256 Id. But see, e.g., Chem-Nuclear Systems, Inc. v. Bush, 292 F.3d 254, 259 (D.C. Cir. 2002) (refusing to rely on a “crucial but unproven assumption” to establish a reasonable basis for apportionment).
257 See Restatement (Second) cmt. d, illus. 5 (1965).
258 Michael Noone, Environmental Law: Third Circuit Reexamines Divisibility Under CERCLA, 66 Temp. L. Rev. 307, 320 (1993) (citing United States v. Alcan Alum. Corp., 964 F.2d 252, 269 n.27 (3d Cir. 1992)). Further noting the Alcan Court’s ambivalence towards apportionment-friendly comments accompanying the Restatement (Second) § 433A, Noone observes “it seems the Alcan case offered the Third Circuit the perfect opportunity through which it could incorporate the Restatement into its jurisprudence”; obviously, it opted not to. See Noone, supra, at 320. Similarly, the Fourth Circuit in Monsanto rejected an unadulterated application of the Restatement (Second) in favor of a less flexible standard, where its “reasoning made clear that while citing 433A as authoritative, the court had adopted . . . small steps away from Restatement § 433A.” See Gershonowitz, supra note 203, at 212 (citing United States v. Monsanto, 858 F.2d 160, 171
Comparing the aptly analogous comment d illustrations with the illustrations supplied for indivisible comment i harms further demonstrates the rationale underlying Burlington III’s implicit interpretation that cases of chemical intermingling fall outside comment i’s scope.\(^{260}\) For example, harm is indivisible under comment i where “[t]wo automobiles, driven independently and negligently by A and B, collide [and] A’s automobile is thrown against C, a bystander, breaking C’s leg.” In that scenario, any apparent bases for apportionment – say, the speeds or weights of the automobiles – bear very little resemblance to their effects; they are not reasonable.\(^{261}\) Similarly, “[t]he instance of a man injured by falling into a hole dug partly by one person and partly by another” presents a non-apportionable harm.\(^{262}\)

These non-apportionable, comment i situations share two crucial common threads: In these situations, both causes are necessary to create the harm, and that harm is “not reasonably capable of being divided” due to its stark concreteness and finality.\(^{263}\) At the opposite end of the apportionability spectrum (i.e., “comment d” situations) are harms where neither cause is necessary to create the harm and where the injury is less concrete and more malleable.\(^{264}\) Applying this standard for distinguishing comment i harms from comment d through analogy to the facts of Burlington III is instructive. In Burlington III, the Railroads’ waste was not necessary to create the harm: Had the Railroads never existed, harm would have been caused by B&B’s and Shell’s chemicals. Thus in chemical intermingling cases, the requirement that “the injury must be in some way due to their joint work” is unsatisfied.\(^{265}\) Put slightly differently, comment d

\(^{260}\) Compare, e.g., RESTAETMENT (SECOND) § 433A cmt. d, illus. 5 (water pollution caused by several defendants will be apportioned where it causes interference with plaintiff’s riparian rights), with id. at cmt. i, illus. 14 (water pollution caused by several defendants will not be apportioned when it causes a fire that destroys plaintiffs home).

\(^{261}\) In other words, this is a situation where “[n]o ingenuity can suggest anything more than a purely arbitrary apportionment of harm.” PROSSER & KEETON, supra note 73, at 347.

\(^{262}\) Armst v. Estes, 8 A.2d 201, 204 (1939).

\(^{263}\) Somerset Villa, Inc. v. City of Lee’s Summit, 436 S.W.2d 658, 665 (Mo. 1968); see Gershonowitz, supra note 203, at 233 (“[W]here both [causes] are necessary to create the harm, it is not unfair to impose joint and several liability.”).

\(^{264}\) See PROSSER & KEETON, supra note 73, at 345-46 (noting that similar situations, such as damage caused due to water pollution, may or may not be apportionable, depending on the particular harm; a fire will not be apportioned, while interference with the enjoyment of land based on the pollution will).

\(^{265}\) Northup v. Eakes, 72 Okla. 66, 268 (1918) (cited in the Reporter’s Notes to the RESTAETMENT (SECOND) § 433A as the basis for illustration 14 to comment i).
harm are those where “a defendant did not cause all of the harm but rather only a portion of it”; where the Defendant’s action was essential to the harm, comment i forecloses the conclusion that the defendant caused only a portion of it.\textsuperscript{266} Moreover, the definiteness of the comment i examples (those examples being a broken leg, a broken arm, a burned-down house, death, and a fractured skull) is not present in chemical intermingling cases.\textsuperscript{267} By analogizing chemical intermingling cases to comment d and comment i’s respective illustrations, it becomes clear Justice Stevens recognized that cases of Burlington III’s ilk most closely parallel the former.

3. Evidentiary Ramifications of Burlington III.

Burlington III effectuates a sea-change in divisibility analysis not only by lessening the degree of certainty required to make an apportionment, but also by modifying the types of evidence that PRPs may use to meet their apportionment showing. Burlington III deemed the Railroads’ length of land ownership coupled with the area of that land to be sufficient bases for apportionment.\textsuperscript{268} Significantly, this demonstrates that apportionment evidence need not be scientifically complex. This overturns the contrary view that characterized the pre-Burlington III era, when courts demanded “specific evidence documenting the whereabouts of [the PRP’s] waste at all times after it left their facilities . . . [,]”\textsuperscript{269} and “reject[ed] simple source or volume evidence of contaminants as means of apportionment.”\textsuperscript{270}

\textsuperscript{266} Gerald R. Boston, Apportionment of Harm in Tort Law: A Proposed Restatement, 21 U. DAYTON L. REV. 267, 315 (1996); cf. Restatement (Second) cmt. d (1965). Comment d explains that “where the cattle of two or more owners trespass upon the plaintiff’s land and destroy his crop, the aggregate harm is a lost crop, but it may nevertheless be apportioned among the owners of the cattle, on the basis of the number owned by each, and the reasonable assumption that the respective harm done is proportionate to that number.” Restatement (Second) cmt. d. This cattle damage illustrates the point: No defendant’s cows were necessary to create the harm, as the plaintiff’s pasture still would have been damaged had only one defendant’s cattle invaded his property. See id.

\textsuperscript{267} See Restatement (Second) § 433A, cmt. i, illus. 12-17.

\textsuperscript{268} See Burlington III, 129 S. Ct. 1870, 1884 (2009) (“[W]e conclude that the District Court reasonably apportioned the Railroads’ share of the site remediation costs at 9%.”).

\textsuperscript{269} O’Neil v. Picillo, 883 F.2d 176, 182 (1st Cir. 1989); cf. United States v. Monsanto Co., 858 F.2d 160, 172 (4th Cir. 1988) (“[T]he district court could not have reasonably apportioned liability without some evidence disclosing the individual and interactive qualities of the substances deposited there.”).

That the Court sanctioned apportionment based on these “simplest of considerations” is attributable to its reliance on the Restatement (Second) approach, since that approach explicitly endorses apportioning based on, for example, time period. This will inevitably make apportionment a realistic argument for nearly all PRPs, which will typically lack data sufficient to fingerprint every movement of their chemicals, as previously thought necessary, yet will be able to demonstrate readily available and commonsense measurements, such as their property’s boundaries and the time they owned that property. Aside from allowing PRPs to use the sorts of evidence realistically available to them, this approach has the advantage of allowing courts to work with the evidence they are most comfortable with. As one commentator observed, “[c]losely related to the unavailability of the toxicological and epidemiological evidence necessary to perform toxic apportionments is the reluctance of courts and counsel to make use of such data. Courts historically have been uncomfortable with the admission of statistical evidence and with the relevant statistical principles.” Therefore, Burlington III will align the evidence necessary for apportionment with the evidence available to PRPs and preferred by courts.

B. UsingMargins of Error to Account For Uncertainties in Apportionment Calculations

The Burlington III Court upheld an apportionment that employed a fifty-percent margin of error in its calculation. In so doing, it effectively sanctioned apportionment based on uncertain evidence containing gaps in proof, provided the uncertainty is quantified through a margin of error.

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271 Burlington II, 520 F.3d at 943.

272 See RESTATEMENT (SECOND) § 433A cmt. c (1965) (using time period as an example of a reasonable manner for apportioning harm based on divisibility).

273 See Burlington II, 520 F.3d at 944 (recognizing the difficulty of meeting their heightened burden of proof, and sympathizing with the Railroads by calling their failure to keep these records “quite understandable”). One commentator recognized that certain types of evidence would allow PRPs to satisfy the stringent apportionment standard imposed by pre-Burlington III courts, but recognized that “evidence of this kind is rarely present.” Liability Issues in CERCLA Cleanup Actions, supra note 219, at 1529 (1986).


275 See Burlington III, 129 S. Ct. at 1883 (approving the district court’s apportionment and its use of a margin of error).

276 That the Supreme Court allowed apportionment based on less-than-certain evidence is not surprising, since the Restatement (Second) itself demands only a reasonable basis for apportionment. See RESTATEMENT (SECOND) § 433A (1965); see generally supra Part IV.A
The implications of the Court’s ratification of the “margin of error” approach raise the question: Where, within a court-established margin of error, should liability be apportioned? By its very nature, a margin of error entails recognizing that, although a PRP’s contribution to the contamination falls inside a range, where precisely it falls within that range is unknowable. Therefore, exactly where within the margin a court apportions liability is based on what it (admittedly) could not ascertain through available evidence. Accordingly, where objective evidence alone fails to precisely apportion (necessitating a margin of error), any placement within that margin is necessarily grounded in subjective considerations, such as a balance of the equities or a hunch. Therefore, it is essential to formulate an interpretation of Burlington III that reconciles the margin of error’s being upheld with Justice Stevens’ directive that equitable considerations may not be considered during apportionment analysis.


Since courts are unable to use equitable considerations to march forward after the trail of objective evidence ends, some systematic standard for setting within-the-margin liability is necessary to prevent inconsistent and arbitrary liability assignments that rely on disallowed considerations. Logically, this standard should employ one of three approaches: assigning liability at the margin’s lowest point, its highest point, or its midpoint. These standards further respective policies of erring in favor of the PRP to avoid overburdening it, applying the moderate approach in recognition that, most likely, the actual damage is somewhere other than the margin’s extremities, and erring towards caution to avoid outcomes that will saddle the government with non-compensable costs.

When choosing among these interpretational approaches, courts are offered guidance by the policies underlying CERCLA, with the Supreme
Court-approved margin of error in *Burlington III* serving as a guidepost.\footnote{See id. at 1882-83 (discussing the margin of error used by the District Court, and ultimately upholding the district court’s apportionment).} This policy inquiry reveals that CERCLA’s foremost goal is ensuring “those responsible for problems caused by the disposal of chemical poisons bear the costs and responsibility for remedying the harmful conditions they created . . . .”\footnote{United States v. Reilly Tar & Chem. Corp., 546 F. Supp. 1100, 1112 (D. Minn. 1982); cf. United States v. Monsanto Co., 858 F.2d 1100, 173 (4th Cir. 1988) (citing United States v. S.C. Recycling & Disposal, Inc., 653 F. Supp. 984, 995 & n.8) (“[M]aking the governments whole for response costs was the primary consideration [of CERCLA].”); see also supra notes 5-8 and accompanying text.} When interpreting this policy, it is important to be mindful that “since CERCLA is a remedial statute, it[] . . . should be construed broadly to avoid frustrating the federal purpose.”\footnote{United States v. Carolina Transformer Co., 978 F.2d 832, 837-38 (4th Cir. 1992) (emphasis added).} Accordingly, within-the-margin liability should be set at a percentage that ensures the PRP pays fully for the damage it causes, lest this goal be undermined.\footnote{See id.} Moreover, that liability should be assigned “broadly” in order to ensure PRPs do not underpay.\footnote{See id.} Only one of the three approaches described above meshes with those criteria, and that, of course, is the approach assigning liability at the zenith of the margin of error. This approach to the margin of error eases PRPs’ burdens in cases where liability cannot be *precisely* calculated, but – by shouldering them with any liability they fail to account for – prevents PRPs from parlaying this imprecision to their advantage.\footnote{Cf. Light, supra note 176, at 11,061. In an illustration accompanying Professor Light’s proposed post- *Burlington III* “Restatement” of apportioning CERCLA liability, he notes that it is appropriate to hold a PRP liable for nine percent of damages despite the court’s calculations indicating it is liable for only six percent of damages; this is done by “[a]llowing for calculation errors . . . .” See id.} Thus the government is not, in the words of the Ninth Circuit, “left holding the bag”\footnote{Burlington II, 520 F.3d 918, 930 (9th Cir. 2008), rev’d 129 S. Ct. 1870 (2009).} when PRPs (which bear the burden of proving a reasonable apportionment basis)\footnote{*Burlington III*, 129 S. Ct. 1870, (“CERCLA defendants seeking to avoid joint and several liability bear the burden of proving that a reasonable basis for apportionment exists.”); RESTATEMENT (SECOND) § 433B(2) (1976) (“Where the tortious conduct of two or more actors has combined to bring about harm to the plaintiff, and one or more of the actors seeks to limit his liability on the ground that the harm is capable of apportionment among them, the burden of proof as to the apportionment is upon each such actor.”).} fail to produce ample evidence supporting a precise calculation.

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\footnote{See id. at 1882-83 (discussing the margin of error used by the District Court, and ultimately upholding the district court’s apportionment).}
2. A Curious Effect of the Upwardly Adjusted Margin

Under this upwardly-adjusted-margin approach, PRPs sometimes will successfully demonstrate a reasonable basis for apportionment, yet fail to escape full joint and several liability. A rudimentary hypothetical illustrates this phenomenon: Alpha Corporation owned a twelve acre parcel from 1992 until 2004, when it sold the parcel to Beta Corporation. Beta still owns the land. Both parties used the industrial solvent toxicopollutinate on the site: Alpha used roughly 20 gallons annually, while Beta used 10 gallons annually. In 2007, the EPA performed a cleanup of the toxicopollutinate-saturated site, and sued to recover its costs from Alpha (a “prior owner” PRP per CERCLA section 107(a)(2)), and from Beta (a “present owner” PRP per section 107(a)(1)). The District Court finds the liability apportionable – Alpha owned the site for eighty-percent of the relevant timeframe, and annually used (and presumably released) twice as much toxicopollutinate as Beta. Beta, therefore, is eleven percent liable under these calculations, while Alpha is eighty-nine percent liable. Based on expert testimony, the court concludes the amount of toxicopollutinate used may not perfectly mirror the amount emitted, and accordingly applies a twenty percent margin of error. Applying the

289 Cf. Restatement (Second) cmt. d, illus. 5 (1965). This illustration, discussed supra notes 255-57 and accompanying text, provides that there exists a reasonable basis for apportioning harm done to C, a downstream riparian landowner, where two upstream landowners (A and B) cause oil to be spilled that impairs C’s land use. Id. Under this hypothetical, landowner C becomes the EPA, the oil becomes toxicopollutinate, and the media becomes the ground, rather than water.

290 42 U.S.C. § 9607(a)(2) (2006); see supra note 60 and accompanying text.


292 As discussed supra section IV.A, Burlington III follows the Restatement (Second) approach to apportioning. Under that standard, these sorts of “reasonable assumptions” are appropriate when performing apportionment analysis. See Restatement (Second) cmt. d (1965).

293 In the three year period between 2004 and 2007, Beta released roughly ten gallons per year (10 x 3 = 30 gallons). In the twelve years between 1992 and 2004, Alpha released roughly twenty gallons per year (20 x 12 = 240 gallons). Since 240 gallons + 30 gallons = 270 gallons, and 30 divided by 270 is approximately .11, Beta is liable for eleven percent of the damages, while Alpha is liable for the remaining eighty-nine percent.

294 Far from being a shot in the dark, scientific developments have made interpreting the error margin a calculation is prone to increasingly feasible. As one article explains, available technology includes: the weighted sites attributes model (sometimes abbreviated WSAM), the individual plume approach (sometimes referred to as IPA), area-of-
upwardly-adjusted margin, the Court increases Beta’s liability to 13.2 percent (11 x .20 = 2.2; 11 + 2.2 = 13.2); Alpha’s liability is adjusted to 106.8 percent (89 x .20 = 17.8; 89 + 17.8 = 106.8). Here, Alpha successfully demonstrated a reasonable basis for apportionment, yet failed to circumvent joint and several liability for the entire cleanup. Accordingly, the upwardly-adjusted margin of error will often leave the Restatement (Second) apportionment defense a mirage for the largest PRPs.

In light of these situations, the margin of error approach, properly applied, removes verisimilitude from the reasonable-basis-equals-no-joint-and-several-liability mantra, since the largest PRPs may find their apportionment argument subsumed within an upwardly-adjusted margin.\textsuperscript{295} This seemingly contrarian result, however, finds support in CERCLA’s statutory framework. Notably, CERCLA encourages the EPA to reach settlements with PRPs whose contributions are “minimal in comparison to other hazardous substances at the facility.”\textsuperscript{296} Like apportionment, these settlements effectively remove the threat of full joint and several liability from settling PRPs by granting them immunity from additional compensation demands from the EPA or from other PRPs.\textsuperscript{297} Accordingly, just as CERCLA’s overarching goal of government reimbursement is not thwarted by settlements with small-contributor PRPs, it is similarly unhindered by allowing small PRPs to escape liability in favor of imposing joint and several liability on an overwhelmingly large PRP, despite that PRPs having presented a “reasonable basis” for apportionment. Moreover, the visibility surrounding these large contributors makes them apt targets for full liability since “[t]he threat of joint and several liability should create very strong safety incentives for highly visible companies who can anticipate that they will be sued.”\textsuperscript{298}

3. Unrestricted Breadth of Margins of Error.

\textsuperscript{295} See Misiorowski & Eagle, supra note 181, at 5.
\textsuperscript{296} See example supra notes 289-94 and accompanying text.
\textsuperscript{298} Liability Issues in CERCLA Cleanup Actions, supra note 219, at 1530.
Another question unanswered by Stevens’ opinion is how wide a margin of error may be without offending the requirement that the “facts contained in the record reasonably support[] the apportionment of liability.” In Burlington III, the Supreme Court upheld a fifty-percent margin of error without expressing trepidation towards the wide breadth of that margin. The Court did, however, find it important that “[t]he District Court’s detailed findings make it abundantly clear . . . that the spills of hazardous chemicals that occurred on the Railroad parcel contributed to no more than ten percent of the total site contamination.” Thus Justice Stevens was concerned not with the breadth of the margin, but with whether that margin – however wide it may be – encompassed the PRP’s actual contribution to the pollution, as demonstrated by objective evidence. As noted above, courts should assign liability at a margin’s loftiest point. Provided that courts perform that upward adjustment, and further provided the margin itself encompasses the PRPs actual contribution, Burlington III appears to place no restrictions on the width of that margin.

Some commentators interpret Burlington III as a narrow, fact-specific holding that upheld the District Court’s apportionment due to the unusual circumstances of the case. Under that view, Justice Stevens’ apparent endorsement of the margin of error is merely a pragmatic ends-justify-the-means approach that upheld the margin solely because, by sheer chance, it corresponded with the correct apportionment. That interpretation is incorrect because it too narrowly reads both the District Court’s use of the margin of error and Justice Stevens’ opinion alike. The District Court employed a fifty percent margin of error to account for “calculation errors.” Nothing in the District Court’s opinion limited this to calculation errors within the chosen factors for apportionment. Rather,

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300 See id.
301 Id. at 1883 (emphasis added).
302 See id.
303 See supra notes 280-88 and accompanying text.
304 See generally Burlington III, 129 S. Ct. at 1882-83 (upholding a margin of error even though the margin was large and uncertain because the apportioned damages were set at or greater than the actual damages caused by the PRP).
305 See, e.g., Cruden, supra note 183 (“The Supreme Court did not change the burden on defendants to prove divisibility.”).
306 See, e.g., Cruden, supra note 183.
308 See id.
the “calculation errors” language is broad enough to encompass errors in selecting the apportionment variables themselves.\textsuperscript{309} In \textit{Burlington III}, Justice Stevens’ opinion did not fault the District Court for its actual calculations.\textsuperscript{310} Rather, it faulted the District Court for choosing to partially base its calculations on a variable that was not sufficiently supported by the evidence – specifically, the volumetric-related factor.\textsuperscript{311} Therefore, \textit{Burlington III} endorses the margin of error approach: it did not uphold the margin of error simply because it coincidentally arrived at the correct answer. Rather, the margin of error was designed to account for precisely these sorts of uncertainties in choosing the calculation variables themselves.\textsuperscript{312}

**C. A Future Role for the Restatement (Third) in Liability Apportionment Under CERCLA?**

The \textit{Burlington III} decision implicitly adopted the \textit{Restatement (Second)} approach to liability apportionment.\textsuperscript{313} In so doing, it ignored the portion of the Railroads’ brief based on the \textit{Restatement (Third)}.\textsuperscript{314} The plain meaning of the holding, therefore, seems to reject the more recently developed \textit{Restatement (Third)} approach to apportionment.\textsuperscript{315} However, the precedential effect of this rejection is complicated because \textit{Burlington III} also held that the controlling apportionment standard is based on \textit{evolving notions of common law}.\textsuperscript{316} Accordingly, Justice Stevens’ holding speaks to only the \textit{current revolutionary state of common law apportionment analysis}.\textsuperscript{317} By applying the \textit{Restatement (Second)} rather than the

\begin{footnotesize}
\textsuperscript{309} See id.
\textsuperscript{310} \textit{Burlington III}, 129 S. Ct. at 1883.
\textsuperscript{311} \textit{See id.} (“The District Court’s conclusion that those two chemicals accounted for only two-thirds of the contamination requiring remediation finds less support in the record . . .”).
\textsuperscript{312} See generally id.
\textsuperscript{313} See discussion \textit{supra} Part IV.A.
\textsuperscript{314} \textit{See Brief for Petitioners, supra} note 149, at 33; cf. \textit{Burlington III}, 129 S. Ct. at 1880-82 (applying the \textit{Restatement (Second)} approach, and making no mention of the \textit{Restatement (Third)}).
\textsuperscript{315} \textit{See Burlington III}, 129 S. Ct. at 1880-84; \textit{see also} Loving v. Sec’y of the Dept. of Health & Human Servs., No. 02-469V, 2009 WL 3094883, at *26 n.26 (Fed. Cl. July 30, 2009) (citing \textit{id.} at 1881) (“With regard to apportionment, whether section 433A of the \{\textit{Restatement (Second)}\} differs from section 26 of the \{\textit{Restatement (Third)}\} is not clear. If there is a difference between the two editions, the \{\textit{Restatement (Second)}\} appears controlling.”).
\textsuperscript{316} \textit{Burlington III}, 129 S. Ct. at 1881 (quoting United States v. Chem-Dyne Corp., 572 F. Supp. 802, 808 (S.D. Ohio 1983)).
\textsuperscript{317} \textit{See id.}
\end{footnotesize}
Restatement (Third), Stevens held that the Restatement (Second) was the correct standard at the time of decision, but left unaddressed the appropriate apportionment standard should the continuum of common law evolution eventually deviate from the Restatement (Second). 318

Burlington III does not stand for the proposition that the Restatement (Second) is forever the applicable apportionment standard. If, for example, a widespread judicial adoption of the Restatement (Third) approach to apportioning liability were to occur, it would be unbefitting to interpret the Restatement (Second) as the “evolved” state of common law. 319 In that scenario, of course, continued evolution would have rendered the Restatement (Second) approach outdated.

This hypothetical shift away from the Restatement (Second) is not at all fanciful because joint and several liability is waning overall as the judicial trend moves toward the apportionment-friendly approach exemplified by the Restatement (Third). 320 The Restatement (Third) observes that trend and seeks to update accordingly; it notes that “[e]ven for topics that were addressed in the Restatement (Second) of Torts, the nearly universal adoption of comparative responsibility by American courts and legislatures has had a dramatic impact.” 321 The Restatement (Third) encourages apportionment through its underlying policy that “[n]o party should be liable for harm it did not cause, and an injury caused by two or more persons should be apportioned according to their respective shares of comparative responsibility.” 322 Its accompanying Reporters’ Note effectuates this policy by, for example, relaxing evidentiary standards:

Divisible damages may occur when a part of the damages was caused by one set of persons in an initial accident and was then later enhanced by a different set of persons. The passage of time may affect whether evidence is available to determine the magnitude of each indivisible part. As long as

318 See id.
319 See sources cited supra note 179 and accompanying text (discussing the policy rationales underlying the trend away from joint and several liability).
321 See sources cited supra note 179 and accompanying text (describing criticisms of joint and several liability, and the corresponding shift away from joint and several liability, as exemplified by the Restatement (Third)); see also Frank J. Vandall, A Critique of the Restatement (Third), Apportionment as it Affects Joint and Several Liability, 49 EMERY L.J. 565, 570 (2000) (observing that the impetus for the Restatement (Third) provisions regarding liability apportionment “appears to have been to prevent a corporate defendant who is slightly at fault from being held liable for a large portion of the damages.”).
323 Id. at § 26 cmt. a.
any person caused only a part of damages, however, the damages are divisible, irrespective of the timing.\textsuperscript{324}
The Reporters’ Note even expresses open-mindedness towards (but not endorsement of) a default approach where liability is divided equally among all defendants when no other evidence supporting apportionment is available.\textsuperscript{325} This common law evolution toward the apportionment-friendly \textit{Restatement (Third)} approach is encapsulated by the Reporters’ observation that the “clear trend over the past several decades has been a move away from pure joint and several liability.”\textsuperscript{326}

Owing to this trend towards apportionment, the \textit{Restatement (Second)} standard may soon become inapplicable to apportionment analysis under CERCLA, notwithstanding its application in \textit{Burlington III}.\textsuperscript{327} Under this interpretation, a move away from the \textit{Restatement (Second)} would not contravene \textit{Burlington III} because \textit{Burlington III}’s apportionment holding was based on \textit{Chem-Dyne}, a case that recognized these ever-changing standards, and preserved flexibility in CERCLA apportionment.\textsuperscript{328} The citation to \textit{Chem-Dyne} creates built-in flexibility in \textit{Burlington III}.\textsuperscript{329}

\section*{V. THE NEW APPORTIONMENT STANDARD ARTICULATED}

\textit{Burlington III} is properly read as an endorsement of the \textit{Restatement (Second)} approach to apportioning liability based on divisibility of harm.\textsuperscript{330} Since the \textit{Restatement (Second)} advocates apportionment based on rough approximations ascertained through “reasonable assumptions,” \textit{Burlington III} significantly lightens the burden of proof PRPs bear.\textsuperscript{331} Accordingly, it is no longer accurate to treat apportionment as “a very difficult proposition,” and courts should greet apportionment arguments with open-mindedness.

\begin{footnotes}
\textsuperscript{324} \textit{Id.} at § 26, Reporters’ Note at 6.
\textsuperscript{325} \textit{See id.} at 12 (citing \textit{Loui v. Oakley}, 438 P.2d 393 (Haw. 1968)) (“The court held that . . . . [w]hen the jury has no basis even for a rough division, per capita division should be used.”).
\textsuperscript{326} \textit{Id.} at § 17, Reporters’ Note to cmt. a, at 211 (2003).
\textsuperscript{327} \textit{Burlington III}, 129 S. Ct. at 1881-82 (applying the \textit{Restatement (Second)} approach).
\textsuperscript{329} \textit{Burlington III}, 129 S. Ct. at 1881-82.
\textsuperscript{330} \textit{See discussion supra Part IV.A.}
\textsuperscript{331} \textit{See In re Bell Petroleum Servs.}, 3 F.3d 889, 904 n.19 (5th Cir. 1993) (“[E]vidence sufficient to permit a rough approximation is all that is required under the \textit{[Restatement (Second)]}.”); \textit{RESTATEMENT (SECOND) § 433A, cmt. d} (1965); \textit{see also discussion supra Part IV.A.}
\end{footnotes}
rather than skepticism. Although with one hand Burlington III banned equitable factors from the apportionment analysis, with the other it allowed sua sponte apportionment based on courts’ discretion. During sua sponte apportionment, a court may use equitable considerations in its threshold determination of whether to apportion on its own accord, while still respecting the ban on equitable considerations during the apportionment calculation itself. Furthermore, rather than balance the equities among individual PRPs, the Restatement (Second) approach adopted by Justice Stevens recognizes that PRPs in general are recurrently overburdened, and lightens their burdens in response.

Parallels between Burlington III and the Restatement (Second) are particularly pronounced in the comments and illustrations accompanying Restatement (Second) § 433A. Comment d provides that CERCLA-like harms (i.e. harms not “severable into distinct parts”) may nevertheless be apportionable where there is a reasonable basis for doing so. Justice Stevens’ decision to apportion where chemical intermingling has muddled would-be “distinct parts” directly mirrors the situation, and demonstrated that courts should treat chemical intermingling cases as “comment d” harms. Therefore, Burlington III parallels the Restatement (Second) not only in its overall framework, but also in the detailed accompanying illustrations that contemplate CERCLA-like harms are amenable to apportionment.

A corollary of the Restatement (Second) approach is that courts should be receptive of simplistic evidence, such as the geographical and temporal evidence used in Burlington III. This comports with the purpose underlying joint and several liability in the CERCLA context, which is to enable the government to recover its expenditures by making “those responsible for problems caused by the disposal of chemical poisons bear

332 Control Data Corp. v. S.C.S.C. Corp., 53 F.3d 930, 934 n.4 (8th Cir. 1995); see discussion supra Part IV.A.
333 See Burlington III, 129 S. Ct. at 1882 n.9 (“Equitable considerations play no role in the apportionment analysis . . . .”); Light, supra note 176, at 11,063 ("Under Burlington Northern . . . a court may apportion liability sua sponte, even if not advanced by a defendant.").
334 See discussion supra Part IV.A.
335 See RESTATEMENT (SECOND) § 433A cmts. d, i (1965); see discussion supra Part IV.A.2.
337 See discussion supra Part IV.A.2.
338 See, e.g., RESTATEMENT (SECOND) cmt. d, illus. 5 (1965) (oil spill damage caused by multiple defendants can be apportioned based on estimate of quantity of oil each defendant spilled); see discussion supra Part IV.A.2.
339 See Burlington III, 129 S. Ct. at 1880-83.
the costs and responsibility for remedying the harmful conditions they created . . . ." 340 By requiring sophisticated and expensive evidence for apportionment, previous decisions made the apportionment argument viable for only deep-pocketed PRPs who could afford to produce such evidence. Ironically, those were the very PRPs who, due to their solvency, could best serve CERCLA’s goal of compensating the government for its costs of cleanup. 341 Courts should therefore interpret Burlington III to allow divisibility based on readily available, common-sense evidence because this interpretation is evenhanded towards PRPs without undermining CERCLA’s goal of fully compensating the government. 342

When presented with an apportionment argument, courts should determine whether the evidence presents a reasonable, non-arbitrary basis for apportionment. Courts should then assess the margin of error their apportionment calculations are prone to. 343 Finally, courts should set the apportionment-seeking PRP’s liability at the uppermost point encompassed by that margin. 344 PRPs are subject to strict, joint and several liability, and therefore a PRP that caused very little contamination – or even none – could theoretically be charged for the entire cleanup under CERCLA. 345 With that in mind, apportionment is a desirable tool for avoiding these heavy-handed results. However, it is undesirable to deny compensation to the government, and therefore “Congress intended for those proven at least partially culpable to bear the cost of the uncertainty . . . .” 346

The margin of error approach accounts for this “uncertainty,” and then saddles PRPs, rather than the government, with the burden of that uncertainty via the upward adjustment. 347 In situations where one PRP accounts for a very large portion of the contamination, the upwardly-adjusted margin could foreclose the possibility of apportionment even where that PRP proves a reasonable basis for apportionment. 348 While

341 See Reilly Tar & Chem., 546 F. Supp. at 1112 (explaining the goal of compensation underlying CERCLA); Elizabeth F. Mason, Comment, Contribution, Contribution Protection, and Nonsettlor Liability Under CERCLA: Following Laskin’s Lead, 19 B.C. ENVTL. AFF. L. REV. 73, 74-75 (“One of CERCLA’s basic aims . . . was to ensure that PRPs would bear the cost of remedying the toxic dangers that they caused.”).
342 See discussion supra Part IV.A
343 See Misiorowski & Eagle, supra note 181, at 18 (explaining scientifically-grounded methods of liability apportionment available to courts).
344 See discussion supra Part IV.B.1.
345 See discussion supra Part IV.B.1.
347 See discussion supra Part IV.B.1-2.
348 See discussion supra Part IV.B.2
encouraging governmental compensation, the margin of error also treats PRPs fairly by allowing them to use the margin of error to account for imprecision rather than being denied apportionment outright. Thus the dual policies of ensuring the government is compensated and not disproportionately burdening PRPs – seemingly at odds – are harmonized.\textsuperscript{349}

\textit{Burlington III} was decided mindful of the fact that CERCLA’s joint and several liability scheme is not static, but is meant to change along with “evolving principles of common law.”\textsuperscript{350} Courts applying \textit{Burlington III} should recognize that by applying the \textit{Chem-Dyne} approach, Justice Stevens was confirming as correct that decision’s evolutionary treatment of CERCLA liability.\textsuperscript{351} Therefore, courts should not read \textit{Burlington III} to require blind adherence to the apportionment principles of the \textit{Restatement (Second)}.\textsuperscript{352} Instead, courts presented with CERCLA-related divisibility questions must vigilantly track developments in liability-apportionment jurisprudence, and update their standards to mirror these developments.\textsuperscript{353} The evolution of joint and several liability theoretically may take any form, and courts should modify their apportionment standards accordingly.

\section*{VI. CONCLUSION}

While \textit{Burlington III} has clearly altered liability apportionment under CERCLA, the details and extent of the alteration are not immediately apparent from the holding. However, by viewing the apportionment decision in light of the \textit{Restatement (Second) of Torts}, which it parallels, a coherent explanation for \textit{Burlington III} emerges that will enable courts to iron out the opinion’s ambiguities. By returning the apportionment inquiry to the \textit{Restatement (Second)} framework and accounting for uncertain apportionment calculations through margins of error,\textsuperscript{354} courts correctly interpret \textit{Burlington III} and effectuate its goal of unifying divisibility of harm analysis under CERCLA. Looming in the background of this interpretation, however, is the fact that \textit{Burlington III} linked its holding to

\textsuperscript{349} See discussion \textit{supra} Part IV.B.
\textsuperscript{351} See \textit{Burlington III}, 129 S. Ct. at 1881-83.
\textsuperscript{352} See discussion \textit{supra} Part IV.C
\textsuperscript{353} See discussion \textit{supra} Part IV.C.
\textsuperscript{354} See discussion \textit{supra} Part V.
the much-earlier *Chem-Dyne* decision; that prior decision based the apportionment inquiry on evolving notions of common law. Accordingly, *Burlington III* recognizes that when apportioning CERCLA liability, the only constant in change. It is, therefore, an of-the-moment decision that is not intended to govern or predict future apportionment standards. 

This article has explored a particularly flummoxing corner of an oft-misunderstood statute. Due to the fact that CERCLA cleanups can cost well over $100 million dollars, PRPs have tremendous incentive to seek apportionment of liability; this article, therefore, proposes a practical solution to a frequently litigated issue. Interpreted under this approach, *Burlington III* simplifies the divisibility inquiry through straightforward application of *Restatement (Second)*. In so doing, it achieves the statutory purpose of fully compensating the government but also offers PRPs the opportunity - which was, for all intents of purposes, unavailable before *Burlington III* - to avoid joint and several liability.

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355 *See discussion supra* Part IV.C.
357 *See discussion supra* Parts IV.C, V.
358 *See discussion supra* Part V.
360 *See discussion supra* Parts IV.A, V.
361 *See discussion supra* Part II.B.1.