Apportioning Cleanup Costs in the New Era of Joint and Several CERCLA Liability

Michael Foy
APPORTIONING CLEANUP COSTS IN THE NEW ERA OF JOINT AND SEVERAL CERCLA LIABILITY

Michael Foy*

I. INTRODUCTION

This comment interprets a recent United States Supreme Court decision addressing the apportionment of liability under CERCLA, a federal environmental law 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’s 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

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1. As explained by the Environmental Protection Agency, CERCLA is: the environmental program established to address abandoned hazardous waste sites . . . . [It] was enacted in the wake of the discovery of toxic waste dumps such as Love Canal and Times Beach in the 1970s. It allows the EPA to clean up sites and to compel responsible parties to perform cleanups or reimburse the government for EPA-lead cleanups. Basic Information, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, http://www.epa.gov/superfund/about.htm (last visited Oct. 30, 2010).


reticent wording, this comment guides courts and practitioners searching for the elusive standard that governs post-Burlington Northern liability apportionment under CERCLA.

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 that the costs of these responses are ultimately shouldered by the parties who necessitated them. Effectuating these goals has caused much frustration for courts and the Environmental Protection Agency (EPA) alike; this is largely because CERCLA's text was "hastily drafted," and the statute's legislative history is "shrouded with mystery." Despite this inept guidance, courts interpreting CERCLA's liability scheme agree, nearly unanimously, that CERCLA allows imposition of joint and several liability upon parties potentially responsible for contaminating a CERCLA site.

661 F. Supp. 2d 989, 1012 (S.D. Ind. 2009).


6. See id.; see also Burlington N., 129 S. Ct. at 1874 (quoting Consol. Edison Co. of N.Y. v. UGI Utils., 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 legislative purpose." United States v. Carolina Transformer Co., 978 F.2d 832, 837-38 (4th Cir. 1992).

7. See, e.g., Artesian Water Co. v. Gov't of Newcastle Cnty, 851 F.2d 643, 648 (3d Cir. 1988) ("CERCLA is not a paradigm of clarity or precision.").


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. & Santa Fe Ry. Co. v. United States, 129 S. Ct. 1870 (2009) (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
The consensus rapidly evaporates, however, when courts address the burden parties must meet to avoid joint and several CERCLA liability by demonstrating the harm they caused is divisible from the rest of the contamination.\textsuperscript{11} Although decisions are discordant regarding the specifics of this burden, courts have generally applied an exacting approach and "have been reluctant to apportion costs."\textsuperscript{12}

The U.S. Supreme Court recently confronted this apportionment issue in \textit{Burlington Northern},\textsuperscript{13} where it upheld the Eastern District of California's apportionment of liability, even though the apportionment was based on calculations that would not satisfy the strict approach to apportionment applied by most circuit courts.\textsuperscript{14} Most courts and commentators interpret \textit{Burlington Northern} as easing the burden CERCLA defendants must meet to apportion would-be joint and several liability.\textsuperscript{15} Beyond this simplistic statement, however, the decision's full scope and ramifications remain uncertain. 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 is derived.\textsuperscript{16} Moreover,
the district court used a "margin of error" in its apportionment calculations, but Justice Stevens's opinion does not explain whether a margin of error approach was appropriate solely because of the case's unique facts or whether a margin of error should routinely be used by courts apportioning liability.

This comment 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 comment explains CERCLA's statutory background, discusses the milieu of apportionment decisions rendered before Burlington Northern, and examines the Burlington Northern decisions in the lower courts and the U.S. Supreme Court. Part III presents several questions predating Burlington Northern that the decision left unanswered, and then identifies several new questions raised by the decision. In Part IV, this comment analyzes these uncertainties through the lens of the congressional goals that form CERCLA's backdrop and through reasonable extrapolations from Justice Stevens's opinion. This analysis culminates in Part V, which proposes Burlington Northern be viewed as a return to the apportionment principles of the Restatement (Second) of Torts. Moreover, this comment argues, Burlington III repudiates the myriad decisions that paid lip-service to the Restatement (Second), but actually imposed a much harsher standard. Part V also proposes an interpretation that endorses the margin of error approach to apportionment, and

at 1881 (quoting United States v. Hercules, Inc., 247 F.3d 706, 717 (8th Cir. 2001)).
18. 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).
19. See infra Part II.A.
22. See infra Part III.
23. See infra Part IV.
25. See infra Part V.
preserves a future role for the *Restatement (Third) of Torts*\textsuperscript{26} in CERCLA apportionment.\textsuperscript{27}

**II. A COMPLICATED STATUTE LEADS TO COMPLICATED JURISPRUDENCE**

Congress drafted CERCLA to comprehensively regulate the processes through which the President of the United States, usually acting through the U.S. Environmental Protection Agency (EPA),\textsuperscript{28} identifies contaminated sites, cleans them, funds their cleanup, and imposes liability on parties responsible for their contamination.\textsuperscript{29} CERCLA provides a "backward-looking" approach for remedying existing pollution caused by hazardous waste disposal.\textsuperscript{30} Congress intended CERCLA to apply retroactively by complementing the forward-looking Resources Conservation and Recovery Act (RCRA),\textsuperscript{31} a statute that seeks to prevent future pollution caused by such disposal.\textsuperscript{32} In practice, RCRA and CERCLA collectively prevent unfettered contamination of the land, and ostensibly seal the "last remaining loophole in environmental law."\textsuperscript{33}

\textsuperscript{26} *Restatement (Third) of Torts: Apportionment of Liability* (2000).
\textsuperscript{27} See infra Part V.
\textsuperscript{30} E.g., United States v. Ottati & Goss, Inc., 630 F. Supp. 1361, 1398 (D. N.H. 1985) ("It is by its very nature backward looking.").
\textsuperscript{33} H.R. Rep. No. 94-1491, at 4 (1976), reprinted in 1976 U.S.C.C.A.N. 6238, 6241 (referring to the unregulated state of pre-CERCLA-and-RCRA ground pollution). In enacting the 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).
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." CERCLA defines "hazardous substances" broadly to encompass any substance deemed hazardous under RCRA, as well as two additional acts enforced by the EPA: the Clean Air Act and the Clean Water Act. When a substance falls outside of this definition, CERCLA still applies if "there is a release or substantial 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, or "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

The EPA is "the primary enforcer of CERCLA." Pursuant to that role, the EPA was statutorily required to develop the National Contingency Plan (NCP) prior to cleaning contaminated sites. The NCP 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.

35. See id. § 9601(14). Even if a substance is 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).
37. 42 U.S.C. § 9601(9)(AMB). Congress explicitly excluded consumer products and vessels from this broad definition. See id.
38. See Fuller, supra note 28, at 229.
40. See id. § 9605(a)(1), (3). Notably, the NCP substantively affects the allocation of liability under CERCLA, as any plaintiff, including the EPA, seeking to 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).
Aside from its independent investigations, the EPA discovers contamination through information provided by its regulatees via CERCLA's requirement that managers of facilities notify the EPA when they have knowledge of a hazardous substance release.\footnote{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).} Based on procedures set forth in the NCP, the EPA maintains the National Priorities List,\footnote{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.").} identifying the known releases or threatened releases requiring the most urgent attention through consideration of "the relative potential of sites to pose a threat to human health or the environment."\footnote{Introduction to the Hazard Ranking System (HRS), U.S. ENVIRONMENTAL PROTECTION AGENCY, http://www.epa.gov/superfund/programs/npl_hrs/hrsint.htm (last visited Nov. 17, 2010).}

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.\footnote{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.} In addressing contamination stemming from the release or threatened release, the government is authorized to engage in removal and remedial actions.\footnote{Id. § 9604(a)(2).} Removal actions entail "cleanup or removal of released hazardous substances from the environment . . . [and] 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 or to the environment."\footnote{Id. § 9601(23).} Remedial actions encompass cleanup tactics that, rather than merely mitigating damage, aim to fully restore the site to its pre-contamination condition.\footnote{Id. § 9601(24).} 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.48

2. Federal Authority to Control the Cleanup Method and Impose Cleanup Costs

The EPA has the authority to determine who must perform the cleanup: it may itself clean the contamination and later sue for restitution or, alternatively, it may direct one or more "potentially responsible parties" to decontaminate the site.49 The former option allows for rapid action, as the EPA is expressly granted authority to perform a cleanup; it can therefore forego prolonged litigation with third parties until after the cleanup.50 When the EPA performs a cleanup, CERCLA allows the government to recover only those costs consistent with the NCP,51 but eases this requirement by presuming that the government's cleanups are NCP-harmonious.52 The latter option is available only after the EPA determines that there may be an imminent and substantial endangerment to public health or welfare, or the environment, due to an actual or threatened release of contaminants.53 When the EPA finds such an imminent endangerment, it may pursue either "civil judicial injunctive actions [or] unilateral EPA administrative orders."54 Finally,

49. 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).
50. See id. § 9604(a)(1)(B).
51. Id.
52. See, e.g., United States v. Ne. Pharm. & Chem. Co., 810 F.2d 726, 747 (8th Cir. 1986); United States v. Hardage, 982 F.2d 1436, 1442 (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.").
54. Steven Ferrey, Inverting the Law: Superfund Hazardous Substance
the EPA may allow the responsible parties to voluntarily clean the site when it determines “such action will be done properly and promptly.”

CERCLA liability attaches to four categories of Potentially Responsible Parties (PRPs), who are identified based on their relationship with the contaminated site. 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 can be liable as arrangers if they arranged for disposal or treatment of hazardous wastes located at the contaminated facility. Finally, parties can be liable as transporters if they accepted and transported a hazardous substance 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.”

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. see Wagner Elec. Corp. v. Thomas, 612 F. Supp. 736, 738 (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, may sue the noncompliant party for its expenses, and seek punitive treble damages. 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.”).

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).
While PRPs are subject to extensive liability, they are not equipped with a similarly vast collection of defenses. Nevertheless, PRP liability is not absolute; rather, PRPs have three defenses under CERCLA. A PRP may avoid liability by demonstrating that the release of hazardous substances was caused by "an act of God," or by "an act of war." Alternatively, PRPs may escape liability by proving the contamination was caused by a third party with whom the PRP had no relationship—contractual or otherwise—so long as the PRP exercised due care with respect to both the substance and the foreseeable effects of the third party’s dealings with that substance. In 1986, through the Superfund Amendments and Reauthorization Act (SARA), Congress created an additional defense that purportedly shields from liability “innocent landowners” who unwittingly purchase contaminated land, and do not contribute to further contamination. SARA expanded the “third party” defense by allowing purchasers to escape liability where they were previously unable to satisfy the “no relationship” requirement of the defense due to their sales contract with the prior landowners.

B. Joint and Several CERCLA Liability

According to the predominant judicial interpretation of CERCLA, PRPs may be held jointly and severally liable for...

61. See infra Part II.B (examining the breadth of CERCLA liability).
63. See 42 U.S.C. § 9607(b).
64. Id. § 9607(b)(1).
65. Id. § 9607(b)(2).
66. See id. § 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. REV. 401, 402 (1998).
68. See 42 U.S.C. § 9601(35).
69. See id. § 9601(35) (excluding sales contracts for already contaminated land from CERCLA’s definition of “contract”).
the entire cost of cleanup.\textsuperscript{70} Although previously drafted references to joint and several liability were stricken from the CERCLA's final draft,\textsuperscript{71} courts have uniformly held that CERCLA permits its imposition.\textsuperscript{72} The \textit{Chem-Dyne} court extensively analyzed the appropriateness of imposing joint and several liability on PRPs, and recognized that "traditional and evolving principles of common law" governed CERCLA liability.\textsuperscript{73} With this guidance in mind, the court surmised that these "principles" referred to \textit{federal} principles of common law, because CERCLA addressed a "complex problem of national magnitude involving \textit{uniquely federal} interests."\textsuperscript{74} 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.\textsuperscript{75} The court, however,\textsuperscript{70} See United States v. Chem-Dyne Corp., 572 F. Supp. 802 (S.D. Ohio 1983). The correctness of the \textit{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 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).

\textsuperscript{71} \textit{Chem-Dyne}, 572 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.").

\textsuperscript{72} See, e.g., Burlington N. \& Santa Fe Ry. Co. v. United States, 129 S. Ct. 1870, 1881 (2009) ("The \textit{Chem-Dyne} approach has been fully embraced by the Courts of appeals."); see also cases cited supra note 10 (allowing joint and several liability). CERCLA liability is not only joint and several, but also strict. See United States v. Atl. Research Corp., 551 U.S. 128, 136 (2007) (citing United States v. Alcan Aluminum Corp., 315 F. 3d 179, 184 (2d Cir. 2003)). Strict liability denotes liability imposed on a defendant without proof that it breached a duty of care. See PROSSER \& KEETON, supra note 70, at 534. Strict liability is not expressly mentioned in CERCLA's text, but is nevertheless well-established by judicial interpretation of CERCLA's legislative history. See \textit{In re} Bell Petroleum Servs., 3 F.3d 889, 897 (5th Cir. 1993). Based on its legislative history, courts "have uniformly held that CERCLA imposes strict liability on responsible parties ... ." Alexandra B. Klass, \textit{From Reservoirs to Remediation: The Impact of CERCLA on Common Law Strict Liability Environmental Claims}, 39 WAKE FOREST L. REV. 903, 933 (2004).

\textsuperscript{73} \textit{Chem-Dyne}, 572 F. Supp. at 807–08.

\textsuperscript{74} Id. at 808 (emphasis added).

\textsuperscript{75} See id. at 810–11. The \textit{Chem-Dyne} opinion was further guided by the reference in CERCLA's legislative history to the Clean Water Act (despite that reference's ambiguity). See 126 CONG. REC. 31,965 (1980) (statement of Rep.
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) of Torts.\textsuperscript{76} The Restatement-influenced rule presumes each PRP is jointly and severally liable for the entire cost of cleanup.\textsuperscript{77} However, this presumption is rebuttable because under the Restatement (Second) of Torts 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.”\textsuperscript{78} In short, the dominant approach embraces joint and several liability, but does view that liability as unavoidable.

1. Pre-Burlington Northern Decisions Addressing Apportionment of CERCLA Liability

PRPs may avoid joint and several liability by demonstrating that their contribution to the contamination is divisible from the entire contamination.\textsuperscript{79} Divisibility is a concept deeply-rooted in post-Chem-Dyne CERCLA jurisprudence,\textsuperscript{80} and is based on the Restatement (Second) of Torts approach that Chem-Dyne interpreted as governing apportionment.\textsuperscript{81} Under the Restatement (Second) of Torts, harm is divisible only when either: “(1) there are distinct harms,\textsuperscript{82} or (2) there is a single harm, but there is a reasonable basis for determining each party's contribution to

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Florio).  
\textsuperscript{76} RESTATEMENT (SECOND) OF TORTS (1965); see United States v. Chem-Dyne Corp., 572 F. Supp. 802, 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”).  
\textsuperscript{78} Id. (citing RESTATEMENT (SECOND) OF TORTS §§ 433A, 881 (1976)).  
\textsuperscript{79} See O'Neil v. Picillo, 883 F.2d 176, 178 (1st Cir. 1989).  
\textsuperscript{80} 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.  
\textsuperscript{81} 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 . . . .”).  
\textsuperscript{82} RESTATEMENT (SECOND) OF TORTS § 433A(1)(a) (1965).
that harm.\textsuperscript{83} The party seeking to avoid joint and several liability bears the burden of proving divisibility.\textsuperscript{84}

The Fourth and First Circuits in \textit{United States v. Monsanto Co.}\textsuperscript{85} and \textit{O'Neil v. Picillo},\textsuperscript{86} respectively, applied the \textit{Chem-Dyne} approach and collectively imposed an exacting burden on PRPs seeking apportionment.\textsuperscript{87} In \textit{Monsanto}, the Fourth Circuit rejected a PRP's assertion that liability could be divided based on the amount of substance that the PRP contributed,\textsuperscript{88} holding that the \textit{quantity} of emission was insufficient without proving the \textit{quality} of the damages caused by those emissions.\textsuperscript{89} In \textit{O'Neil}, the First Circuit rejected a PRP's proposed apportionment,\textsuperscript{90} and suggested that 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 . . . ."\textsuperscript{91} The \textit{O'Neil} Court called this the "stringent burden placed on [PRPs] by Congress."\textsuperscript{92} Due to these and similar holdings,\textsuperscript{93} the period following \textit{Chem-Dyne} was characterized by the imposition of joint and several CERCLA liability that was, for all intents and purposes, unavoidable.\textsuperscript{94}

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  \item \textsuperscript{83} See id. § 433A(1)(b).
  \item \textsuperscript{84} See United States v. Chem-Dyne Corp., 572 F. Supp. 802, 810 (S.D. Ohio 1983) (citing \textsc{Restatement} (Second) of \textit{Torts} § 433B).
  \item \textsuperscript{85} United States v. Monsanto Co., 858 F.2d 160 (4th Cir. 1988).
  \item \textsuperscript{86} O'Neil v. Picillo, 883 F.2d 176 (1st Cir. 1989).
  \item \textsuperscript{87} See \textit{Monsanto}, 858 F.2d at 171–73. The \textit{Monsanto} Court stated that PRPs "bear] the burden of establishing a reasonable basis for apportioning liability" and that in the typical CERCLA scenario this burden is unmet absent "some evidence disclosing the individual and interactive qualities of the substances deposited there." \textit{Id.} at 172; see also \textit{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. 888, 902 ("[T]he remedial intent of CERCLA requires a liberal statutory construction . . . .").
  \item \textsuperscript{88} See \textit{Monsanto}, 858 F. 2d at 171–73.
  \item \textsuperscript{89} 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.").
  \item \textsuperscript{90} O'\textit{Neil}, 883 F.2d at 179–80.
  \item \textsuperscript{91} \textit{Id.} at 182.
  \item \textsuperscript{92} \textit{Id.} at 183.
  \item \textsuperscript{93} See, e.g., City of N.Y. v. Exxon Corp., 766 F. Supp. 177, 191–92 (citing United States v. Monsanto Co., 858 F.2d 160, 169 (4th Cir. 1988)).
  \item \textsuperscript{94} See Oswald, \textit{supra} note 76, at 334 ("[T]he practical effect of the majority approach [to divisibility] has been blanket application of joint and several

\begin{itemize}
Ensuing decisions sought to clarify the nature of the showing required to demonstrate that apportionment is possible. First, courts must decide the threshold question of whether a harm is theoretically amenable to apportionment, on this point, the Second Circuit held in Alcan Aluminum that contamination is not per se indivisible merely because sources of the contamination have commingled. Whether the harm is actually apportionable was addressed in In re Bell Petroleum Services, a case that confronted the degree of sureness required for apportionment and held 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 admissible to support apportionment, requiring it to be "concrete and specific." Courts ascribed this burden to congressional intent, since one of CERCLA's objectives is ensuring that the government is fully compensated for its cleanup costs.

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liability for CERCLA cleanup costs.

95. 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, and 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 STAN. 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).

96. See Prager, supra note 95, at 213 (explaining the difference between theoretical apportionment and actual apportionment, and Congress's recognition of this difference).

97. Alcan Aluminum, 990 F.2d 711.

98. See id. at 722 ("Cummingling is not synonymous with indivisible harm, and Alcan should have the opportunity to show that the harm . . . was capable of reasonable apportionment.").


100. Id. at 903 (stating apportionment may be proper even where a PRP's contribution to the harm cannot be proved with an absolute certainty). The court further noted that "evidence sufficient to permit a rough approximation is all that is required under the [Restatement (Second) of Torts]." Id. at 904 n.19.


Even though apportionment continued to be difficult to prove, a few courts applied a more lenient approach that allowed equitable considerations to influence the apportionment inquiry. In United States v. A & F Materials Co., the Southern District of Illinois held that joint and several liability was appropriate under CERCLA, but rejected a strict application of the Chem-Dyne approach; instead it held that certain equitable factors could be considered in the apportionment analysis. Similarly, the Northern District of Illinois rejected a by-the-book application of the Restatement (Second) of Torts approach, reasoning that judicial discretion is necessary to avoid inequity. Accordingly, it embraced equitable considerations by holding that “the appropriate approach to the problem of liability in cases such as the present one is that taken by the A & F Materials court.” The Supreme Court has since discredited

(D. Minn. 1982) (“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.”).


105. Id. at 1256 (“After reviewing the legislative history the Court concludes a rigid application of the [Restatement (Second)] approach to joint and several liability is inappropriate.”). When CERCLA was reviewed by the House of Representatives, then-Senator Al Gore argued that courts should be able to use an exhaustive list of equitable considerations when determining whether to apportion liability. United States v. Township of Brighton, 153 F.3d 307, 318 n.15 (6th Cir. 1998). For the courts that allowed equitable considerations to influence their decision, it was these “Gore factors” that they referenced. See, e.g., id. at 317–19 & n.15. These “Gore factors” include:

(i) the ability of the parties to demonstrate that their contribution to a discharge, release, or disposal of a hazardous waste can be distinguished from the overall contamination; (ii) the amount of hazardous waste involved; (iii) the degree of the toxicity of the hazardous waste involved; (iv) the degree of involvement by the [PRPs] in the generation, transportation, treatment, storage, or disposal of the hazardous waste; (v) the degree of care exercised by the [PRPs] with respect to the hazardous waste . . . ; and (vi) the degree of cooperation by the parties with governmental authorities].

Id.

107. 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).

108. Id. at 1118.
this approach; however, equitable considerations survive in section 113(f) of CERCLA. Section 113(f), along with section 107(a)(4)(B), endows PRPs that are unable to assert a statutory defense with a means to avoid liability for the entire cleanup by seeking contribution from other PRPs. Thus inequities created by strict joint and several liability are alleviated through section 113(f) and the "similar and somewhat overlapping remedy in [section] 107." 

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. Burlington III stemmed from contamination at an agricultural chemical storage and distribution facility in Arvin, California (the 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 (collectively, Railroads). The District Court found the Arvin site's contamination was attributable chiefly to Dichloropropane-dichloropropene (D-D), a substance stored in "leak-prone trailers throughout the Arvin site, including the Railroads' parcel." 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 action against B & B, the Railroads, and Shell Oil Company (Shell), the company that delivered the contamination-causing agricultural products.

The district court found in favor of the Agencies, holding B & B and the Railroads liable as owners; it also held Shell liable as an arranger. 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

115. 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 14, 2003), aff'd in part, rev'd in part sub nom. United States v. Burlington N. & Santa Fe Ry. Co., 520 F.3d 918 (9th Cir. 2008), 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 0.9 acres of which were owned by the Railroads. Id.
117. See id.; see also Burlington I, 2003 WL 25518047 at *4. In addition to D-D, other hazardous substances such as Demagon and Dinoseb contributed to the contamination. Burlington III, 129 S. Ct. at 1874-75; Rodkin, supra note 116, at 280.
118. See supra notes 49-53 and accompanying text (describing the statutory authority for government-initiated cost recovery actions).
120. See id. at *4.
contributions. Although neither the Railroads nor Shell comprehensively briefed the issue of apportionment, preferring a "scorched earth, all-or-nothing approach to liability," wherein they denied liability entirely, the court "nonetheless proceeded to perform the equitable apportionment analysis demanded by the circumstances of the case."

The district court began its apportionment inquiry by finding as a threshold matter that apportionment was theoretically possible. It then held a reasonable basis for actual apportionment existed based on three figures: the percentage of the total area of the site owned by the Railroads (19 percent), the duration of the site's use as a chemical storage facility divided by the length of the Railroads' lease (45 percent), and the percentage of the site's contamination attributable to the types of chemicals stored on the Railroads' portion of the site (66 percent). The court then multiplied .19, .45, and .66 to determine that the Railroads were liable for 6 percent of the cleanup costs. Even though its calculations suggested the Railroads were only liable for 6 percent, the court nevertheless held them liable for 9 percent of the total cleanup costs by accounting for "calculation

122. See id. (describing the methods used by the district court to apportion liability).
123. Burlington I, 2003 WL 25518047 at *82 (internal quotation marks omitted).
124. See id.
125. Burlington II, 520 F.3d at 932 (internal quotation marks omitted).
126. 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 Petroleum 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 95, at 213 (distinguishing harms capable of theoretical apportionment from those capable of actual apportionment).
127. 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 therefore capable of apportionment.").
128. Id. at 1882.
129. Id.
130. Id.; see Burlington I, 2003 WL 25518047 at *88–91.
errors" of 50 percent to avoid underestimating their liabilities. The court volumetrically analyzed Shell's contribution by “multipl[y]ing the percentages of leaks attributable to Shell to determine that Shell was liable for [6 percent] of the total cleanup costs.” Finding no basis for apportioning B & B's liability, the district court held it jointly and severally liable.

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. Shell also appealed, arguing its activities were insufficient to warrant “arranger” PRP status, and therefore the District Court erred in assigning it any liability.

Regarding the apportionment issue, the Ninth Circuit reversed the district court's decision and held the Railroads and Shell jointly and severally liable, viewing the court's apportionment methods as insufficient for both of these PRPs. In examining the district court's land area-based calculation of the Railroads' liability, the Ninth Circuit rejected a geographical apportionment of the Railroads' liability 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 the district court's volumetric apportionment based on evidentiary inadequacy, holding that

132. Id.
133. Amy L. Gleghorn, Environmental Update: United States Court of Appeals, 14 MO. ENVTL. L. & POL'Y REV. 423, 423 (2007). Although Shell denied liability outright on grounds that it was not a PRP, the District Court characterized Shell as an "arranger" PRP. See id. at 424.
134. See id. at 423. This imposition of joint and several liability 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).
135. Burlington II, 520 F.3d at 930 ("Seeking to hold the Railroads and Shell jointly and severally liable for the entire judgment, the agencies appeal.").
136. Id.
137. See id. at 943, 947.
138. Id. at 944.
139. Id. at 945 (emphasis added).
"[t]here is no evidence as to which chemicals spilled on the parcel, where on the parcel they spilled, or when they spilled."  

Regarding Shell, the Ninth Circuit observed a split among courts on the specificity of proof necessary to establish divisibility of harm, but found addressing that split to be unnecessary because the "district court's extrapolations could not be upheld under even a forgiving standard."  

The Railroads appealed from the Ninth Circuit's reversal to the U.S. Supreme Court. They argued the district court's apportionment was legally sound because it comported with the "evolving" common law principles governing CERCLA liability. They asserted this common law evolution has led to near-unanimous endorsement of the Restatement (Second) of Torts approach to apportioning liability, condoning apportionment based on reasonable assumptions and approximations—such as those relied on by the district court. Conversely, the EPA argued that the district court's temporal, geographical, and volumetric calculations were "unsubstantiated assumptions and gross approximations."

140. *Id.* In finding that there was no reasonable basis for apportionment, the Ninth Circuit explained that the apportionment used by the district court failed to meet the applicable legal standard because it "bore insufficient logical connection to the pertinent question: What part of the contaminants found on the . . . parcel were attributable to the presence of toxic substances or to activities on the Railroad[s'] parcel?" *Id.* at 946.  

141. *Burlington II*, 520 F.3d at 947 n.32. For the circuit split, compare, e.g., Control Data Corp. v. S.C.S.C. Corp., 53 F.3d 930, 934 n.4 (8th Cir. 1995) (allowing apportionment only when supported by concrete and specific evidence), with, e.g., *In re Bell Petroleum Servs.*, 3 F.3d 880, 903–04 (5th Cir. 1993) (allowing apportionment based on sufficiently reliable approximations). The court also rejected Shell's contention that, because it did not intend to dispose of hazardous substances, it was not an arranger PRP. *See Burlington II*, 520 F.3d at 950–51.  


144. *See Brief for Petitioners*, supra note 143, at 31. Under the Restatement (Second) of Torts approach, courts may make reasonable assumptions when apportioning liability with regard to the evidence, first 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) OF TORTS § 433A cmt. d (1965).  

The Burlington III majority, led by Justice Stevens, reversed the Ninth Circuit, finding joint and several liability to be unwarranted and reinstating the district court's apportionment of the Railroads' liability.146 The opinion noted that traditional and evolving concepts of common law control liability apportionment under CERCLA.147 Applying these evolving principles, the Court found that, even though the American Law Institute drafted the Restatement (Third) of Torts during the period between Chem-Dyne and Burlington III,148 section 433A of the older Restatement (Second) of Torts was the guiding standard for the apportionment analysis.149 Under section 433A, liability may be apportioned when there is a reasonable basis for doing so.150 The party seeking to apportion bears the burden of demonstrating that basis.151 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 [10 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.\textsuperscript{152}

The Court, however, found the evidence insufficient to justify the district court’s volumetric-related basis for apportionment.\textsuperscript{153} Even so, the district court’s 9 percent apportionment, with the inclusion of the 50 percent margin of error, corresponded with the apportionment it would have reached had it not erroneously included the volumetric multiplicand.\textsuperscript{154} Therefore, the Court upheld the apportionment because “the District Court’s ultimate allocation of liability is supported by the evidence . . . .”\textsuperscript{155}

The majority opinion also addressed the Agencies’ arguments that the apportionment was erroneous because it inappropriately used equitable analysis,\textsuperscript{156} and conducted the apportionment \textit{sua sponte} rather than placing the burden of proof on the Railroads.\textsuperscript{157} The Court agreed that the district court erred in using equitable considerations,\textsuperscript{158} but reasoned that “despite the District Court’s reference to equity, its actual apportionment decision was properly rooted in

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\item \textsuperscript{152} \textit{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. \textit{Id.} (citing Burlington II, 520 F.3d 918, 936 n.18, 943 (9th Cir. 2008), rev’d 129 S. Ct. 1870 (2009)).
\item \textsuperscript{153} \textit{Id.} at 1882–83.
\item \textsuperscript{154} See \textit{id.} at 1882. In mathematical terms, \(0.19 \times 0.45 = 9\%.\) \textit{Id.}
\item \textsuperscript{155} \textit{Id.} at 1882–84 (emphasis added); accord \textit{Brief for Petitioners}, \textit{supra} note 143, at 47 (arguing that the 50 percent margin of error ensures that uncertainty in the evidence supporting apportionment does not prejudice the Agencies in the least).
\item \textsuperscript{156} See \textit{Brief for the United States}, \textit{supra} note 145, at 38 (“The district court’s decision to undertake that apportionment without the parties’ assistance rested on . . . legal errors.”); \textit{Brief for the State of California}, \textit{supra} note 145, at 48 (“[T]he district court engaged in an equitable allocation, an exercise not properly part of an apportionment determination.”).
\item \textsuperscript{157} See \textit{Brief for the State of California}, \textit{supra} note 145, 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 \textit{generally Burlington III}, 129 S. Ct. 1870 (2009).
\item \textsuperscript{158} \textit{Burlington III}, 129 S. Ct. at 1882 n.9 (“As the Governments point out, insofar as the District Court made reference to equitable considerations favoring apportionment, it erred.”).
\end{itemize}
evidence that provided a reasonable basis for identifying the portion of the harm attributable to the Railroads." 159 Although the district court, rather than the Railroads, advanced the apportionment theory, Justice Stevens held the apportionment proper. 160 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. 161 Altogether, therefore, Burlington III seemed to discredit the longstanding notion that apportionment was an incredibly difficult proposition, yet stopped short of detailing the specifics of this new apportionment standard. 162

3. Diverging Interpretations Among Courts and Commentators

Several courts have interpreted the "hotly debated" import of Burlington III's apportionment holding. 163 Appleton Papers Inc. v. George A. Whiting Paper Co. 164 contains a particularly thorough analysis of the decision. 165 The Appleton Papers 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." 166 Nevertheless, that court read Burlington III

159. Id.
160. Id. at 1882–83 (acknowledging the Railroads did not put forth sufficient evidence for divisibility, but nevertheless upholding an apportionment that the district court independently calculated). Significantly, the fact that the district court apportioned based on its own factors (rather than those advanced by the Railroads) appears misaligned with prior apportionment decisions that consistently held that "the burden to demonstrate apportionment is on each defendant." United States v. Hunter, 70 F.Supp.2d 1100, 1106 (C.D. Cal. 1999).
161. See id. at 1885–86 (Ginsburg, J., dissenting). The Court further held that Shell was not a PRP, thereby mooting consideration of the district court's apportionment of Shell's liability, since only PRPs are liable under CERCLA. See id. at 1880 (majority opinion).
162. See generally id. at 1880–84.
164. See, e.g., id. at *20.
166. See id. at *1–4.
167. Id. at *1.
narrowly as merely allowing, rather than requiring an apportionment inquiry.\textsuperscript{168} Consistent with Appleton Papers' interpretation of Burlington III as a grant of judicial discretion, one court cited Burlington III as authority for apportioning liability \textit{sua sponte}.\textsuperscript{169} Regarding certainty of evidence needed to apportion, another 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..."\textsuperscript{170} With respect to the standard applicable to apportionment, a third court interpreted Justice Stevens's extensive citations to the Restatement \textit{(Second)} of Torts\textsuperscript{2} to disallowing consideration of the Restatement \textit{(Third)} of Torts approach\textsuperscript{172} to

\begin{itemize}
  \item[168.] See id. at *2 ("[T]here is nothing within \textit{[Burlington III]} that requires courts to make some sort of threshold determination regarding joint and several liability.").
  \item[170.] Reichhold, 2009 WL 1806668, at *49.
  \item[171.] See Burlington III, 129 S. Ct. 1870, 1881 (2009) (citing \textit{RESTATEMENT (SECOND) OF TORTS $ 433A} (1965)).
  \item[172.] See \textit{RESTATEMENT (THIRD) OF TORTS: APPORTIONMENT OF LIABILITY} (2000). The \textit{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 \textit{Restatement (Third)} approach mirrors the broader trend away from joint and several liability. See Richard L. Cupp, Jr., \textit{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, \textit{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 fail to distribute liability equitably among defendants."). This targeting of deep-pocketed defendants is often found in the EPA's liability-recoupment practices. See Jason E. Panzer, Note, \textit{Apportioning CERCLA Liability: Cost Recovery or Contribution, Where Does a PRP Stand?}, 7 FORDHAM ENVTL. L. REV. 437, 451 ("[T]he EPA only focuses on a few financially viable PRPs to shoulder the entire
Accordingly, judicial interpretations have used Burlington III as guidance on the types of evidence that may be used, whether sua sponte apportionment is appropriate, and the extent of the burden PRPs must meet in order to demonstrate a reasonable basis for apportionment.

Commentators disagree on whether Burlington III should be interpreted broadly or narrowly. Some view the holding as significantly lowering the burden defendants must meet to apportion, and thus avoid joint and several liability. For example, in his proposed "Restatement" for apportioning CERCLA liability, Professor Alfred R. Light asserted that Burlington III lowers the showing necessary for apportionment: though PRPs still bear the burden of proving divisibility, their burden of production is relaxed. Others view 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 cost of the EPA's remediation or removal measures under [section] 107(a)."

(footnote omitted).

173. 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.").


176. See Light, supra note 169, at 11,058.

177. See e.g., John C. Cruden, Acting Assistant Att'y Gen., Env't. & Natural Res. Div., Speech at the Env't Law Inst.: 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).
of contamination for which [they are] responsible.”\textsuperscript{178} Regarding \textit{sua sponte} apportionment, Professor Light’s proposed “Restatement” of apportionment asserted that, after \textit{Burlington III}, “a court may independently perform an apportionment analysis and limit liability even if not advanced by [a PRP].”\textsuperscript{179}

III. NEW QUESTIONS RAISED, EXISTING QUESTIONS UNANSWERED

\textit{Burlington III} is fraught with loose ends. In the apportionment section of the holding, Justice Stevens applied the “\textit{Chem-Dyne} approach”\textsuperscript{180} that the circuit courts have universally applied to CERCLA apportionment,\textsuperscript{181} yet his opinion upheld an apportionment based on less precise calculations and derived from less sophisticated evidence than was previously thought necessary.\textsuperscript{182} The unforthcoming wording of the opinion made clear that apportionment required a “reasonable basis,”\textsuperscript{183} but left unexplained the source of this standard and the types of evidence that PRPs may use to meet this standard.\textsuperscript{184} Divergence has characterized the decision’s short history, as commentators disagree on the requirements for a post-\textit{Burlington III} divisibility showing and, more broadly, on whether \textit{Burlington III} substantially alters the divisibility inquiry, or merely reaffirms prior apportionment jurisprudence.\textsuperscript{185} Moreover, the district court’s apportionment employed a considerably large “margin of error” to account for its

\textsuperscript{178} Misiorowski & Eagle, \textit{supra} note 174, at 17.

\textsuperscript{179} Light, \textit{supra} note 169, at 11,058.

\textsuperscript{180} \textit{Burlington III}, 129 S. Ct. 1870, 1881 (2009).

\textsuperscript{181} See \textit{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{182} See \textit{id.; cf. Oswald, supra} note 76, at 334 (“[T]he practical effect of the majority approach [to divisibility] has been blanket application of joint and several liability for CERCLA cleanup costs.”).

\textsuperscript{183} See \textit{Burlington III}, 129 S. Ct. at 1881 (citing United States v. \textit{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{184} See \textit{supra} note 15 and accompanying text.

\textsuperscript{185} See Misiorowski & Eagle, \textit{supra} note 174, at 17 (summarizing the competing approaches for interpreting \textit{Burlington III}); \textit{compare} Vroman et al., \textit{supra} note 175, \textit{with} Cruden, \textit{supra} note 177.
"calculation errors." However, it is unclear whether the Burlington III majority opinion intended to ratify margin of error-based apportionment or simply upheld the district court's margin of error solely because it fortuitously arrived at the same result it would have without the margin.

Justice Stevens acknowledged that "traditional and evolving principles of common law" control the scope of CERCLA liability. Therefore, even after deciphering the standard applied in Burlington III, whether the Court intended that standard to remain controlling if these "evolving principles" move away from the Burlington III standard is ambiguous. Notably, the Supreme Court declined to apply the Restatement (Third) of Torts to apportionment, yet this decidedly pro-apportionment approach is becoming increasingly widespread. Therefore, the future role of the Restatement (Third) in CERCLA apportionment requires clarification.

IV. MAKING SENSE OF BURLINGTON III

A. A Return to the Pure Restatement (Second) of Torts Approach to Liability Apportionment

Through its extensive references to section 433A of the Restatement (Second), Burlington III makes clear that the Restatement (Second) figures prominently in apportionment analysis under CERCLA, but does not discuss the difficulties that inhere when applying section 433A to CERCLA.


189. See id.

190. Justice Stevens's opinion makes no mention of the Restatement (Third), even though it was briefed by the Railroads. See Brief for Petitioners, supra note 143, at 33. One court interpreted this to mean that the 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 Burlington III, 129 S. Ct. at 1881).

191. See sources cited supra note 172 and accompanying text (explaining the policy rationales underlying the judicial trend toward the Restatement (Third)).

192. See generally Burlington III, 128 S. Ct. at 1880–81.
Using the Restatement (Second) corresponds with the approach ostensibly taken by the circuit courts, but does nothing to quell the oft-expressed 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 [section] 433A and CERCLA is actually quite unclear: [section] 433A focuses on causation while CERCLA is a strict liability statute." This ambiguity is compounded by the fact that Burlington III was decided amongst an ironic backdrop where most courts viewed apportionment as "a rare scenario," despite the fact that they based their analyses on a standard that would apportion whenever there is "an estimate based on reasonable assumptions."

Justice Stevens's majority opinion in Burlington III does not inform its readers 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

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193. 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 . . . ."); United States v. Twp. of Brighton, 153 F.3d 307, 318 (6th Cir. 1998); In re Bell Petroleum Servs., Inc., 3 F.3d 889, 895 (5th Cir. 1993).

194. 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.J. 207, 236 (2003) ("A number of courts have suggested that a rule of divisibility based on causation is problematic . . . .").


196. 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.").


198. See generally cases cited supra note 10.

CERCLA,\textsuperscript{200} and that "CERCLA defendants seeking to avoid joint and several liability bear the burden of proving that a reasonable basis for apportionment exists."\textsuperscript{201} Thus, one might easily conclude, \textit{Burlington III} leaves intact the confusion surrounding the interplay between section 433A and CERCLA.\textsuperscript{202} \textit{Burlington III}, however, is illuminating not for what it says, but for what it \textit{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.\textsuperscript{203} Therefore, ascertaining the governing apportionment standard post-\textit{Burlington III} requires analyzing the facts and outcome of \textit{Burlington III} to determine which legal framework the opinion corresponds with. By backtracking from the outcome of \textit{Burlington III} in light of the facts of that case, it becomes clear the \textit{Restatement (Second)} governs apportionment cases under CERCLA.\textsuperscript{204}

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

As \textit{A & F Materials} and similar holdings demonstrate, several courts believed consideration of equitable principles was necessary to avoid gross unfairness to PRPs threatened with the entire cost of a cleanup.\textsuperscript{205} Even courts following the majority "\textit{Chem-Dyne}" approach, rejecting equitable

\textsuperscript{200} Id.
\textsuperscript{201} Id. (citing \textit{Chem-Dyne}, 572 F. Supp. at 810).
\textsuperscript{202} Cf. United States v. Capital Tax Corp., 545 F.3d 525 (7th Cir. 2008) (citing United States v. Hercules, Inc., 247 F.3d 706, 715–16 (8th Cir. 2001)) ("[T]he 'fit' between [section] 433A and CERCLA is actually quite unclear . . . .").
\textsuperscript{203} Namely, it finds a reasonable basis for apportionment where the Ninth Circuit did not.
\textsuperscript{204} See infra part IV.A.1.
\textsuperscript{205} See, e.g., United States v. A & F Materials Co., 578 F. Supp. 1249 (S.D. Ill. 1984); Allied Corp. v. Acme Solvents Reclaiming, Inc., 691 F. Supp. 1100, 1100 (N.D. Ill. 1988). The \textit{A & F Materials} opinion held that rigid application of joint and several liability that ignores equitable considerations "must be avoided because both Houses of Congress were concerned about the issue of fairness, and joint and several liability is extremely harsh and unfair if it is imposed on a defendant who contributed only a small amount of waste to a site." \textit{A & F Materials}, 578 F. Supp. at 1256. This judicial concern for PRPs is, perhaps, not misplaced since the average cost of cleaning a CERCLA site is around thirty million dollars. John M. Hyson, "Fairness" and Joint and Several Liability in Government Cost Recovery Actions Under CERCLA, 21 HARV. ENVTL. L. REV. 137, 145 n.32 (1997).
considerations, sometimes lamented this approach’s inherent unfairness and rigidity. The Chem-Dyne approach is criticized heavily for its arguably unfair targeting of defendants with deep pockets, even when they are no more culpable than their shallow-pocketed counterparts.

Notwithstanding these criticisms, Burlington III makes clear that the majority approach towards the role of equity is correct, and reliance on equitable factors in the apportionment analysis is error. Yet despite spurning equitable considerations, Burlington III has the 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; this is a decidedly equitable result because it makes apportionment a realistic argument for PRPs who contributed a very small fraction of the contamination, but who would otherwise lack the means to meet a difficult burden of proof.

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206. See supra notes 80–103 and accompanying text (describing the majority approach to liability apportionment under CERCLA).
207. See Akzo Coatings, Inc. v. Aigner Corp., 909 F. Supp. 1154, 1164 (N.D. Ind. 1995) (describing imposition of full liability on a single PRP as an “inequity”). One commentator compellingly argued that ignoring equitable factors was not only unfair, but also contrary to congressional intent:

By placing such a heavy burden on defendants, it seems that one of the concerns of Congress in passing CERCLA has in fact been realized. Congress apparently deleted the language imposing joint and several liability from CERCLA as a concession to those opposed to the uniform imposition of joint and several liability regardless of the facts of a particular case. By following the strict rule laid down in Chem-Dyne, federal courts that have adopted the 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 Chem-Dyne places an enormously heavy burden on defendants.


208. See Shepherd, supra note 172, at 919 (“[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.”); cf. Panzer, supra note 172, 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).”); Note, Developments in the Law: Toxic Waste Litigation, 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.”).

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

210. See Appleton Papers, Inc. v. George A. Whiting Paper Co., No. 08-C-16,
Burlington III accomplishes this relaxation of the preconditions for apportioning liability by aligning the apportionment burden for CERCLA PRPs with the Restatement (Second). Under the Restatement (Second), apportionment should be performed when there is a rough approximation of a defendant's contribution to the damage. 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.” Burlington III implicitly mimicked this assumption of proportionality by upholding the district 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.

This holding markedly contrasts with the Ninth Circuit’s approach, which demanded “precision” and exemplified the more stringent mentality widely adopted by the circuit courts. The Ninth Circuit’s heightened requirements are particularly transparent in their 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

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211. See RESTATEMENT (SECOND) OF TORTS § 433A (1965); cf. Burlington III, 129 S. Ct. at 1881 (citing exclusively to the Restatement (Second) and courts following its approach in detailing the law governing the case's apportionment issue).

212. See In re Bell Petroleum Servs., 3 F.3d 889, 904 n.19 (5th Cir. 1993) (citing RESTATEMENT (SECOND) OF TORTS § 433A (1965)) (“Evidence sufficient to permit a rough approximation is all that is required under the [Restatement (Second)].”).


214. 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) OF TORTS § 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).


216. 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).

217. See id. at 945 (“The simple fraction based on time that the Railroads owned the land cannot be a basis for apportionment.”).
each time period." In contrast, the Restatement (Second), as applied by the Supreme Court, expressly condones apportionment based on precisely these sorts of reasonable assumptions. These parallels between Burlington III and the Restatement (Second) are aptly demonstrated by the comments and illustrations accompanying Restatement (Second) section 433A. Comment d provides that CERCLA-like harms (i.e. harms not “severable into distinct parts”) may nevertheless be apportioned where there is a reasonable basis for doing so. The majority's decision to apportion where chemical intermingling has muddled would-be “distinct parts” directly mirrors these illustrations from the Restatement, demonstrating that courts should treat chemical intermingling cases as apportionable “comment d” harms.

Therefore, it appears the Restatement (Second)—long recognized as the “starting point” for joint and several liability—is also its ending point in the post-Burlington III era for apportioning liability based on divisibility of harm.

By aligning the divisibility inquiry with the Restatement (Second), Justice Stevens's opinion approved the apportionment approach of Chem-Dyne. The court in Chem-Dyne held CERCLA liability should dovetail with “traditional and evolving principles of common law." Therefore, Justice Stevens's apportionment opinion represents his interpretation of the current, “evolved"

218. Burlington II, 520 F.3d at 945.
220. See Restatement (Second) of Torts § 433A cmts. d, i (1965); see discussion supra Part IV.A.1.
221. Restatement (Second) § 433A cmt. d (1965).
222. See discussion supra Part IV.A.1.
224. 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 [section] 433A of the Restatement (Second) of Torts.” Burlington III, 129 U.S. at 1881 (citing Hercules, 247 F.3d at 717; 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 not one citation to a source differing from the Restatement (Second) indicating that the “end point” in apportionment analysis differed from this “starting point.” See id.
226. See supra note 188 and accompanying text.
doctrine of common law liability apportionment.\textsuperscript{227} By
upholding an apportionment that relied on factors sufficient
to satisfy the "reasonable assumptions" and "rough
approximations" of the \textit{Restatement (Second)},\textsuperscript{228} yet
insufficient to meet the Ninth Circuit's heightened
requirements,\textsuperscript{229} the holding implies that common law
liability apportionment has evolved \textit{to—and not beyond}—the
\textit{Restatement (Second) approach.}\textsuperscript{230} Because several circuit
courts demanded more than the \textit{Restatement (Second)}
requires, \textit{Burlington III} appears to discredit their standards
for apportionment by returning to the pure \textit{Restatement (Second)}
approach.\textsuperscript{231}

2. \textbf{Evidentiary Ramifications of Burlington III}

\textit{Burlington III} also alters the status quo of apportionment
analysis by broadening the \textit{types} of evidence PRPs may use to
meet their apportionment showing, and in doing so eases the
burden on PRPs by enabling them to use the evidence
reasonably available to them.\textsuperscript{232} \textit{Burlington III} deemed the
Railroads' length of land ownership coupled with the area of
that land to be sufficient bases for apportionment.\textsuperscript{233} This

\textsuperscript{227} See Burlington III, 129 S. Ct. at 1880 (citing Chem-Dyne, 572 F. Supp.
802).

\textsuperscript{228} 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)]."), \textit{RESTATEMENT (SECOND) OF TORTS} § 433A
(

\textsuperscript{229} See Burlington II, 520 F.3d 918, 952 (9th Cir. 2008) (reversing the
district court's apportionment).

\textsuperscript{230} See supra notes 223–25 and accompanying text; cf. Oswald, supra note 76,
at 308 ("The \textit{Restatement} reflects the modern common law approach to joint
and several liability.").

\textsuperscript{231} See Burlington III, 129 S. Ct. at 1880 (requiring only a reasonable basis
1989) (assuming that "responsible parties rarely escape joint and several
liability" due to the very strenuous burden of proving divisibility).

\textsuperscript{232} Cf. Robert M. Guo, Note, \textit{Reasonable Bases for Apportioning Harm
& Joel D. Eagle, \textit{The Diminishing Role of Science in CERCLA After Burlington
Northern v. Santa Fe,} 40 \textit{ENV'T REP.} (BNA) 1205 (2009) (noting that, under a
broad interpretation of \textit{Burlington III}, PRPs "may not need to present
sophisticated scientific evidence to demonstrate a reasonable basis for
apportionment").

\textsuperscript{233} 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%.").
suggests that apportionment evidence need not be scientifically complex, and overturns the contrary view from 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 . . . [,]” and “reject[ed] simple source or volume evidence of contaminants as means of apportionment.” Thus, the Court sanctioned apportionment using the “simplest of considerations” by relying on the Restatement (Second) approach.

This change will inevitably make apportionment a realistic argument for nearly all PRPs, who typically lack sufficient data to fingerprint every movement of their chemicals. PRPs will be able to demonstrate readily available and commonsense measurements, such as their property’s boundaries and the time they owned that property. This approach has the added advantage of allowing judges to work with the commonsense evidence they are most comfortable with. One commentator explained this judicial preference for simplified evidence: “[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

234. See id.
235. O’Neil, 883 F.2d 176, 182; 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.”).
237. Burlington II, 520 F.3d 918, 943 (9th Cir. 2008).
238. See RESTATEMENT (SECOND) OF TORTS § 433A cmt. c (1965) (using time period as an example of a reasonable manner for apportioning harm based on divisibility).
239. See Burlington II, 520 F.3d at 944 (recognizing the difficulty of meeting the 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.” Developments in the Law: Toxic Waste Litigation, supra note 208, at 1529.
240. See id.
Therefore, interpreting Burlington III as relaxing evidentiary standards makes the evidence necessary for apportionment commensurate with the evidence available to PRPs, and the type of evidence preferred by courts.

B. Using Margins of Error to Account for Uncertainties in Apportionment Calculations

Burlington III upheld an apportionment that employed a 50 percent margin of error in its calculation.\(^{242}\) In so doing, it implicitly sanctioned apportionment based on uncertain evidence containing gaps in proof, provided the uncertainty is quantified through a margin of error.\(^{243}\) 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.\(^{244}\) Therefore, exactly where within the margin a court apports 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, perhaps even worse, a hunch. Therefore, it is imperative to formulate an interpretation of Burlington III that reconciles the allowable margin of error with the Court’s directive that equitable


\(^{243}\) 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) OF TORTS § 433A (1965); see generally supra Part IV.A (explaining the hand-in-hand relationship between the Restatement (Second) and Burlington III’s apportionment holding).

\(^{244}\) See generally Burlington III, 129 S. Ct. at 1883 (noting that the district court knew based on the evidence that the Railroads’ liability was less than 10 percent, but that they could not determine the precise percentage of harm caused by the them).
considerations may not be considered during apportionment analysis.246

1. Upwardly Adjusted Within-the-Margin Apportionment

Since courts are unable to use equitable considerations after the trail of objective evidence runs cold,246 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: (1) assigning liability at the margin's lowest point, (2) at its highest point, or (3) at its midpoint.247 These standards further respective policies of: (1) erring in favor of the PRP to avoid overburdening it, (2) applying a moderate approach in recognition that, most likely, the actual damage is somewhere other than the margin's extremities, and (3) erring towards caution to avoid outcomes that will saddle the government with non-compensable costs.

When choosing among these interpretational approaches, the policies underlying CERCLA offer guidance to courts, with the Supreme Court-approved margin of error in Burlington III serving as a guidepost.248 This policy inquiry reveals that CERCLA's foremost goal is ensuring that "those responsible for problems caused by the disposal of chemical poisons bear the costs and responsibility for remedying the harmful conditions they created . . . ."249 One must also recognize that "since CERCLA is a remedial statute, it[] . . .

245. See id. at 1882 n.9 ("Equitable considerations play no role in the apportionment analysis . . . .").
246. Id.
247. Common sense limits a margin adjustment approach to these three options because any other option would create a sense of arbitrariness. Arbitrariness gives rise to an inference that disallowed equitable considerations, rather than objective evidence, are determining the within-the-margin apportionment. See generally id.
248. See id. at 1882–83 (discussing the margin of error used by the district court, and ultimately upholding the apportionment).
should be construed broadly to avoid frustrating the federal purpose.  

Accordingly, within-the-margin liability should be set at a percentage that ensures the PRP pays fully for the damage it caused. Moreover, that liability should be assigned "broadly" in order to ensure PRPs do not underpay. Only one of the three approaches described earlier is consistent with the above criteria: the approach assigning liability at the zenith of the margin of error. This approach eases PRPs' burdens in cases where liability cannot be calculated precisely, but, by shouldering them with any liability that they fail to account for, prevents PRPs from parlaying this imprecision to their advantage. Thus, the government is not "left holding the bag" when PRPs (who bear the burden of proving a reasonable apportionment basis) fail to produce ample evidence supporting a precise calculation.

2. Unrestricted Breadth of Margins of Error

Another question raised by Burlington III 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 50 percent margin of error without apprehension toward the wide breadth of that margin. The Court did, however, find it important that

251. Id.
252. Cf. Light, supra note 169, 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 9 percent of damages despite the court's calculations indicating it is liable for only 6 percent of damages; this is done by "[a]llowing for calculation errors . . . ." See id.
254. Burlington III, 129 S. Ct. 1870, 1881 (2009) ("CERCLA defendants seeking to avoid joint and several liability bear the burden of proving that a reasonable basis for apportionment exists.");
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.
256. See id.
"[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 10 percent of the total site contamination."257 Thus the Court 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.258 Courts should assign liability at a margin's loftiest point; if courts perform that upward adjustment and the margin itself encompasses the PRP's actual contribution, Burlington III appears to place no restrictions on the width of that margin.259

Some commentators do not view Burlington III as condoning margins of error, and instead interpret Burlington III as a narrow, fact-specific holding that upheld the district court's apportionment due to the unusual circumstances of the case.260 Under that view, Justice Stevens's apparent endorsement of the margin of error is merely a pragmatic ends-justify-the-means approach that upheld the margin solely because it corresponded with the correct apportionment by sheer chance.261 That interpretation, however, is incorrect because it reads too narrowly both the district court's use of the margin of error and Justice Stevens's opinion alike. The district court employed a 50 percent margin of error to account for "calculation errors."262 Nothing in the district court's opinion limited this "calculation errors" measurement to errors within the chosen factors for apportionment.263 Rather, the "calculation errors" language is broad enough to encompass errors in selecting the apportionment variables

257. Id. at 1883 (emphasis added).
258. See id.
259. 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).
260. See, e.g., Cruden, supra note 177 ("The Supreme Court did not change the burden on defendants to prove divisibility.").
261. See, e.g., Cruden, supra note 177.
263. See id.
Thus in Burlington III, the Court did not fault the district court for its actual calculations. Instead, 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.

In other words, the narrow reading of "calculation errors" fails because it only considers the numerical values taken from the evidence, whereas the Supreme Court faulted the district court for considering certain variables in the first place—not for its actual calculations. Therefore, 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. To the contrary, the margin of error was designed to account for precisely these sorts of uncertainties in choosing the calculation variables themselves.

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

The Burlington III decision implicitly adopted the Restatement (Second) of Torts approach to liability apportionment, but it does not stand for the proposition that the Restatement (Second) will forever be the governing standard. The Court's opinion ignored the portion of the Railroads' brief based on the Restatement (Third). By doing this, Burlington III seems to reject the more recently developed Restatement (Third) approach to apportionment. However, the precedential effect of this rejection is complicated because Burlington III also held that the

264. See id.
266. 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 . . . .").
267. See generally id.
268. See discussion supra Part IV.A.
269. See Brief for Petitioners, supra note 143, at 33 (arguing that the Restatement (Third) supports apportionment of the Railroads' liability); cf. Burlington III, 129 S. Ct. at 1880-82 (applying the Restatement (Second) approach, and making no mention of the Restatement (Third)).
270. See Burlington III, 129 S. Ct. at 1880-84; 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 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.").
controlling apportionment standard is based on the evolving notions of common law.\textsuperscript{271} Accordingly, Burlington III's holding speaks to only the current evolutionary state of common law apportionment analysis.\textsuperscript{272} By applying the Restatement (Second) rather than the Restatement (Third), Burlington III 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).\textsuperscript{273}

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)\textsuperscript{274} approach to apportioning liability were to occur, it would be unbefitting to interpret the Restatement (Second) as the "evolved" state of common law.\textsuperscript{275} 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).\textsuperscript{276} 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."\textsuperscript{277} The Restatement

\begin{itemize}
\item \textsuperscript{271} Burlington III, 129 S. Ct. at 1881 (quoting United States v. Chem-Dyne Corp., 572 F. Supp. 802, 808 (S.D. Ohio 1983)).
\item \textsuperscript{272} See id.
\item \textsuperscript{273} See id.
\item \textsuperscript{274} See sources cited supra note 172 and accompanying text (discussing the policy rationales underlying the trend away from joint and several liability).
\item \textsuperscript{275} See Burlington III, 129 S. Ct. at 1881 (quoting Chem-Dyne, 572 F. Supp. at 808).
\item \textsuperscript{276} See sources cited supra note 172 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 EMORY 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.").
\item \textsuperscript{277} RESTATEMENT (THIRD) OF TORTS: APPORTIONMENT OF LIABILITY § 26
\end{itemize}
(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.” 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 any person caused only a part of damages, however, the damages are divisible, irrespective of the timing.

This common law evolution toward the apportionment-friendly 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.”

Due to this trend towards apportionment, the Restatement (Second) standard may soon become inapplicable to apportionment analysis under CERCLA, notwithstanding its application in Burlington III. Under this interpretation, a move away from the Restatement (Second) would not contravene Burlington III because Burlington III’s apportionment holding was based on Chem-Dyne, a case that recognized these ever-changing standards. The citations to Chem-Dyne, therefore, create built-in flexibility in Burlington III.

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cmt. a (2003).
278. Id. at § 26 cmt. a.
279. Id. at § 26, Reporters’ Note to cmt.f, at 332.
280. Id. at § 17, Reporters’ Note to cmt. a, at 149 (2003).
IV. THE NEW APPORTIONMENT STANDARD ARTICULATED

Burlington III is properly read as an endorsement of the Restatement (Second) of Torts approach to apportioning liability based on divisibility of harm. Since the Restatement (Second) advocates apportionment based on rough approximations ascertained through "reasonable assumptions," Burlington III significantly lightens the burden of proof on PRPs. Accordingly, it is no longer accurate to treat apportionment as "a very difficult proposition," and courts should greet apportionment arguments with open-mindedness rather than skepticism.

Although Burlington III banned equitable factors from the apportionment analysis, it allowed courts to use their discretion in initiating sua sponte apportionments. 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 Burlington III recognizes that PRPs in general are recurrently overburdened, and lightens their burdens in response.

Courts applying the Restatement (Second) should seek guidance from the comments and illustrations accompanying the Restatement (Second). These comments confirm this apportionment-friendly approach as correct and offer concrete examples of applying apportionment to the sort of chemical intermingling scenarios characteristic of CERCLA harms.

284. See discussion supra Part IV.A.
285. See In re Bell Petroleum Servs., 3 F.3d 889, 904 n.19 (5th Cir. 1993) ("Evidence sufficient to permit a rough approximation is all that is required under the [Restatement (Second)]."); RESTATEMENT (SECOND) OF TORTS § 433A cmt. d (1965); see also discussion supra Part IV.A.
286. 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.
287. See Burlington III, 129 S. Ct. at 1882 n.9 ("Equitable considerations play no role in the apportionment analysis . . ."); Light, supra note 169, at 11,063 ("Under Burlington Northern . . . a court may apportion liability sua sponte, even if not advanced by a defendant.").
288. See discussion supra Part IV.A.
289. See RESTATEMENT (SECOND) OF TORTS § 433A cmts. d, i (1965); see also discussion supra notes 219–21 and accompanying text.
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 underlying purpose of joint and several liability in the CERCLA context: enable the government to recover its expenditures by making "those responsible for problems caused by the disposal of chemical poisons bear the costs and responsibility for remedying the harmful conditions they created." By requiring sophisticated and expensive evidence for apportionment, previous decisions made apportionment viable for only deep-pocketed PRPs who could afford to produce such evidence. Ironically, those were the very PRPs who could best serve CERCLA's goal of compensating the government for its cleanup costs. Courts should therefore interpret Burlington III as allowing divisibility based on readily available, commonsense evidence because this interpretation is even-handed towards all PRPs without undermining CERCLA's goal of fully compensating the government.

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 appropriate margin of error for their apportionment calculations. Finally, courts should set the apportionment-seeking PRP's liability at the uppermost point encompassed by that margin. Because PRPs are subject to strict joint and several liability, a PRP that caused very little contamination—or even none—could theoretically be charged for the entire cleanup under CERCLA. Thus, apportionment is a desirable tool for avoiding these heavy-

290. See Burlington III, 129 S. Ct. at 1880–83.
292. 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 (1992) (“One of CERCLA's basic aims . . . was to ensure that PRPs would bear the cost of remedying the toxic dangers that they caused.”).
293. See discussion supra Part IV.A.
294. See Misiorowski & Eagle, supra note 174, at 18 (explaining scientifically-grounded methods of liability apportionment available to courts).
295. See discussion supra Part IV.B.1.
296. See discussion supra Part IV.B.1.
handed results. On the other hand, 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.”297 By upwardly adjusting margins of error, courts will be able to harmonize these goals by allowing PRPs to avoid the harshness of joint and several liability while simultaneously ensuring that the government is fully compensated.

The margin of error approach accounts for this “uncertainty,” and then via the upward adjustment, saddles PRPs—rather than the government—with the burden of that uncertainty. While 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 burdening PRPs disproportionately—seemingly at odds—are harmonized.298

Burlington III acknowledged that CERCLA’s joint and several liability scheme is not static, but is meant to change along with “evolving principles of common law.”299 Courts applying Burlington III should recognize that by applying the Chem-Dyne approach, Burlington III confirms the evolutionary treatment of CERCLA liability.300 Therefore, courts should not read Burlington III to require blind adherence to the apportionment principles of the Restatement (Second).301 Instead, courts presented with CERCLA-related divisibility questions must vigilantly track developments in liability-apportionment jurisprudence, and update their standards to reflect these developments.302 Theoretically, the evolution of joint and several liability may take any form, and courts should modify their apportionment standards accordingly.

298. See discussion supra Part IV.B.
300. See Burlington III, 129 S. Ct. at 1881–83.
301. See discussion supra Part IV.C.
302. See discussion supra Part IV.C.
VI. CONCLUSION

While Burlington III has clearly altered liability apportionment under CERCLA, the details and extent of the alteration are not immediately apparent from the holding. Viewing the apportionment decision in light of the Restatement (Second) of Torts, however, a coherent explanation for Burlington III emerges that will enable courts to iron out the opinion's ambiguities. By returning the apportionment inquiry to the Restatement (Second) of Torts framework and accounting for uncertain apportionment calculations through margins of error, courts can correctly interpret 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 Burlington III linked its holding to the much earlier Chem-Dyne decision, similarly basing the apportionment inquiry on evolving notions of common law. Accordingly, Burlington III is an of-the-moment decision that does not control or predict future apportionment standards, but instead recognizes that when apportioning CERCLA liability, the only constant is change.

303. See discussion supra Part V.
304. See Chem-Dyne, 572 F. Supp. at 810, quoted in Burlington III, 129 S. Ct. at 1881; see also discussion supra Part IV.C.
305. See discussion supra Parts IV.C., V.