Joint and Several Liability in Superfund Actions: When is Environmental Harm Divisible? PRPS Who Want to be Cows

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Unsuccessful defendants in Superfund litigation are generally held to be jointly and severally liable. Thus, a defendant who has contributed only a small amount of the waste at a Superfund site can be liable for 100% of the cleanup costs. From the earliest Superfund decisions, however, courts imposing joint and several liability have noted that joint and several liability was not required by the statute and that liability would not be joint and several where common law principles would apportion the harm among defendants.

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1. The Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 42 U.S.C. §9601 et. seq., is commonly referred to as the Superfund Law because of the fund created to pay for the remediation of inactive hazardous waste sites.

2. One commentator summed up a section on joint and several liability by stating “in a very short period of time, so many courts had adopted the Chem-Dyne position [holding that Superfund defendants are jointly and severally liable] that there was no longer a reasonable basis for disagreement concerning the application of joint and several liability.” A. Topol and R. Snow, Superfund Law and Procedure §54.4 at 372 (West 1992), citing United States v. Conservation Chemical, 1984 HWLR 6065 (W.D. Mo. 1984), which cited five other federal decisions for the proposition that there was no ground for difference of opinion on the issue. Virtually all of the Superfund cases cited in this article will use joint and several liability as their starting point.

The early cases cited Restatement (Second) of Torts §433A for the common law rule of apportionment, but did not provide a detailed analysis of it. They merely concluded that where numerous hazardous substances mixed together to create one mess that needs to be cleaned up, there is one indivisible harm and liability will not be apportioned. These early opinions seemed to overlook the fact that §433A states that joint and several liability is not imposed where there is a reasonable basis to distinguish between causes, even if the causes created one indivisible harm. Comment d, for example, states that "where cattle of two or more owners trespass upon the plaintiff’s land and destroy his crop, the aggregate harm is a lost crop, but it may nevertheless be apportioned..." The lost crop is a single, indivisible harm, but in that case, the Restatement would not impose joint and several liability. Therefore, Superfund defendants, trying to avoid the harshness of joint and several liability, are asking with increasing frequency, “Aren’t we like the cows?”

While joint and several liability remains the general rule in Superfund cases, four federal appellate courts have used the common law principles of apportionment set forth in § 433A to permit Superfund defendants to avoid joint and several liability. Each of these cases involved an unusual set of facts, and each court was careful to distinguish its facts from the typical case in which joint and several liability is imposed. Each of these decisions provided an analysis of Monsanto, 858 F.2d 160 (4th Cir. 1988), cert. denied, 490 U.S. 1106 (1989) (discussed infra notes 21-27).

4. See infra notes 13-27 and accompanying text.

5. RESTATEMENT (SECOND) OF TORTS §433A provides as follows: § 433A. “Apportionment of Harm to Causes
   (1) Damages are to be apportioned among two or more causes where
      (a) there are distinct harms, or
      (b) there is a reasonable basis for determining the
          contribution of each cause to a single harm.
   (2) Damages for any other harm cannot be apportioned
       among two or more causes.”


7. See infra notes 28-89 and accompanying text.

8. The typical cases have numerous generators of various substances. In In re Bell Petroleum Servs., 3 F.3d 889 (5th Cir. 1993), on the other hand, there was only one hazardous substance at issue.
§ 433A which added significantly to our understanding of when joint and several liability should be applied. This article will analyze these recent Superfund decisions that have used § 433A to apportion liability and explain which Superfund cases are appropriate for apportionment and which are not. In other words, this article will attempt to explain when potentially responsible parties (commonly referred to as a PRP) at Superfund sites are like the cows.

BACKGROUND

Section 107 of the Comprehensive Environmental Response, Cleanup and Liability Act ("CERCLA" or the "Superfund Law"), provides that four groups of persons "shall be liable" for cleanup costs: (1) current owners or operators of a facility at which there has been a release or threatened release of hazardous substances; (2) past owners or operators who owned or operated the facility at the time of the disposal of hazardous substances; (3) persons who arranged for disposal of hazardous substances at these sites; and (4) persons who transported hazardous substances to the site, if they also selected the site. Persons in any of these categories are commonly referred to as potentially responsible parties ("PRPs").

The Superfund Law makes no reference to joint and several liability. Indeed, both the House and Senate versions of the bill that became the Superfund Law contained language authorizing joint and several liability, but that language was removed shortly before passage. Nevertheless, reasoning that the removal of the joint and

and each of the PRPs was an owner or operator of the facility at a different time.


10. Among the early Superfund decisions that analyze the meaning of the statute's failure to address whether liability is joint and several are: United States v. Chem-Dyne Corp, 572 F.Supp. at 806; Colorado v. ASARCO, Inc., 608 F. Supp 1484 (D. Colo. 1985); United States v. Argent Corp., 21 Env. Cases (BNA) 1356 (D.N.M. 1984).

11. The Senate amendments eliminating joint and several liability were passed on November 24, 1980. 126 Cong. Rec. S. 14964 (Nov. 24, 1980). The House amendments eliminating joint and several liability were passed on December 3, 1980. 126 Cong. Rec. H.
several language from the bill was not a rejection of joint and several
liability, but was merely intended to provide courts with flexibility in
determining whether to apply it, courts have consistently applied
joint and several liability.\textsuperscript{12}

The early Superfund cases were unanimous in imposing joint and
several liability. In the typical case, numerous parties sent hazardous
materials to the same site. The result was viewed as one indivisible
harm and pursuant to the Restatement (Second) of Torts, when two
or more persons cause a "single and indivisible harm," each is liable
for the entire harm.

In \textit{United States v. Chem-Dyne Corp.}, for example, more than
600,000 pounds of waste were sent to the site by 289 generators and
transporters.\textsuperscript{13} In determining that joint and several liability was
appropriate, the court first analyzed the legislative history of
CERCLA, concluding that the removal of joint and several liability
language did not imply a rejection of joint and several liability.\textsuperscript{14}
The court stated that joint and several liability was deleted "to avoid
its universal application to inappropriate circumstances."\textsuperscript{15} The court
noted that common law principles should be the source for determin-
ing when to apply joint and several liability, citing Restatement
(Second) of Torts § 433A.\textsuperscript{16} The court then cited § 433A for the
proposition that if the "harm is divisible and there is a reasonable
basis for apportionment," then each party will be liable only for a

\textsuperscript{11}787 (Dec. 3, 1980). These amendments are discussed by the
Chem-Dyne court, quoting extensively from Senator Helms’ speech.
Senator Helms explained the deletion of joint and several liability as
follows: “Retention of joint and several liability in S. 1480 received
intense and well deserved criticism.” \textit{Chem-Dyne}, 572 F.Supp. at
806.

12. The Chem-Dyne court relied on statements in the legislative
history that indicate congressional intent to rely on common law
principles to determine whether joint and several liability should be
applied. 572 F. Supp. at 806-807 (quoting Senator Randolf “we have
deleted any reference to joint and several liability, relying on com-
mon law principles” and Representative Florio “[i]ssues of joint and
several liability resolved shall be governed by common law”).

13. \textit{Id.} at 811.
14. \textit{Id.} at 805
15. \textit{Id.} at 810.
16. \textit{Id.}
portion of the harm.\textsuperscript{17} The difference between "and" (requiring both) and "or" (requiring either, as provided in the Restatement) could have made a difference because the court focused on the nature of the harm, and concluded that joint and several liability was appropriate because the defendants had "not carried their burden of demonstrating the divisibility of the harm and the degrees to which each defendant is responsible."\textsuperscript{18} Defendants made a divisibility argument, but the court concluded that division based on the volume of waste disposed of would not be an accurate measure because it did not take into account differences in toxicity or the possibility that the harm was increased by the interaction between the wastes.\textsuperscript{19}

The court's procedural reasoning was also important to the development of the law regarding joint and several liability. The court understood defendant's motion to determine whether liability was joint and several as a motion for summary judgment.\textsuperscript{20} On a motion for summary judgment, the court "construes the evidence in a light least favorable to the movant."\textsuperscript{21} This places a heavy burden on defendants and it was therefore easy for the court to decide that defendants did not meet their burden of proof regarding divisibility.\textsuperscript{22}

\begin{itemize}
\item \textsuperscript{17} \textit{Chem-Dyne} at 811. The court noted that the case "turns on the issue of whether the harm caused at Chem-Dyne is "divisible" or "indivisible."
\item \textsuperscript{18} \textit{Id.} at 811
\item \textsuperscript{19} \textit{Id.} The court stated that "the mixing of wastes raise[d] a question about divisibility of harm." The court also noted that there was a factual dispute regarding which wastes had contaminated the groundwater. The court did not see this factual dispute as preventing summary judgment. The court's decision may be inconsistent with the Restatement by looking for an accurate basis for apportionment rather than a reasonable basis. \textit{Chem-Dyne}, 572 F.Supp. at 811.
\item \textsuperscript{20} \textit{Id.} at 810. The court stated that the defendants request for an early determination that liability was not joint and several was "essentially a Motion for Partial Summary Judgment." \textit{Id.}
\item \textsuperscript{21} \textit{Id.} (citing Bohn Aluminum & Brass Corp. v. Storm King Corp., 303 F.2d 425, 427 (6\textsuperscript{th} Cir. 1962)).
\item \textsuperscript{22} \textit{Id.} at 811. The court noted the difficult burden a moving party has, explained that there were factual disputes regarding who caused what portion of the harm, and therefore concluded that defendants had not met their burden of proof. \textit{Id.}
\end{itemize}
The earliest appellate analysis of the application of § 433A in Superfund litigation, in United States v. Monsanto, Inc., essentially followed Chem-Dyne. The court’s reasoning made clear that while citing Restatement § 433A as authoritative, the court had adopted the Chem-Dyne court’s small steps away from Restatement § 433A. The court affirmed a trial court conclusion that the “harm at Bluff Road was non-divisible,” while making clear that the court understood § 433A to focus on the result and not on whether there is a reasonable basis for apportionment among causes. As will be discussed later, the examples provided in the Restatement make clear that whether the result is divisible is not determinative. Indeed, the whole point of the cows illustration is that a single indivisible result can be apportioned among defendants.

The trial court also provided a policy reason for the imposition of joint and several liability – the need to make the government whole for response costs. This policy is something of a recurring theme in Superfund litigation (one that becomes less compelling as the government chooses to sue fewer and fewer of the potentially responsible parties). While the court stated that Restatement § 433A was the basis for the law on the issue of joint and several liability, nothing in § 433A suggests that making the plaintiff whole is an underlying goal. Indeed, the Restatement suggests that it is not a goal.

23. United States v. Monsanto, 858 F.2d 160, 171 (4th Cir. 1988). The court noted that while large quantities of some substances could be combined with little impact, small quantities of others could have disastrous consequences. Thus volume would not be an appropriate method of division. Monsanto, 858 F.2d at 172.

24. Id. at 172. The court stated that to meet burden regarding apportionment, defendants must prove “that the environmental harm at Bluff Road was divisible.” Monsanto, 858 F.2d at 172.

25. Id. at 173. The court stated that making governments whole was “a primary consideration and that cost allocation was ‘more appropriately considered after the plaintiff was made whole.’” Id.

26. If the government identifies 50 potentially responsible parties and chooses to litigate against only the 5 largest, it is difficult to argue that each defendant should be jointly and severally liable so that the government recovers all of its costs.
because apportionment is appropriate even when dividing between negligent and innocent causes.\textsuperscript{27}

Recently, four federal courts of appeals have re-examined the issue of divisibility and § 433A and reached conclusions different from those reached in \textit{Chem-Dyne} and \textit{Monsanto}, albeit in very different fact patterns: (1) \textit{In re Bell Petroleum}\textsuperscript{28}; (2) United States v. \textit{Alcan Aluminum Corp.} (3\textsuperscript{rd} Cir. 1992)\textsuperscript{29}; (3) United States v. \textit{Alcan Aluminum Corp.} (2\textsuperscript{nd} Cir. 1993)\textsuperscript{30}; and United States v. \textit{Township of Brighton}.\textsuperscript{31} Each of these decisions further developed the legal community's understanding of § 433A and moved away from the \textit{Chem-Dyne}/\textit{Monsanto} presumption that environmental harm is not divisible.\textsuperscript{32}

In \textit{In re Bell Petroleum}, the responsible parties were consecutive owners and operators of an industrial facility. The contamination consisted largely of one hazardous substance that had been disposed

\textsuperscript{27} RESTATEMENT (SECOND) OF TORTS § 433A comment e states that apportionment should be made between innocent and not innocent causes so that a defendant is not held responsible for harm it did not cause. For example, where the harm that would result from defendant's dam is exacerbated by an unprecedented and unforeseeable rainfall, the defendant is not responsible for damage caused by the unforeseeable rainfall. \textit{RESTATEMENT (SECOND) OF TORTS} § 433A, cmt. e (1965).

\textsuperscript{28} 3 F.3d 889 (5\textsuperscript{th} Cir. 1993).

\textsuperscript{29} 964 F.2d 252 (3\textsuperscript{rd} Cir. 1992).

\textsuperscript{30} 990 F.2d 711 (2\textsuperscript{nd} Cir. 1993).

\textsuperscript{31} 153 F.3d 307 (6\textsuperscript{th} Cir. 1998). \textit{See infra} note 32 and accompanying text. \textit{See also} United States v. Hercules, Inc., 247 F.3d 706 (8\textsuperscript{th} Cir. 2001). The \textit{Hercules} court may be a fifth appellate court adopting a divisibility analysis, but the court's reasoning is based in part on \textit{Alcan} and \textit{Brighton Township} and does not break new ground in the area. United States v. Hercules, Inc., 247 F.3d at 716.

\textsuperscript{32} It is important to note that most trial courts still operate under a presumption that environmental harm is not divisible. \textit{See}, \textit{e.g.}, United States v. Agway, Inc., 193 F.Supp.2d 545 (N.D. N.Y. 2002) (describing divisibility as a limited defense to the rule of joint and several liability) and United States v. Consolidated Coal Co., 184 F.Supp.2d 723, 742 (S.D. Ohio 2002) (stating that liability under § 107 is joint and several).
of by different parties at different times.\(^{33}\) Two of the parties entered consent agreements with the EPA, and the remaining party objected to being held jointly and severally liable for the entire remainder of the costs.\(^{34}\)

The court began its analysis of joint and several liability by noting that courts have generally imposed joint and several liability in CERCLA cases.\(^{35}\) The court then addressed § 433A of the Restatement. The Restatement states that joint and several liability is not appropriate either where there are distinct harms, or where "there is a reasonable basis for determining the contribution of each cause to a single harm."\(^{36}\) In a statement that echoes much of the earlier court decisions on the issue, the court stated that the "nature of the harm is the key to determining whether apportionment is appropriate."\(^{37}\) That conclusion seems to focus on the result and whether it is divisible, while ignoring the explicit statement in the Restatement that

\(^{33}\) See In re Bell Petroleum, 3 F.3d 889, 903 (5th Cir. 1993). The facility had three operators. "Leigh owned the real property at the site from 1967 through 1981, and conducted chrome-plating activities there in 1971 and 1972. In 1972, Bell purchased the [chrome-plating business] and leased the property from Leigh. [Bell] continued to conduct similar, but more extensive, chrome-plating activities at the site until mid-1976. In August 1976, Sequa purchased the business assets from Bell, leased the property from Leigh, and conducted similar chrome-plating activities at the site until late 1977." Id.

\(^{34}\) Id. at 894. A consent decree was approved on July 24, 1990 whereby the EPA "settled its claims against Bell for all costs, past and future for $1,000,000." In December 1990, another consent decree was approved "pursuant to which the EPA settled its claim against Leigh for past and future cost - for $100,000." Id.

\(^{35}\) Id. at 895. The court noted that "[a]lthough joint and several liability is commonly imposed in CERCLA cases, it is not mandatory in all such cases." In re Bell, 3 F.3d at 895.

\(^{36}\) RESTATEMENT (SECOND) OF TORTS § 433A (1965).

\(^{37}\) In re Bell, 3 F.3d at 896 (stating, "[a]pportionment is inappropriate for other kinds of harms, which, 'by their nature, are normally incapable of any logical, reasonable, or practical division.' Examples of such are death, a single would, the destruction of a house by fire, or the sinking of a barge"). In these cases, two or more causes have combined to cause a single result, incapable of division. Id.
even if the harm is single and indivisible, apportionment is appropriate where there is "a reasonable basis for determining the contribution of each."\(^{38}\)

The court then discussed some of the examples of divisible harm set forth in the Restatement.\(^{39}\) One of those examples addresses "successive harm," such as when two defendants, independent of each other, pollute the same stream at different times.\(^{40}\) In such cases, apportionment is appropriate because it is clear that each party caused a separate amount of harm and neither party is responsible for what the other caused.\(^{41}\) It is important to note that the reason to apportion is that it is clear that neither party is responsible for what the other caused, not that we can establish with certainty what the other party caused.\(^{42}\) Instead of looking at the polluted stream as one harm, the Restatement suggests looking at it as two independent harms: the harm caused by the first polluting party and the separate harm caused by the second polluting party. This reasoning suggests that the harm being apportioned is the act causing harm, not the result.

The court also noted that the Restatement provides for apportionment where a single harm is capable of division upon some reason-

\(^{38}\) See Restatement (Second) of Torts § 433A (1965).

\(^{39}\) In re Bell, 3 F.3d at 895 (noting that examples of "distinct" harms are "where two defendants independently shoot the plaintiff at the same time, one wounding him in the arm and the other wounding him in the leg. Although some of the elements of damages (such as lost wages or pain and suffering) may be difficult to apportion, "it is still possible to make a rough estimate which will fairly apportion such subsidiary elements of damages"). \emph{Id.}

\(^{40}\) \emph{Id.} at 895-96, (noting that apportionment is appropriate with regard to successive harms "because 'it is clear that each has caused a separate amount of harm, limited in time, and that neither has any responsibility for the harm caused by the other' "). \emph{Id.}

\(^{41}\) \emph{Id.}

\(^{42}\) The standard set by the Restatement is whether there is a reasonable basis for apportionment. In many cases there will be a reasonable basis to apportion, but no certainty with regard to the apportionment. In such cases, the Restatement would apportion. In comment d, for example, it is reasonable to assume similar cows cause a similar amount of damage, but we are not certain about what each cow did. Restatement (Second) of Torts § 433A cmt. d (1965).
able basis. Two examples of this are: (1) a field trampled by the cows from two or more neighboring fields and (2) two polluters who pollute the same stream at the same time. Regarding the cows, the Restatement states that the number of cows owned by each trespassing neighbor provides a reasonable basis for apportionment. Regarding the pollution, the Restatement views quantity of pollution material as a reasonable basis.

The court never addressed how successive harms (two polluters who pollute at different times) differ conceptually from a single harm capable of division (two polluters at the same time). The injury causing acts are the same. The results (i.e. one polluted stream) are the same. Whether the injury causing acts occurred at the same time or at different times seems to be fortuitous. Nevertheless, the successive nature of the pollution (two polluters releasing the same substance at different times) made it easier for the court to view its facts as significantly different from the typical Superfund case, and permitted the *Bell* court to rely on the Restatement's examples of harms for which there is a reasonable basis for apportionment.

At the conclusion of its discussion of the Restatement, the court noted that whether harm is capable of apportionment is a question of law, but if harm is capable of apportionment, how to apportion it is a question of fact. The court stated, however, that CERCLA cases present some special difficulties with regard to divisibility because the Restatement would divide based on the amount of harm each

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43. The court may require apportionment to be made where a single harm is divisible upon some reasonable and rational basis, fairly apportioned among the responsible causes, where no injustice to the parties results. *See In re Bell*, 3 F.3d at 895.

44. *See RESTATEMENT (SECOND) OF TORTS § 433A, cmt. d (1965)*. The Restatement points out that apportionment also is appropriate where part of the harm is the result of an innocent cause, or where the plaintiff is responsible for a portion of the harm.

45. *Id.*

46. *Id.*

47. *In re Bell*, 3 F.3d at 903.

48. *Id.* at 896. In many cases, this involves an intensive factual determination.
caused, but causation is not necessarily an element of a CERCLA claim.\textsuperscript{49}

The court concluded its analysis of the legal background by noting that CERCLA can lead to unfair results, particularly where a defendant is required to pay huge amounts for damage to which it did not contribute.\textsuperscript{50} The common law tort principles set forth in the Restatement “provide sound guidance” to “ameliorate this harshness.”\textsuperscript{51}

After analyzing the case law and concluding that there was uniformity of opinion on many key issues, including (1) that CERCLA does not mandate joint and several liability and (2) the Restatement is the primary source for determining when to impose joint and several liability, the \textit{Bell} court examined some of the issues about which there is disagreement. First, the court stated that the issue of joint and several liability should be dealt with early in the proceedings, even though some courts had concluded that it was better dealt with after liability.\textsuperscript{52} Second, the court overturned the trial court's conclusion that in order to avoid joint and several liability, a defendant had to prove with \textit{certainty} that there was a basis for apportionment.\textsuperscript{53}

\begin{itemize}
  \item[49.] \textit{Id.} at 893 n.4 (noting that “[i]n cases involving multiple sources of contamination, a plaintiff need not prove a causal link between costs incurred and an individual generator’s waste”). \textit{See also} Amoco Oil Co. v. Borden, Inc., 889 F.2d 664 (5\textsuperscript{th} Cir. 1989). Other courts have likewise concluded that proof of causation is not required in CERCLA cases. \textit{See} United States v. Alcan Aluminum Corp., (Alcan-PAS), 990 F.2d 711, 721 (2d Cir. 1993); \textit{see also} United States v. Alcan Aluminum Corp., (Alcan-Butler), 964 F.2d 252, 266 (3d Cir. 1992); and \textit{United States v. Monsanto Co.}, 858 F.2d 160, 170 (4\textsuperscript{th} Cir. 1988).
  \item[50.] CERCLA, as a strict liability statute, will not listen to pleas of “no fault” and can require parties to pay substantial damages to which their acts did not contribute. \textit{See In re Bell}, 3 F.3d at 897.
  \item[51.] \textit{Id.} As a result of CERCLA’s patent unfairness, “Congress left it to the courts to fashion some rules that will, in appropriate circumstances, ameliorate this harshness.” Congress pointed to the common-law principles of tort liability set forth in the Restatement to provide guidance in doing so. \textit{Id.}
  \item[52.] \textit{Id.} at 901 (stating that “[w]ith respect to the timing of the ‘divisibility’ inquiry, that an early resolution is preferable,” leaving the ultimate discretion in the hands of the district court). \textit{Id.}
  \item[53.] \textit{In re Bell}, 3 F.3d at 903.
\end{itemize}
Instead, it concluded that all that was needed was a reasonable basis.\(^{54}\)

Applying the law to the facts of the case, the *Bell* court concluded that the defendant had met its burden of proving that there was a reasonable basis for apportionment as a matter of law.\(^{55}\) The court stated that the case is analogous to two of the examples given in the Restatement: (1) cows from two or more fields destroy a plaintiff’s crops and it is reasonable to apportion liability based on the number of cows each neighbor owns; and (2) liability between two polluters of a stream can be apportioned based on quantity of pollutants discharged.\(^{56}\) The first illustration makes clear that the amount of harm does not need to be established with certainty – because we do not know whose cows were active and whose were passive. Indeed, the court noted that liability could be apportioned even though it is possible that one party caused all the harm.\(^{57}\)

The dissent takes the majority to task for apportioning liability when the defendant could not say with certainty which party had caused what harm.\(^{58}\) Indeed, the defendant was so uncertain that it presented competing theories regarding divisibility, each of which

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54. *Id.*

55. *See In re Bell*, 3 F.3d at 904 (holding that,”Sequa met its burden of proving that there is a reasonable basis for apportioning liability among defendants on a volumetric basis”). *Id.*

56. *Id.* at 903.

57. *See id.* Citing the cow example, the Restatement suggests that “apportionment is appropriate even though there is a possibility that only one of the defendant’s cattle caused all of the harm, while the other defendant’s cattle idly stood by.” This is justified on the grounds that it is reasonable to assume that the respective harm done by each of the defendants is proportionate to their number (cows) or volume (toxic) produced. *Id.*

58. *See id.* at 904 fn. 19. The dissent noted that the trial court had given the defendant an opportunity for a hearing and at the hearing the defendant failed to meet its burden of proof by a preponderance of the evidence. The majority, on the other hand concluded that by requiring defendant to prove its method of division by a preponderance was requiring certainty, not merely a reasonable basis. *In re Bell*, 3 F.3d at 904.
was based on different assumptions. The dissent saw the court’s acceptance of this basis for apportionment as requiring less than a preponderance of the evidence. The court, however, stated that the defendant would still need to prove what it was responsible for by a preponderance, but the legal issue, decided by the court, was merely that a reasonable basis existed. The court addressed the dissent’s comments, noting that they go to how to apportion, not whether there is a reasonable basis.

The dissent, commenting on the court’s response, makes two interesting points. First, that there is both a legal and a factual element to divisibility. The defendant must show as a matter of law there is a reasonable basis for apportionment, and then the defendant must

59. See id. at 911. Sequa focused on several potential methods of achieving a reasonable basis for quantitative apportionment of liability on a volumetric basis. Under one method of apportionment, the Sequa expert pointed to its electrical usage, which was effectively refuted by other evidence in the case. Another method of apportionment was suggested via Sequa’s sales record, which also suffered fatally from an inability to produce an adequate number of invoices. Id.

60. Id. at 903.

61. See id. All that is required is that expert testimony and other evidence “establishes a factual basis for making a reasonable estimate that will fairly apportion liability,” unless exceptional circumstances exist. “Because each defendant’s exact contribution to the harm cannot be proven with absolute certainty, or the fact that it will require weighing the evidence and making credibility determinations, are inadequate grounds upon which to impose joint and several liability.” Id.

62. In re Bell, 3 F.3d at 909. The dissent states that the majority confuses the distinction between the legal burden that the single harm at issue caused is of a type capable of apportionment, and the factual burden of proving the amount of harm attributable to a particular party. Going further, they claim the gist of the majority opinion is based on this legal fallacy: “because the evidence is clear that Sequa did not cause 100% of the harm to the aquifer, Sequa must be entitled to a finding by the district court apportioning the amount of harm attributable to it under the RESTATEMENT (SECOND) OF TORTS § 433.” Id.
show that said reasonable basis is more likely than not what happened.63

Second, the dissent challenged the analogy between the Bell case and the Restatement example of the cows trampling the field.64 In the dissent’s view, this was a case in which there was uncertainty regarding how many cows each farmer owned as well as uncertainty regarding how many cows from each farmer were actually in the field.65 Thus, the dissent concluded that any apportionment would be speculative.66 The dissent correctly noted that there was a factual dispute regarding the volumes of waste each party had disposed of. To the majority, however, that did not mean that as a matter of law there was no reasonable basis for apportionment, but rather, it meant that defendant was entitled to a factual hearing to see if it could provide sufficient evidence to support the basis of apportionment that the court found to be reasonable.67

In United States v. Alcan Aluminum (Butler Tunnel), the Third Circuit Court of Appeals suggested that § 433A of the Restatement might not only provide a means for a Superfund defendant to avoid joint and several liability,68 but might also provide a means for a de-

63. See id.
64. Id. at 910. Stating that in the cow example, “a reasonable, factual basis for division must exist in order for the court to actually draw the possible apportionment...” Id.
65. See id. at 911.
66. See id. at 913. The dissent concluded that “Sequa failed to meet its burden of proof on the factual, quantitative apportionment issue.” In re Bell, 3 F.3d at 913.
67. See id. at 904. The dispute hinges on the meaning of uncertainty. To the dissent, uncertainty regarding whether there is a reasonable basis to apportion means we could not apportion. To the majority, a reasonable basis is never certain and therefore uncertainty is not inconsistent with apportionment.
68. United States v. Alcan Aluminum (Butler Tunnel), 964 F.2d 252, 271 (3d Cir. 1992) [hereinafter Alcan-Butler] (stating that “[i]f Alcan can establish that the harm is capable of reasonable apportionment, then it should be held liable only for the response costs relating to the harm to which it contributed. Further, if Alcan can establish that the hazardous substances in its emulsion could not have caused or contributed to the release or the resultant response
fendant to avoid liability entirely. The case arose out of the cleanup of a Superfund site in Pennsylvania at which all the defendants except for Alcan settled their liability with the government. The government moved for summary judgment against Alcan on the issue of liability and Alcan cross-moved for summary judgment. Alcan argued that its waste did not constitute a hazardous substance because the trace amounts of metals in its waste were less than the background levels for said metals.

The court found that CERCLA contains no quantity requirement, so one could be liable even for trace elements. The court further

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69. Id. at 257. "In November 1989, the Government filed a complaint against 20 defendants, including Alcan, for the recovery of costs incurred as a result of the release of hazardous wastes from the Site into the Susquehanna River. In response, 17 of the 20 defendants executed a consent decree on January 17, 1990. On June 8, 1990, two of the three remaining defendants entered into a second consent decree with the Government... The Government then moved for summary judgment against Alcan, the only non-settling defendant, to collect the balance of its response costs." Id.

70. Id.

71. Id. at 256. "During the rolling process, fragments of aluminum ingots, which also contained copper, chromium, cadmium, lead and zinc...broke off into the emulsion... According to Alcan, the level of these compounds in the post-filtered emulsion was far below the EP toxic or TCLP toxic levels and, indeed, orders of magnitude below ambient or naturally occurring background levels." Alcan-Butler, 964 F.2d at 256.

72. Id. at 259-260. The court affirmed a decision that agreed with the Government, observing that "the plain statutory language fails to impose any quantitative requirement on the term 'hazardous substance' and that 'there is no principled basis upon which to deviate from the ...rule that the mere listing of a substance by EPA renders that substance hazardous.'" The Court in Alcan, ultimately held that the statute did not, on its face, impose any quantitative requirement or concentration level on the definition of "hazardous substances." Rather, the substance under consideration must fall within one of the designated categories. Id.
concluded that a plaintiff does not need to prove causation, so Alcan could be held liable even if its waste did not cause any of the response costs. The court then looked to the divisibility of harm issue as a means of avoiding or limiting the unfairness of holding a party who may not have caused any environmental harm liable for harm caused primarily by a group of others.

The court began its discussion of RESTATEMENT (SECOND) § 433A by noting that the drafters of the Restatement found that joint pollu-

Section 9601 (14) sets forth CERCLA's definition of "hazardous substance" as:

`hazardous substance' means (A) any substance designated pursuant to section 1321 (b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C.A. 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 U.S.C.A. 6901 et seq.] has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act [42 U.S.C.A. 7412], and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). CERCLA 42 U.S.C.A. § 9601(14).

73. Alcan-Butler, 964 F.2d at 269-270 (concluding that even though the concentrations of metals in the emulsion were much lower than naturally occurring background levels and therefore, if this were the only waste at the site, no one would have considered cleaning it up, Alcan could, nevertheless be held liable for the cleanup that was caused by the other waste at the site.)
tion of water is typically divisible.\footnote{74} The court then noted that the defendant has the burden of proving that harm is divisible.\footnote{75} This would avoid the injustice of having a wrongdoer who has caused harm avoid liability simply because another caused the same harm. In other words, the fact that the stream was already polluted should not be a defense, but it should limit the extent to which defendant is responsible.

The court recognized that under similar circumstances, many courts, including the \textit{Chem-Dyne} and \textit{Monsanto} courts, had found environmental harm to be indivisible as a matter of law, based on factors such as differences in toxicity and synergistic properties.\footnote{76} The \textit{Alcan-Butler} court, however, concluded that whether or not harm is divisible depends greatly on the facts and that Alcan should have an opportunity to develop the facts and prove divisibility.\footnote{77} Alcan argued that there was no need for a hearing on divisibility because its contribution to the harm was zero.\footnote{78} The court rejected that, but noted that upon remand "if Alcan proves that the emulsion

\textit{See id.} at 269. Section 433 A, Comment d provides that "[t]here are other kinds of harm which, while not so clearly marked out as severable into distinct parts, are still capable of division upon a reasonable and rational basis, and of fair apportionment among the causes responsible. Such apportionment is commonly made in cases of private nuisance, where the pollution of a stream has interfered with the plaintiff's use and enjoyment of his land." \textsc{Restatement (Second) of Torts} § 433A cmt. d (1965).

\textit{Alcan-Butler,} 964 F.2d at 269. "Under the Restatement, where a joint tortfeasor seeks to apportion the full amount of a plaintiff's damages..., it is the tortfeasor's burden to establish that the damages are capable of such apportionment. \textit{See also} \textsc{Restatement (Second) of Torts} § 433B(2) (1965).

\textit{Alcan-Butler,} 964 F.2d at 269. "Alcan's burden in attempting to prove the divisibility of harm to the Susquehanna River is substantial, and the analysis will be factually complex as it will require an assessment of the relative toxicity, migratory potential and synergistic capacity of the hazardous waste at issue." \textit{See United States v. Monsanto Co.,} 858 F.2d at 172 n.26; \textit{see also United States v. Chem-Dyne Corp.,} 572 F.Supp. 802, 811 (1983).

\textit{Alcan-Butler,} 964 F.2d at 269.

\textit{See id.} at 269-270.
did not or could not . . . contribute to the release and the resultant response costs, then Alcan should not be responsible for any response costs.”

The court recognized that this result brought causation back into the analysis, but concluded that such a result is consistent with CERCLA and is the only way to assure that there is some reason for the imposition of CERCLA liability.

The court remanded the case to the trial court to give Alcan an opportunity to show that the harm is divisible and that the damages are capable of reasonable apportionment. This conclusion is inconsistent with the Restatement, which states that liability is apportioned if the harm is divisible or if there is a reasonable basis for apportionment, but nevertheless, Alcan would have its opportunity to establish the facts.

While the Alcan-Butler case was working its way through the Third Circuit, a case with substantially the same facts, but at a different site, was being litigated in New York. In that case, also entitled United States v. Alcan Aluminum, the Second Circuit essentially adopted the reasoning of the Third Circuit, but with a couple of minor differences.

The Second Circuit began by noting that in order to defeat the government’s motion for summary judgment on the issue of joint and several liability, Alcan need only show that there are issues of fact regarding whether there is a reasonable basis for apportionment.

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79. See id. at 270.
80. Id. at 270-271.
81. Id.
82. United States v. Alcan Aluminum, 990 F.2d 711, 722 (2d Cir. 1993) [hereinafter Alcan] (having assessed CERCLA’s plain meaning, its legislative history, and the case-law construing it, the Second Circuit essentially adopted the reasoning of the Third Circuit in United States v. Alcan Aluminum Corp., 964 F.2d 252, 261-71 (3d Cir. 1992). This approach will permit a defendant to avoid liability only when its pollutants contribute no more than background contamination.)
83. See Alcan, 964 F.2d 711. “The polluter bears the ultimate burden of establishing a reasonable basis for apportioning liability.” See also Monsanto, 858 F.2d at 172; and Chem-Dyne, 572 F.Supp. at 810.
Apportionment, the court stated, is “intensely factual.” Once the question is framed that way, a defendant does not need to do much to avoid summary judgment and obtain a hearing on the issue of divisibility. This does not mean that divisibility will be the general rule—it merely makes it unlikely that the issue will be determined on summary judgment.

The court recognized that causation was being brought into the case “through the back door after being denied entry at the front door.” However, the court stated that it was only permitting causation as defendant’s burden and causation could result in a finding of no liability only where a party shows that background levels are not exceeded. In other words, the court did not think that examining causation as a means of proving divisibility was inconsistent with the fact that causation was not required to prove liability. The court recognized that its reasoning made it possible to conclude that in the liability phase, one can be held liable even if they caused no response costs, then in the divisibility stage, the same party could be found to have no liability because it caused no response costs.

The court did not address the Restatement’s examples of divisibility, perhaps because none were analogous. In the cases of the cows and pollution of a stream, each defendant did essentially the same

84. See *Alcan*, 964 F.2d 711. See also *Chem-Dyne*, 572 F.Supp. at 811.
85. See *Alcan*, 990 F.2d at 722. The commingling of Alcan’s waste emulsion and metallic and organic hazardous substances created an issue as to divisibility. The differing contentions by experts on both sides raised sufficient questions of fact to preclude the granting of summary judgment on the divisibility issue. On remand, the factual question should be – is there a reasonable basis for apportionment, not is there a precise basis. Otherwise, the phrase "reasonable basis" would be written out of the restatement. *Id.*
86. *Id.* The Court explained that causation was brought back into the case at the backdoor, at the apportionment stage, after being denied entry at the front door, where liability is ascertained.
87. *Id.* The Court then added that placing the burden of proving causation on the defendant was reintroduced as a “special exception,” only to allow the defendant to escape payment where its pollutants did not contribute more than background levels, as in *Alcan-Butler*
88. See *id.* at 723.
thing and the effects were cumulative. Alcan's claim, on the other hand, was that it did something significantly different. Alcan was not arguing that it had fewer cows and should pay less. Alcan was arguing that the field was trampled by cows and it didn't have a cow. It had something which was totally harmless and which already existed at the site. While the Restatement example of the cows could present a means to limit the extent of a defendant's liability, Alcan did not rely in that example because Alcan sought to avoid liability in its entirety, not to merely limit its liability.

In *United States v. Township of Brighton*, the Sixth Circuit carried this discussion of causation further, again allowing a fact hearing on the issue of divisibility. Brighton Township operated a dump on part of a site that became an inactive hazardous waste site. Brighton Township operated the site for only part of the period in which disposal occurred at the site. Brighton Township's argument against liability was that the hazardous substances at the site were deposited after Brighton left the site in 1973, or in a manner outside the control of Brighton Township. The trial court found the Township to have joint and several liability as an operator of the facility.

89. See id. at 722. Contrary to the Government's position, commingling is not synonymous with indivisible harm. The response costs were attributed to substances such as PCB's, nitro benzene, phenol, dichloroethone, toluene, and benzene. Alcan contends "that no soil contamination due to heavy metals was found there and insist[ed] that the metallic constituents of its oil emulsion are insoluble compounds," were therefore capable of reasonable apportionment. Id.


91. See *Brighton*, 153 F.3d at 317. Claiming that the evidence showed that hazardous materials found at the site were "either placed there after 1973, or placed there by non-residents, beyond the scope of Brighton Township's operator status." Id.

92. See id. at 316-317. The Court vacated the district court's ruling that Brighton Township was an operator of the facility, while stating that there was enough evidence that hazardous materials were brought onto the site before 1973 to support the district court's finding of liability under § 9607. "If an entity is an operator, it is jointly and severally liable for any hazardous material that is found, whatever its source, unless that operator can show divisibility." It is inter-
The appeals court began its discussion of divisibility by pointing out that courts have generally imposed joint and several liability in CERCLA cases and that exceptions to that rule have been developed based on § 433A of the Restatement. Section 433A would not impose joint and several liability where there is "a reasonable basis for determining the contribution of each cause." The issue upon which there is no consensus, the court noted, is what constitutes "a reasonable basis."

The court contrasted what it saw as two distinct views on divisibility: (1) a fairness type approach and (2) a causation analysis. The fairness approach would look to equitable factors in an attempt to determine responsibility. The causation analysis is essentially that proposed by the Bell and Alcan-Butler courts. The court preferred the causation analysis, reasoning that causation analysis is more in line with the Restatement and Congress' intent to incorporate the Restatement into CERCLA.

The court acknowledged that this analysis weakens the strict liability aspect of CERCLA because it is possible that a defendant will be found responsible under CERCLA and be found to have zero liabil-

93. See Brighton, 153 F.3d at 318. "The Restatement says that 'damages for harm are to be apportioned among two or more causes where (a) there are distinct harms, or (b) there is a reasonable basis for determining the contribution of each cause to a single harm.'" Id.


95. See Brighton, 153 F.3d at 318. "Although most courts have looked to the Restatement to at least some degree, there is no consensus as to what constitutes a 'reasonable basis.'" Id.

96. See id. at 319. The Brighton Court distinguished "the divisibility defense to joint and several liability from the equitable allocation principles... under CERCLA's contribution provision," stating that former is legal, while the latter is equitable. As such, "the respective tests should reflect that distinction." Id.

97. See id.

98. See supra notes 45-47 and 70-72 and accompanying text.

99. See Brighton, 153 F.3d at 319.
ity based on causation. This anomaly, the court stated, is built into the Restatement.

The court then made some concluding statements about divisibility which are potentially inconsistent. The court said that divisibility is a factual issue, and an appellate court will therefore use “clear error” as its standard of review. This would imply that “if they are in doubt, they should impose joint and several liability.” Then the court noted that divisibility will be permitted where there is a reasonable basis for apportionment based on causation. The decision is unclear regarding what doubt is to be resolved in favor of joint and several liability. The doubt at issue cannot be doubt regarding apportionment because reasonable basis implies uncertainty.

The problem stems in part from the court not being clear regarding when it is addressing the trial court and when it is addressing the appellate court. The statement regarding the clear error standard of review describes the appellate court review of a court decision on a question of fact. The appeal from a summary judgment, where there had been no factual hearing, would be treated differently, because the court would be reviewing a decision of law, not a decision of fact. The statement regarding resolving doubt in favor of joint and several liability would therefore be after a hearing on the facts. The clear error standard would require the appellate court to err on the side of not applying joint and several liability if the trial court had not found that there was a reasonable basis for apportionment, then held a fact hearing to determine how to apportion.

The court's statement regarding divisibility if there is a reasonable basis for apportionment based on causation is addressing the legal issue and could be addressing either the trial or appellate court. Thus, the court’s position was like the Restatement’s, that a reason-

100. Id. at 318. “This is because defendants who can show that the harm is divisible, and they are not responsible for any of the harm..., have effectively fixed their own share of the damages at zero.” Brighton, 153 F.3d at 318.
101. Id.
102. Id. at 319. Also note, that the Sequa court disagreed and saw divisibility as a legal issue.
103. Id.
104. Brighton, 153 F.3d at 319.
105. See id.
106. See id.
able basis for apportionment is reason to hold a hearing, but if there is a finding of fact after a hearing, the appellate court should only overturn that decision if there is clear error.\textsuperscript{107}

The court could not have meant that doubt regarding reasonable basis for apportioning is to be resolved in favor of joint and several liability because that would effectively eliminate the reasonable basis standard. There are many things about which we are in doubt, but have a reasonable basis for deciding and there is nothing in the court's decision that indicates that divisibility is to be permitted only if there is certainty. The standard is then essentially the same as in \textit{In re Bell} – if there is a reasonable basis for dividing, then have a hearing and if the trier of fact finds that it is more likely than not that a person caused only a particular portion of the harm, they are responsible \textit{only} for that portion.\textsuperscript{108}

In a concurring opinion, Judge Moore analyzed the use of causation in divisibility.\textsuperscript{109} He began by noting that language requiring a causal connection between the generator of the waste and the release causing the response costs was removed from the bill that became CERCLA.\textsuperscript{110} Courts have viewed that as a rejection of a causation requirement, even though a similar removal of joint and several liability language has not been seen as a rejection of joint and several liability. This leads to an apparent anomaly: a plaintiff does not have to prove causation to establish liability, but a defendant can avoid liability by proving lack of causation.\textsuperscript{111}

Judge Moore correctly noted that what made this case unique was the fact that the defendant was an operator, while prior discussions

\textsuperscript{107} See id.

\textsuperscript{108} See id.

\textsuperscript{109} See id. at 322.

\textsuperscript{110} \textit{Id.} at 328. “The legislative history supports the absence of a causation requirement, as the final version of the bill ultimately passed by Congress deleted the requirement that liability be imposed only on those who ‘caused or contributed to the release or threatened release’ contained in the earlier version passed by the House of Representatives.” H.R. 7020, 96\textsuperscript{th} Cong. 3071(a)(1)(D), 126 CONG. REC. 26,779 (1980). This deleted language required a causal nexus between a generator and the release causing the incurrence of response costs.

\textsuperscript{111} See supra notes 70-72 and accompanying text.
of divisibility had all involved generators.\textsuperscript{112} He viewed the divisibility defense to joint and several liability as a means of "tempering the harshness of unlimited liability" for someone who did not cause the contamination, or who caused only a small part of it.\textsuperscript{113} However, because owners and operators did not directly cause the contamination, there is a greater concern that issues of equity and culpability will creep into the analysis with owners and operators. To prevent this, Judge Moore would limit the divisibility defense for such parties to temporal division\textsuperscript{114} (i.e. where defendant operated a facility for only a portion of the time that waste was disposed of at the facility).

WHAT IS DIVISIBLE?

Section 433A of the Restatement (Second) of Torts is entitled "Apportionment of Harm to Causes," clearly indicating that the intent is to apportion harm among "causes."\textsuperscript{115} The key is not how

\textsuperscript{112} See Brighton, 153 F.3d at 329-30. Judge Moore opined that "the courts should allow an operator to show divisibility of harm," despite the fact that such a defense has been used primarily in conjunction with generators of hazardous waste.

\textsuperscript{113} Id.

\textsuperscript{114} Id. at 330-31. "[A]pportionment is appropriate only where the previous owner or operator presents sufficient evidence from which the court can determine the portion of harm caused by the hazardous substances disposed of at the time of its ownership or operation of the facility, as distinguished from the portion of harm caused by hazardous waste amassed on the property at a time when the defendant was not the owner or operator of the facility." See also In re Bell Petroleum Services, 3 F.3d 902-904 (holding that there was a reasonable basis for apportioning liability among former owners where only a portion of harm was caused by hazardous waste disposed of at the time the defendant owned the facility.

\textsuperscript{115} See RESTATEMENT OF THE LAW (SECOND) TORTS § 433A (1965).

"§ 433A Apportionment of Harm to Causes:

(1) Damages for harm are to be apportioned among two or more causes where:
(a) there are distinct harms, or
many harms there are or whether the harm is indivisible. The key
issue is whether one can attribute parts of the harm or harms to iden-
tifiable causes. Certainly, where there are separate harms or where
one harm breaks into identifiable parts it is easier to apportion, but
the Restatement makes clear that those are not the only cases in
which apportionment is appropriate.

The Restatement uses the cows and the field to illustrate this point.
Comment d states that where "cattle of two or more owners trespass
upon the plaintiff's land and destroy his crop, the aggregate harm is
a lost crop, but it may nevertheless be apportioned among the owners
of the cattle on the basis of the number owned by each, and the rea-
sonable assumption that the respective harm done is proportionate to
that number." 116 There is only one lost crop. It does not divide into
recognizable parts. Nevertheless, the causes are separable and the
Restatement would apportion the damages rather than imposing joint
and several liability on the defendants. 117

A second important lesson we learn from the cows illustration is
that apportionment is an estimate based on reasonable assump-
tions 118 there is no requirement of precise division. The Restate-
ment does not say that the cows of the various owners need to be of
similar age because we may assume that younger cows are more
rambunctious. No questions are raised regarding whether anyone's
cows showed prior crop destroying propensities. The question of
whether the crop damage is greater near one of the borders is not
asked. A creative attorney representing the owner of the most cows

(b) there is a reasonable basis for determining the con-
tribution of each cause to a single harm.

(2) Damages for any other harm cannot be apportioned
among two or more causes.

where two or more factories independently pollute a stream, the in-
terference with the plaintiff's use of the water may be treated as di-
visible in terms of degree, and may be apportioned among the own-
ers of the factories, on the basis of evidence of the respective quanti-
ties of pollution discharged into the stream."

117. See id.

118. See id. "There are other kinds of harm which, while not so
clearly marked out as severable into distinct parts, are still capable of
division upon a reasonable and rational basis, and of fair apportion-
ment among the causes responsible."
could make numerous reasonable arguments why the number of cows may not be a fair basis for apportionment. All of those questions go to the question of accurate apportionment, not to reasonable apportionment.

Does that mean that the Restatement favors reasonable apportionment over accurate apportionment? Clearly not. The question is not whether those facts are relevant, but when they are relevant. When the issue is the question of law regarding whether to require joint and several liability or to apportion damages, the Restatement says to look whether there is a reasonable means of apportionment. If there is, then a hearing is held and each of these facts becomes relevant. At the hearing, the issue is how to apportion damages, and if the defendant’s reasonable theory of apportionment is supported by the preponderance of the evidence, then damages are apportioned accordingly. If not, whatever method has the preponderance is used.

Some might suggest that comment (i) to § 433A is inconsistent with the above analysis. Comment (i) states that “[c]ertain kinds of harm, by their very nature, are incapable of any logical, reasonable or practical division.”119 This comment would appear to suggest that to determine whether to divide, we look to the nature of the harm and not the nature of the causes. Death, comment i states, is ordinarily incapable of division.120

The Restatement’s illustrations in comment i, however, are all illustrations in which the nature of the causes is significantly different from the nature of the causes in the illustrations of divisibility. In illustration 12, for example, two negligent drivers collide and a by-stander is injured as a result of the collision.121 In illustration 14, two parties negligently discharge oil, which is ignited by a spark causing a fire that burns down plaintiff’s barn.122

In their hornbook on torts, Professors Prosser and Keeton note that the cases in which divisibility is appropriate are those in which neither cause is necessary to the creation of the harm and neither cause

119. RESTATEMENT (SECOND) TORTS § 433A cmt. i (1965).
120. Id.
121. RESTATEMENT (SECOND) TORTS, § 433A cmt. i, illus. 12 (1965).
is sufficient to create the harm. The joint pollution and cow illustrations fit into this category. Remove one party's cows and there is likely to be less damage to the field because no one party is alleged to have caused all the damages. In such cases, the harm may be divisible. However, where either cause would be sufficient to cause the entire harm or where both are necessary to create the harm, it is not unfair to impose joint and several liability.

Prosser and Keeton understand illustration 12 as a case in which neither cause was sufficient to cause the harm, but both were necessary. In such cases, because no injury would have occurred without the combined wrongful acts, it is appropriate to impose joint and several liability. Similarly, in illustration 14, neither was necessary and either was sufficient to cause the injury. Where the negligent act of either party would have been sufficient to cause the entire harm, joint and several liability is not unfair.

The divisible harms illustrations are all cases in which the harm is cumulative. The second person merely adds to the harm caused by the first. More cows means more of the same harm, not a different harm from what the other caused. In such cases, no one should be responsible for the whole because his act was neither sufficient for the development of the whole nor necessary for the resulting harm.

These illustrations help explain why timing can be an important factor. In illustration 12, the collision between two negligent drivers results in injury to a bystander (A + B = injury to C). Both are necessary for the injury and liability is joint and several. If they did not interact, however, assume that A negligently hits C's car and B subsequently does the same, liability would not be joint and several. B cannot be responsible for all the damages. He hit an already damaged car. A cannot be responsible for all the damage. His negligence did not in any way contribute to the damages subsequently caused by B.

Based on the above, the conclusion of the Chem-Dyne and Monsanto courts may have been correct. Defendants argued that, like the cows, the injury they caused was merely cumulative. Each could argue that their waste was not necessary (remove any one party and you still have a big mess) and that their waste was not sufficient (the addition of other wastes made the environmental harm greater and perhaps different).

The courts, on the other hand, reasoned that illustration 12 is more closely analogous. The synergistic effect of the combination of chemicals created a different problem for which each party's waste was necessary. In the alternative, based on differences in toxicity, it may be that any one party's waste could have been sufficient to require a costly remedy. Depending on the specific facts, either of those reasons could justify the use of joint and several liability.

Applying this rule to the recent environmental case law, it would seem that the *In re Bell* decision was sound because each party did essentially the same thing at a different time. The effect was cumulative. No one party's action was sufficient to cause the injury (illustration 12) and no one party's action was necessary for there to be an injury. Therefore, no one party should be responsible for the whole. *Alcan* is a bit more complicated. Alcan's argument that apportionment was appropriate was based on Alcan's assertion that its emulsion caused none of the clean-up costs. Based on the above rule, the question is not limited to what one person caused. The question should be, did its combination with other materials at the site cause response costs that might not have been caused if both were not present? If it did, then a good case could be made that its combination was not merely cumulative. It may have been necessary for the formation of certain costs, but not sufficient, making it more like the illustration of the car accident (illustration 12) than the cows. Interestingly, on remand, the trial court noted that the emulsion had caused the other contaminants to migrate further than they otherwise would have. Thus, the emulsion combined with the other contaminants so that both were necessary. Thus, Alcan could be jointly and severally liable.

In *Brighton*, the Court divided liability based on time, assuming that one could not be responsible for harm that occurred while they were not present or in any way responsible for activities at the site. That would probably be true if the harm at the site was merely cumulative. The court does not appear to have asked that question. It is conceivable that pollution at different times could react together in a manner that creates joint and several liability for an operator whose relationship to the site is limited in terms of time. Indeed, it is difficult to see why an operator who accepted waste during only part of the time that the site accepted waste has a better shot at divisibility than a generator who only sent one shipment of waste.
The above analysis implies that the selected remedy can have a major impact on whether the harm is apportioned. If the emphasis is on how (or whether) the multiple causes interact to create the harm, defining the harm becomes very important. For example, assume a site that has contamination from both volatile organic compounds ("VOCs") and metals. A Chem-Dyne analysis might look at the mixture as the harm, and say that because of the possible differences in toxicity and the difficulty in determining how they might interact, they should be treated as one harm, not separate harms. If removal of contaminated soil is the remedy, it may be difficult to determine the extent to which each contributed to the remedy, and indeed both contaminants may have been sufficient to require this remedy.

On the other hand, if the selected remedy is, or includes, treating groundwater for VOCs or soil vapor extraction, a good case could be made that the persons responsible for the metals should not be required to pay for that element of the remedy. They did not contribute to the harm (i.e. the need for this remedy). Their delivery of waste to the site was neither necessary to the existence of that harm nor sufficient to cause it.

A capping remedy presents another interesting twist. Assume that a wide variety of contaminants are mixed together and the selected remedy is capping. In that case, defendants have a good argument that the wastes are cumulative like the cows, and therefore, apportionment is appropriate. No one party's waste was necessary to the harm. Additionally, it is likely that no one party's waste would be sufficient to cause the harm. The argument could be made that without information regarding relative toxicity and interactive nature, there is no reasonable basis for apportioning. However, toxicity and interactive nature are relevant only if the remedy takes toxicity or interactive nature into account. That is, the relative toxicity and interactive nature are relevant only if they have an impact on the harm, an impact on determining what technology to use, what cleanup standard to use, how much soil needs to be removed, etc. However, when a cap is chosen, a decision has been made that none of that really matters. The quantity is so great or so diverse that treatment or removal is not feasible. In such a case, each party's waste is merely cumulative. It is as if each party contributed the same material and apportionment based on quantity should be appropriate.
DOES A RULE FOCUSED ON CAUSATION UNDERMINE STRICT LIABILITY?

A number of courts have suggested that a rule of divisibility based on causation is problematic because it: (1) makes the extent of liability depend on a factor that is not required to prove liability, and (2) it undermines the strict liability aspect of Superfund. This section will address these concerns.

The Restatement would not have any problem apportioning based on a factor that is not a source of liability. Comment e to § 433A provides that “the same kind of apportionment” (i.e. apportionment based on causes of harm) “can fairly be assigned to an innocent cause.” For example, the Restatement provides that where defendant’s dam combines with unprecedented rainfall to create property damage, defendant should be responsible only for the harm that would have resulted from the dam and not the harm that was added by the rainfall. If causation can be a means of apportionment applicable to innocent causes, causes that cannot be a source of liability, causation can certainly be a means applicable to non-innocent causes that are not a source of liability, (e.g. Superfund defendants).

As the drafters of the Restatement would see it, it is too simplistic to say that causation is either relevant or not relevant. Causation is not relevant to determining who is liable. However, in determining how to divide that liability among the liable parties, causation is a critical factor. Liability and apportionment are different analyses based on different factors.

Additionally, there is no inconsistency between a causation requirement and strict liability. Strict products liability requires that the defective product cause the injury. Strict liability for abnormally dangerous activities also requires a causal relationship between the danger and the injury. Indeed CERCLA is unique in not requiring a defendant’s hazardous substances to cause the response costs. Thus, it is inaccurate to suggest that apportionment based on causation is inconsistent with strict liability.

A rule of apportionment based on causation is also not inconsistent with the Superfund Law. All courts agree that the Superfund Law does not require joint and several liability. There is also unanimity regarding the fact that Restatement § 433A is the basis for the fed-

125. Id.
eral common law regarding when joint and several liability is re-
quired. There are differences of opinion regarding when to apply § 433A, but § 433A divides among *causes* of harm. If § 433A is built into the Superfund law and § 433A divides based on causes of harm, then dividing based on causes of harm cannot be inconsistent with the Superfund law.

A second argument suggesting that use of causation is inconsistent with Superfund is based on § 107(b)(3) of CERCLA. Section 107(b) provides for the only defenses to Superfund liability. A responsible party will not be liable if the release was caused solely by: (1) an act of God; (2) an act of war; or (3) a third party. The third party defense, however, is conditioned upon the defendant exercising due care with regard to hazardous substances and taking precautions against the foreseeable acts of third parties.

Those conditions on the third party defense clearly contemplate that the release could be solely caused by a third party, yet the defense would be unavailable because the person seeking the defense did not take precautions against the acts of third parties. In such a case, a person who did not cause the release (because the release was caused solely by a third party) would not have a defense. However, apportionment based on cause of the harm could result in a finding of zero liability. Zero liability, when there is no defense, is seen as inconsistent with the regulatory scheme because it appears to create a defense that is not in the statute.

The Alcan courts did not see this as an inconsistency. They recognized that causation was being used in two different ways: (1) causation is not a defense and a defendant who did not cause any of the response costs may be liable for those costs; (2) causation as a means to apportion among liable parties may result in a finding of zero liability. The cases in which there is zero liability will be quite rare, but more importantly, if the court's understanding of § 433A is correct, and a § 433A type analysis is built into CERCLA, then the result is correct even if the result appears to be inconsistent with another portion of CERCLA.

128. *Id.*
130. *See Alcan*, 964 F.2d at 271.
The *Alcan* court has been accused of manipulating the rules regarding summary judgment in order to avoid a conclusion it considered unfair. The basis for that accusation is that prior courts on similar facts (i.e. commingled waste) had generally granted summary judgement for the government. Courts have also indicated that defendant’s burden of proof to defeat that summary judgment motion was substantial. The *Alcan* court, on the other hand, seemed to indicate that because of the “intensely factual” nature of inquiry regarding apportionment, summary judgment should not be so difficult to defeat.

The *Alcan* court’s conclusion regarding summary judgement should be seen as a statement about apportionment, not a statement about summary judgement. If § 433A provides for apportionment based on causes of the harm whenever there is a reasonable basis for apportionment, then summary judgement on that issue should be rare. It should be rare not because it is so easy to show that there is a reasonable basis for apportionment, but because it should not be difficult to provide some facts which support the finding of a reasonable basis of apportionment.

The ease in defeating summary judgement does not imply that joint and several liability will be rare. There will be many cases in which there is some factual evidence of a reasonable basis for apportionment, but after a hearing, defendant will have failed to prove that it is more likely than not that apportionment is appropriate. Indeed, *Alcan* may be such a case. The evidence that Alcan’s waste emulsion was clean and could not have caused any response costs provided evidence of a reasonable basis for apportionment. After a hearing, however, the emulsion was found to have increased the response costs by assisting the spread of the contaminants that were being remediated.

The *In re Bell* court arrived at essentially the same conclusion regarding § 433A. In order to defeat summary judgement a defendant does not need precise volumetric division. It merely needs to produce a reasonable theory of apportionment and a factual basis for that theory. A defendant does not need to show that it is more likely than not the correct theory in order to defeat summary judgement. The more likely than not standard is the standard to be applied by triers of fact after a hearing.
CONCLUSION

Recent case law and the Restatement combine to present a different picture of apportionment than typically considered by Superfund practitioners. At common law, as described by the Restatement, an indivisible harm would be apportioned among causes when neither cause was necessary or sufficient to create the injury. The cows illustrate this point. By examining the relationship between the causes of the harms, it becomes clear that there are many situations where the PRPs are, like the cows, merely cumulative. The typical Superfund case is probably unaffected because where the hazardous substances react with each other, each may become necessary to creating the harm. On the other hand, the harm should be defined as the response costs and not necessarily the mess. Thus, to determine whether the impact of the PRPs is cumulative or not, one often needs a technical understanding of the site and the proposed remedy.