The year is 1994, and the government discovers toxic contamination on SuperGrow, Mr. Goodguy's newly purchased fertilizer factory, which produces ammonia-based fertilizers. Apparently, in 1827 Mr. Sneak, a surreptitious dumper, illegally disposed of several thousand barrels of sodium chloride, commonly known as salt, on the clay-packed site that later became SuperGrow. Salt is highly corrosive and long-lasting, properties that qualify it for inclusion as a hazardous substance.\(^1\) The presence of the salt aggravated SuperGrow's pollution by rendering most state-of-the-art safety precautions ineffective. The rapid corrosion poses an imminent environmental disaster, attracting the attention of the media and various protest groups. In the midst of all the negative publicity and consumer boycotts, Mr. Goodguy decides to close the plant and retire.

SuperGrow began operation as a small packaging plant in the late 1800s and emerged as a leader in chemical manufacture in the early 1970s. An earlier operator of the facility, Ms. Orange, specialized in Agent Orange\(^2\) production during the 1960s and 1970s. Ms. Orange’s laissez-faire handling of the toxic waste resulted in a vast amount of pollution, especially in contrast with the later owner-operators’ han-

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\(^1\) 42 U.S.C. § 9601(14) (1988) provides:

The term “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. § 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 U.S.C. § 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. § 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).


\(^2\) Agent Orange was a chemical defoliant used in Vietnam, purportedly linked to the health problems of many military veterans. See In re “Agent Orange” Product Liability Litigation, 597 F. Supp. 740, 764-69 (E.D.N.Y. 1984).
dling of the factory. Mrs. Safety, one of these subsequent owners, installed safety precautions, including specially-lined piping and holding tanks intended to prevent liquid chemicals from contacting the surrounding soil. However, the salt that Mr. Sneak deposited corroded the piping and holding tanks much faster than normal wear and tear would have, thereby exacerbating the contamination of soil and groundwater.

The government initiates a rather straightforward action under the current Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as modified by the Superfund Amendments and Reauthorization Act of 1986 (SARA). Mr. Goodguy quickly cooperates with the government to prevent the larger disaster posed by the corroded pipes and holding tanks. The resulting procedural steps are guided by CERCLA and SARA. First, the hazardous chemicals present on the property are identified by reference to statute or EPA action. Second, an investigation is undertaken to reveal the extent of the pollution. The investigation reveals extensive contamination from the mixture of salt, Agent Orange, and ammonia-based fertilizers. Third, SuperGrow is designated as a cleanup site and targeted by the National Priority List (NPL). Fourth, the government undertakes a “remedial investigation or feasibility study” (RI/FS) to assess the nature and extent of the problem. Finally, appropriate cleanup measures (“response authorities”) are chosen and implemented in accordance with the National Contingency Plan (NCP).

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3 There are at least two proposals to make changes to the current operational scheme of this Act in September 1994. See infra note 68. The effect of these changes could be to make the following procedural description of the operation of CERCLA incorrect. However, the procedural aspects used in this hypothetical are illustrative only and the true value of this Note is in the discussion of the analysis used by the courts to apportion costs.

4 42 U.S.C. §§ 9601-9675 (1988). For further discussion of the CERCLA statute see infra part II.


6 The Clinton Administration’s proposed Superfund Reform Act of 1994 would make some changes to the procedures described below, namely that the cost recovery action would be drastically modified in an attempt to mitigate against the perceived harshness of the current statute. See S. 1834, 103d Cong., 2d Sess. (1994); H.R. 3800, 103d Cong., 2d Sess. (1994). See also John C. Nagle, CERCLA, Causation and Responsibility, 78 MINN. L. REV. 1493 (1994) (examining how the proposed bill would affect the causation analysis or the cost recovery action).


8 Id. § 9605(a). The NPL is a list of the worst hazardous waste sites in the country. Subsection 105(a)(8) of CERCLA, 42 U.S.C. § 9605(a)(8), directs that criteria be established for evaluating the degree of hazard posed by the various sites, and that the sites posing a significant risk to public health must be collected on a list.

9 Id. § 9604(a).

In the absence of settlement, payment for the clean-up is structured as follows: the initial response costs are funded by the Superfund and then recovered in a cost recovery action from one or more of the "responsible parties" identified by the statute. The all such terms (including the terms 'removal' and 'remedial action') include enforcement activities related thereto." Id. (footnotes omitted).

The National Contingency Plan (NCP), promulgated by the EPA under Presidential authority, guides federal and state response authorities. It identifies the methods and determines the appropriate extent of response authorities. Id. § 9605(a). See In re Bell Petroleum Servs., Inc., 3 F.3d 889, 894 (5th Cir. 1993).

Subsection 113(f)(2) directs:

A person who has resolved its liability to the United States or a State in an administrative or judicially approved settlement shall not be liable for claims for contribution regarding matters addressed in the settlement. Such settlement does not discharge any of the other potentially liable persons unless its terms so provide, but it reduces the potential liability of the others by the amount of the settlement.

Under the Proposed Superfund Reform Act of 1994, settlements will be based on shares of liability determined by an allocation procedure. This is effectuated by the insertion of a new § 122 into the statute. An allocator will be selected from a list and will make a determination of a nonbinding, equitable allocation of percentage shares of the facility. Parties can accept the allocator's determination and settle, or face an action under § 107. A modified list of the Gore Factors is to be used in making the determination under the new § 122 proceeding. S. 1834, 103d Cong., 2d Sess. § 409 (1994).


Subsection 9607(a)(4) of the United States Code title 42 imposes liability on parties responsible for hazardous release. The parties are liable for "all costs of removal or remedial action incurred by the United States Government or a State or an Indian tribe not inconsistent with the national contingency plan." Id. § 9607(a)(4)(A).

Subsection 107(a) provides:

Notwithstanding any other provision or rule of law, and subject only to the defenses set forth in subsection (b) of this section—

(1) the owner and operator of a vessel or a facility,

(2) any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of,

(3) any person who by contract, agreement, or otherwise arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment, of hazardous substances owned or possessed by such person, by any other party or entity, at any facility or incineration vessel owned or operated by another party or entity and containing such hazardous substances, and

(4) any person who accepts or accepted any hazardous substances for transport to disposal or treatment facilities, incineration vessels or sites selected by such person, from which there is a release, or a threatened release which causes the incurrence of response costs, of a hazardous substance, shall be liable for—

(A) all costs of removal or remedial action incurred by the United States Government or a State or an Indian tribe not inconsistent with the national contingency plan;

(B) any other necessary costs of response incurred by any other person consistent with the national contingency plan;

(C) damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction, or loss resulting from such a release; and
cost recovery action allows the government to sue for costs incurred in cleaning up a site. Theoretically, CERCLA allows the government to recover the entire cost of the operation from any party who is deemed a responsible party. Under the current statutory scheme, there is no obligation for the government to apportion the costs of the clean-up. Thus, the government pursues reimbursement from Mr. Goodguy, who cooperates by reimbursing the Superfund thirty million dollars. Mr. Goodguy then seeks monetary contributions from other responsible parties in a contribution action.

The contribution action, authorized in subsection 113(f) of the CERCLA statute, redistributes liability among potentially responsible

(D) the costs of any health assessment or health effects study carried out under section 9604(i) of this title.

Id.

The issue of causation in the context of determining the liability of responsible parties is of great controversy and interest. Several commentators have recently criticized the imposition of joint and several liability and proposed changes to the statute so that it would reintroduce causation. Department of Justice Attorney John Nagle is concerned with the imposition of liability on current owners and operators with no connection to the site at the time of the disposal of the of hazardous substances ... establish[ing] proof of the absence of causation as an absolute defense to liability, and ... provid[ing] an early opportunity to apportion or allocate liability among responsible parties, primarily based on the amount of the injury attributable to each party.

Nagle, supra note 6, at 1497 (footnote omitted).

Such discussions, although integral to a full understanding of the CERCLA statute, are beyond the scope of this Note. This Note seeks to examine the apportionment of liability in contribution actions after joint and several liability has been imposed, makes a proposal to codify the existing haphazard adoption of the Gore Factors, and offers some guidance to practitioners in determining which factors the courts will find significant. The application of the Gore Factors will similarly be relevant should Congress adopt a modification of the cost recovery action to include the Gore Factors.

Several circuits have chafed under the imposition of joint and several liability under the statute and have sought to impose apportionment at the cost recovery stage. In re Bell Petroleum Servs., Inc., 3 F.3d 889 (5th Cir. 1993); United States v. Alcan Aluminum Corp., 990 F.2d 711 (2d Cir. 1993) [hereinafter Alcan II]; United States v. Alcan Aluminum Corp., 964 F.2d 252 (3d Cir. 1992) [hereinafter Alcan I]. Each of these circuits has recognized that some relief from joint and several liability could be gained by proving divisibility of harm. This is a trend that cannot be ignored, but perhaps partially can be blamed for CERCLA's perceived lack of effectiveness and for encouraging the endless litigation over the division of costs. As written, the statute deliberately imposes strict liability on those identified as responsible parties. The inability of the circuits to allow the operation of the statute to stand as written could be a major factor in encouraging the litigation that has choked the effectiveness of the statute. Perhaps the problem is not that CERCLA does not work, but that it has not been allowed to work.

parties after the government is awarded relief. This action is available for private clean-up operations as well. Mr. Goodguy brings a contribution action against the estate of Mr. Sneak, We Truck International (the trucking company that transported the boxes of salt to the dumping site), Mrs. Safety, Ms. Orange, and all other previous owners and operators of the property from the time of the dumping incident.

Federal jurisdiction is available in a number of circuits. Subsection 113(b) specifies that the U.S. district courts have exclusive original jurisdiction over all controversies arising under CERCLA without regard to citizenship or amount in controversy. Mr. Goodguy's choice of venue should be a carefully studied decision. Disarray among the circuits as to which equitable factors warrant consideration and their priorities can lead to radically different allocations of costs. Forum shopping is neither admired nor advocated, but until a uniform slate of factors is codified, a careful litigation strategy is a vital consideration in CERCLA litigation.

CERCLA limits venue to the district "in which the release or damages occurred, or in which the defendant resides, may be found, or has his principal office." However, this provides few limitations in a contribution action such as in the introductory hypothetical, where a multiplicity of locations fit within the language of the statute. Super-Grow and Mr. Goodguy are situated in New York. Ms. Orange resides in Tennessee. The estate of Mr. Sneak exists in California. The successor owner of the trucking company, We Truck International, is an

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17 Subsection 113(f) reads as follows:
(1) Contribution.
Any person may seek contribution from any other person who is liable or potentially liable under section 9607(a) of this title, during or following any civil action under section 9606 of this title or under section 9607(a) of this title. Such claims shall be brought in accordance with this section and the Federal Rules of Civil Procedure, and shall be governed by Federal law. In resolving contribution claims, the court may allocate response costs among liable parties using such equitable factors as the court determines are appropriate. Nothing in this subsection shall diminish the right of any person to bring an action for contribution in the absence of a civil action under section 9606 of this title or section 9607 of this title.

18 The text of subsection 113(b) provides:
Except as provided in subsections (a) and (h) of this section, the United States district courts shall have exclusive original jurisdiction over all controversies arising under this chapter, without regard to the citizenship of the parties or the amount in controversy. Venue shall lie in any district in which the release or damages occurred, or in which the defendant resides, may be found, or has his principal office. For the purposes of this section, the Fund shall reside in the District of Columbia.

19 See infra text accompanying notes 138-49.

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international transportation conglomerate incorporated in Aruba with Miami as its primary headquarters. Other potential defendants live in California, Illinois, and Texas.

This Note examines the process of determining equitable allocations, with special focus on the emergence of the proposed 1986 amendment to section 3071 of H.R. 7020, a list of suggested judicial considerations known as the "Gore Factors." The Gore Factors have become the largest portion of the federal common law for equitable resolutions of contribution actions. This Note also proposes the codification of a standardized list of factors similar to the Gore Factors and recommends guidelines as to their prioritization. Implementation of this proposal would greatly increase the probability of receiving standardized treatment in the courts, independent of forum choice. The Clinton Administration's Superfund Reform Act of 1994 also seeks to codify a modification of the Gore Factors but focuses on the cost recovery stage of a CERCLA proceeding rather than on the contribution proceeding as proposed by this Note.21

Part I.A of this note introduces the concepts of apportionment and contribution, and discusses their importance in the context of environmental cleanup. Part I.B discusses pre-CERCLA remedies for environmental damage and examines the effect of legislation on these remedies. Part I.C introduces the Gore Factors. Part II reviews the CERCLA and SARA legislation. Part III examines the application of each separate Gore Factor and applies each Factor to the introductory hypothetical. Part IV evaluates the role the Gore Factors have played in CERCLA contribution actions, surveys other factors utilized by the courts, and concludes with the proposal that refinement of the original six Gore Factors could expand the effectiveness of the CERCLA statute.

I

BACKGROUND

A. The Difficulty and Importance of Apportionment and Contribution

Apportioning the costs of cleaning up an environmental disaster is currently one of the most heavily litigated areas of the law.22 As illustrated above, parties required to reimburse the government for

22 A study performed by the Rand Corporation found that as much as one third of all the money spent on Superfund sites by the private sector was for litigation. According to the study, $11.3 billion has been spent on Superfund through 1991. Superfund Bills would Increase Some Suits, but Decrease Overall Litigation, Rand Says, Daily Rep. for Executives (BNA) at A-146 (Aug. 2, 1994), available in Westlaw, BNA-DER database.
response costs quickly turn to the contribution provision\textsuperscript{23} to find other parties\textsuperscript{24} to share their costs. Prior to 1986, the actual mechanics of the contribution process were unclear due to the lack of congressional guidelines for the courts in the CERCLA statute. Although the courts had found an implicit right to contribution\textsuperscript{25} before 1986, SARA expressly established the right to a contribution action by amending section 113 of CERCLA.\textsuperscript{26} Courts have held that contribution actions can be maintained even in suits arising prior to the 1986 SARA amendments without an impermissible retroactive effect because of the implicit right to contribution.\textsuperscript{27}

Two important concepts in toxic litigation, apportionment and contribution, are almost indistinguishable, as they are based on the same principles of equity. These terms have very precise meanings aside from their linguistic definition, as used in CERCLA and SARA.\textsuperscript{28} Apportionment is a mechanism for dividing response costs. This procedure was considered and rejected by Congress in drafting the CERCLA statute.\textsuperscript{29} In an apportionment action, the government would only be permitted to collect the exact amount of the response costs from the parties actually responsible for contributing the hazardous waste. However, the statute is applied by the courts using both strict liability\textsuperscript{30} and joint and several liability.\textsuperscript{31} Therefore, the government is permitted to extract the entire amount of the response costs from any of the jointly and severally liable parties listed by the statute. If

\begin{itemize}
\item \textsuperscript{23} 42 U.S.C. § 9613(f) (1988).
\item \textsuperscript{24} For the statutory definition of potentially responsible parties, see supra note 14.
\item \textsuperscript{26} The amendment provides that any person may seek contribution from any other person who is liable or potentially liable under § 107(a), during or following any civil action under § 106 or § 107(a). 42 U.S.C. § 9613(f). See supra note 17 for the text of § 113(f).
\item \textsuperscript{27} Alcan II, 990 F.2d 711, 724 (2d Cir. 1993).
\item \textsuperscript{28} See infra notes 29-33 and accompanying text.
\item \textsuperscript{29} The House version of the CERCLA bill included a causation analysis in the cost recovery action, which was not adopted in the final Senate bill. See Nagle, supra note 6, at 1497-99.
\item \textsuperscript{31} Black’s Law Dictionary defines joint and several liability as:
\begin{quote}
Describ[ing] the liability of copromisors of the same performance when each of them, individually, has the duty of fully performing the obligation, and the obligee can sue all or any of them upon breach of performance . . . .
\end{quote}
Term also refers to the liability of joint tortfeasors (i.e., liability that an individual or business either shares with other tortfeasors or bears individually without the others).
\end{itemize}
\textit{Id.} at 837.
apportionment were the rule rather than the exception, the government would be unable to promptly clean up hazardous waste sites because of the difficult evidentiary and causal issues which would inevitably arise.32

The contribution process reintroduces equity.33 The contribution step assesses the proportionate “fault” of the parties and levies costs upon parties according to the court’s findings of fact. The primary differences between contribution and apportionment relate to who does the dividing and the point at which the division is performed.

The standard of liability under CERCLA has emerged solely through judicial interpretation of the statute.34 Early proposed versions of the statute contained provisions calling for both strict liability and joint and several liability,35 but these provisions, including the Gore Amendment,36 were deleted from the final legislation.37 Federal courts have adopted both strict liability and joint and several liability as the standards in cost recovery actions, with an apparent trend in the Second, Third, and Fifth Circuits toward allowing a narrow affirmative defense of divisibility.38 Nevertheless, it is the process of dividing costs during contribution actions that attempts to establish actual liability. CERCLA liability is harsh because courts often are placed in the un-

32 Garber, supra note 17, at 367-70. Nagle eliminates economy of resources as a justification for the imposition of liability. He criticizes the statute for only allowing causation in “through the back door” by pointing to the narrowly available affirmative defense of divisibility of harm discussed by the Second and Third Circuits in Alcan II, 990 F.2d 711 (2d Cir. 1993) and Alcan I, 964 F.2d 252 (3d Cir. 1992). Nagle, supra note 6 at 1496. The causation issue about which Nagle is concerned, however, may be a moot issue because apportioning damages is inherently difficult when the damages are incurred by commingled wastes. In fact, Nagle himself alludes to this difficulty in a footnote. Id. at 1519 n.112 (citing In re Bell Petroleum Servs., Inc., 3 F.3d 889, 895 n.7 (5th Cir. 1993), in which the Fifth Circuit describes this difficulty). In practice, neither the Second nor the Fifth Circuits currently mandate that trial courts apportion liability based on divisibility. Rather, they discuss it only as a discretionary option for the trial court. Only the Third Circuit appears to mandate that the defendant be allowed to prove divisibility of harm at the trial court level. Alcan I, 964 F.2d at 270.

33 In fact, the Alcan I court admitted that the “contribution” inquiry involves an analysis similar to the “divisibility” inquiry, as both focus on what harm the defendant caused.” Alcan I, 964 F.2d at 270 n.29. However, after stating the apparent similarities, the Alcan I court disregarded the statutory language of CERCLA by ignoring the availability of the contribution action. “[W]e believe that this inquiry . . . is best resolved at the initial liability phase and not at the contribution phase since it involves precisely relative degrees of liability.” Id. The Alcan I court supported its disregard for the statutory remedy of contribution by claiming that there were great dangers of a defendant being strong-armed into settlement where the other parties have entered into settlement agreements with the government. Id.

34 See infra notes 98-107 and accompanying text.
35 See infra notes 103-06 and accompanying text.
36 See infra notes 54-72 and accompanying text.
37 See discussion infra text accompanying notes 52-57.
38 See supra note 15.
comfortable position of penalizing defendants who, at the time of the pollution incident, were following up-to-date safety precautions.\(^\text{39}\)

As discussed below, the common law has not provided the courts with a consistent set of criteria for evaluating the intricacies of a contribution action. Instead, courts have examined the legislative history of the CERCLA statute for guidance in making equitable apportionments. This has led to two developments: first, courts have gradually adopted the “Gore Factors,” discussed in the legislative history as the Gore Amendment;\(^\text{40}\) and second, other miscellaneous factors have been used in conjunction with the Gore Factors in apportioning liability.

B. The Common Law Approach to Environmental Disasters

Before Congress began regulating environmental clean-ups, the common law resolved disputes over clean-up costs by using the doctrine of nuisance and, less commonly, the doctrine of trespass.\(^\text{41}\) Indeed, one commentator has remarked: “Nuisance theory and case law is the common law backbone of modern environmental and energy law.”\(^\text{42}\) Nuisances can be either public or private, although the distinction is fading in modern nuisance law.\(^\text{43}\) A public nuisance is an unreasonable interference with a right common to the general public.\(^\text{44}\) A private nuisance is a substantial and unreasonable interference with the use and enjoyment of land.\(^\text{45}\)

When determining liability, the common law imposed strict liability on those who engaged in “abnormally dangerous” activities. This strict liability standard dates back to the 1868 English case *Rylands v. Fletcher*\(^\text{46}\) and is justified by the proposition that victims of accidents caused by “abnormally dangerous” activities pose no reciprocal risk to the producer. Rather than blindly follow this strict liability standard, commentators find indications that modern courts carefully weigh the magnitude of the risk as measured by a comparison of the probability and severity of the harm.\(^\text{47}\) One commentator, William Rodgers, char-


\(^{40}\) See 126 Cong. Rec. 26781 (1980).

\(^{41}\) For a comprehensive discussion of the common law of environmental law, see 1 William H. Rodgers, Jr., Environmental Law §§ 2.1-2.20 (1986).

\(^{42}\) Id. § 1.1, at 2.

\(^{43}\) Id. § 2.2, at 34.

\(^{44}\) Restatement (Second) of Torts § 821B (1977).

\(^{45}\) Id. §§ 821D, 821F.

\(^{46}\) 3 H. & C. 774, 159 Eng. Rep. 737 (1865), rev’d L.R. 1 Ex. 265 (1866), aff’d L.R. 3 H.L. 330 (1868) (non-natural use of water by collecting it in a reservoir was performed at the defendant’s own peril, and any damage occurring from such collection should be borne by the defendant).

\(^{47}\) See 1 Rodgers, supra note 41, § 2.18 at 136.
characterizes hazardous waste sites as "technological runaways" and approves the imposition of strict liability on landowners associated with such sites. However, in actual practice an innocent and later owner of a contaminated site may not always be strictly liable. Rather, a court may look to the circumstances of how the successor gained possession of the contaminated site and when the disposal of the waste occurred to determine liability.

The common law before CERCLA contained no provision allowing contribution actions as they exist today. The enactment of modern environmental statutes such as CERCLA, the Resource Conservation and Recovery Act, the Clean Air Act, and others has affected the law both substantively and procedurally. For example, CERCLA is not only a governmental vehicle for clean up, but is also a provider of private cost recovery suits. The changes made by CERCLA are sweeping, and often the vaguely drafted statute poses workable solutions only because of the good sense of the judiciary. As evidenced by the rejection of the Gore Factors, Congress has hesitated to pass exacting guidelines for the courts to follow. This, however, has proved to be a mistake, especially in the area of contribution actions. The Gore Factors themselves, or a carefully drafted improvement, would enhance the effectiveness of CERCLA by strengthening the effectiveness and consistency of the contribution action.

C. The Gore Factors: Their History and Influence

The proposed Gore Amendments to H.R. 7020, the House version of the early CERCLA legislation, were suggested by then-Representative Albert Gore (D-Tenn.) during the House floor debates. The House of Representatives adopted both of the proposed Gore

48 Id. at 137.
49 Id. at 137-38.
50 Id. at 140 & nn.35-36 (discussing City of Bridgeton v. B.P. Oil, Inc., 369 A.2d 49 (N.J. Super. Ct. Law Div. 1976) (successor-in-interest not liable for the contamination of the land with oil caused by the previous owner)).
51 See Nagle, supra note 6, at 1513-14 nn.92-93 (explaining that "disposal" can occur during work on a site that simply consists of moving the hazardous substances) (citing Tanglewood E. Homeowners v. Charles-Thomas, Inc., 849 F.2d 1568, 1573 (5th Cir. 1988); Cadillac Fairview/Cal., Inc. v. Dow Chem. Co., 21 Env't Rep. Cas. (BNA) 1108, 1113 (C.D. Cal. March 5, 1994)).
52 Plaintiffs could use state or federal procedural devices such as interpleader (in the role of a third party plaintiff) or joinder of a necessary party.
54 The September 23, 1980 session operated under a closed rule which only allowed committee amendments. For an examination of the legislative history of CERCLA, see Frank P. Grad, A Legislative History of the Comprehensive Environmental Response, Compensation and Liability ("Superfund") Act of 1980, 8 COLUM. J. ENVTL. L. 1, 16 (1982). The amendments proposed by Representative Gore in their entirety are as follows:
Amendments, but the Senate deleted them from the final legislation.\textsuperscript{55}

The amendments would have modified the liability section of the CERCLA bill. The first amendment would have closed the loophole of third party defenses by preventing third parties from creating a defense to strict liability. This could theoretically occur when the intervening party was an agent or employee of the responsible party, or where the act or omission occurred in connection with a contractual relationship with the responsible party.\textsuperscript{56} Gore stressed the need for strict liability because a negligence standard could allow defendants who operated through contractors or agents to relieve themselves of responsibility.\textsuperscript{57}

\textsuperscript{55} Id. at 31965 (1980).
\textsuperscript{56} Grad, \textit{supra} note 54, at 16.
\textsuperscript{57} Representative Gore stressed that "under the rule [of the amendment], it does not matter that the defendant exercised due care in his selection or instructions to the contractor. The inherently dangerous nature of the activity to be performed provides the grounds for the liability." \textit{126 Cong. Rec. 26785} (1980). Gore believed that his amendment brought the CERCLA legislation closer to the common law of abnormally dangerous activities established by \textit{Rylands v. Fletcher}, 3 H & C 774, 159 Eng. Rep. 737 (1885), \textit{rev'd} L.R. 1
The second amendment, containing the criteria that forms the basis of this Note, elaborated upon the joint and several liability provisions of section 3071(a)(1) of H.R. 7020. The amendment would have introduced causation into the cost recovery action by directing the courts to base apportionment decisions of response costs on a list of six factors. The defendant would have been required to prove apportionability by a preponderance of the evidence based on the six Gore Factors under the amended section 3071(a)(2)(B). Although the Senate later deleted this amendment in favor of joint and several and strict liability, the courts have adopted these factors in whole or in part and often quote them verbatim in their opinions.

The original six factors proposed by Representative Gore, as contained in the legislative history of the CERCLA statute, are as follows:

(i) the ability of the parties to demonstrate that their contribution to a discharge, release or disposal of a hazardous waste can be distinguished; [hereinafter the Distinguishability Factor]

(ii) the amount of hazardous waste involved; [hereinafter the Amount Factor]

(iii) the degree of toxicity of the hazardous waste involved; [hereinafter the Toxicity Factor]

(iv) the degree of involvement by the parties in the generation, transportation, treatment, storage, or disposal of the hazardous waste; [hereinafter the Involvement Factor]

(v) the degree of care exercised by the parties with respect to the hazardous waste concerned, taking into account the characteristics of such hazardous waste; and [hereinafter the Care Factor]

(vi) the degree of cooperation by the parties with Federal, State or local officials to prevent any harm to the public health or the environment [hereinafter the Cooperation Factor].

In 1986, the House Committee on the Judiciary acknowledged the continuing relevance of the Gore Factors when it drafted the SARA legislation. The Committee paraphrased the Gore Factors and

Ex. 265 (1866), aff'd L.R. 3 H.L. 330 (1868). 126 Cong. Rec. 26782-83 (1980); see infra part II.A.
59 The amendment did not establish apportionment as a matter of right, but merely allowed the possibility of apportionment into the cost recovery process.
60 Grad, supra note 54, at 17.
offered them as "relevant criteria" for the courts to use in apportioning losses under the contribution provision of the new subsection 113(f). The paraphrase included all of the factors except Gore's first factor, the Distinguishability Factor.

It is unclear why the Committee omitted the Distinguishability Factor. The District Court for the Southern District of Illinois, in *United States v. A & F Materials*, had previously introduced all six factors into the common law. *A & F Materials* utilized the Factors found in the 1980 legislative history of CERCLA and was decided two years before Congress passed the 1986 SARA Amendments recommending the Factors. In fact, the House Committee cited *A & F Materials* as authority when recommending the Gore Factors. Regardless of whether the omission of the Distinguishability Factor by the Judiciary Committee was an oversight or a deliberate omission, courts continue to utilize the full set of six factors.

The Gore Amendments present a framework for the courts to divide costs between parties in a consistent manner. The Amendments consequently advance the goals of the CERCLA statute. Even though the Gore Factors were introduced merely as criteria for apportioning losses in a cost recovery action, the courts have applied the Factors in contribution actions. By doing so, the courts have discovered an efficient use for these factors. Nevertheless, judicial application of the factors has not always been consistent. This Note's proposal advocating the codification of definite, weighted factors and excluding all other considerations will improve modern environmental law.

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64 The paraphrase of the second Gore Amendment by the House Committee on the Judiciary is as follows:

[T]he amount of hazardous substances involved; the degree of toxicity or hazard of the materials involved; the degree of involvement by parties in the generation, transportation, treatment, storage or disposal of the substances; the degree of care exercised by the parties with respect to the substances involved; and the degree of cooperation of the parties with government officials to prevent harm to public health or the environment.


66 Id.
68 Specifically, by maintaining the current mandate of joint and several liability at the cost recovery stage, followed by a full equitable apportionment during a contribution action, both equity and efficiency would be served. Although joint and several liability is harsh, if properly executed it advances the CERCLA goals of preserving the Superfund and allowing prompt cleanup of hazardous sites.
69 See supra notes 22-40 and accompanying text for a discussion of the distinction between apportionment and contribution.
70 See infra part IV.B.
71 See infra part IV.A-D.
Gore Factors should be codified into the contribution provisions during the 1994 revisions of the CERCLA legislation, thereby forcing courts to address these factors in a fair and consistent manner.\textsuperscript{72}

II

THE CERCLA STATUTE: A BASIC OVERVIEW OF ITS GOALS AND OPERATION

A. Introduction to CERCLA

The current CERCLA legislation is a combination of original legislation passed in 1980\textsuperscript{73} and the SARA amendments passed in 1986.\textsuperscript{74} This legislation was intended to make the participants in the hazardous waste disposal process liable for the increasing costs of cleaning up the hazardous waste disposal areas. The business of hazardous waste disposal had been unregulated for many years: in 1980 the EPA estimated that there were 30,000 to 50,000 hazardous waste disposal sites existing in the United States.\textsuperscript{75} The passage of the statute was an important step in remedying the waste problem facing the country, but the bill itself has been criticized for being hastily assembled and lacking useful legislative history.\textsuperscript{76}

Although the legislative history is less extensive than many other statutes, the underlying policies of the statute are identifiable. The first two key objectives of the statute were “facilitat[ing] the prompt clean up of hazardous dumpsites by providing a means of financing

\textsuperscript{72} This proposal can be distinguished from the two proposals currently being debated in Congress. Both the Boucher Amendment and the Administration Proposal seek to reincorporate the Gore Factors into the cost recovery stage of the CERCLA procedure.

The Boucher Amendment proposes to incorporate the Gore Amendments in essentially the same form as those proposed by then-Representative Gore. However, the Boucher Amendment creates two additions to the six original Gore Factors. The first addition could be referred to as the Weight of the Evidence Factor: “the weight of the evidence as to the liability and the appropriate share of each liable party.” 139 CONG. REC. E3118-20 (November 24, 1993). The second addition is a catch-all: “any other equitable factors deemed appropriate.” 139 CONG. REC. E3120 (November 24, 1993).

The Administration proposal makes more changes to the original Factors. It includes the Amount, Toxicity, Involvement, Care, and Cooperation Factors but eliminates the Distinguishability Factor. The proposal adds what could be called a Mobility Factor: “the mobility of hazardous substances contributed by each allocation party”; and a Catchall Factor: “such other factors that the Administrator determines are appropriate by published regulation or guidance, including guidance with respect to the identification of orphan shares pursuant to paragraph (3) of this subsection.” 140 CONG. REC. S1069 (February 7, 1994).

The introduction of catchall factors would allow the uncertainty now prevalent in contribution actions to continue. Catchall factors would encourage the growth of litigation, spurring uncertainty in the cost allocation process.

\textsuperscript{73} 42 U.S.C. §§ 9601-9675 (1988).


\textsuperscript{76} See Grad, supra note 54, at 1; see also Fejfar, supra note 58, at 163.
both governmental and private responses,” and “placing the ultimate financial burden upon those responsible for the danger.” A third major objective was “induc[ing] voluntary responses to those [hazardous] sites.” Another goal of the statute is conserving the Superfund to maintain sufficient funding to meet statutory goals. These goals can be advanced by courts whose decisions become powerful influences on the behavior of polluters in clean-up scenarios. Consistent treatment, such as that provided by the exclusive use of the Gore Factors, would modify the expectations of parties involved in CERCLA litigation and facilitate settlement. Uncertainty in the federal common law of contribution fosters needless litigation and expends resources which are better spent on remediation.

The Resource Conservation and Recovery Act (RCRA) was an earlier legislative attempt to counteract the growing hazardous waste problem but proved ineffective in responding to the growing awareness of environmental danger. In order to bring suit to force a clean-up under the RCRA, the Environmental Protection Agency (EPA) had to meet the high standard of “imminent hazard to health or the environment.” RCRA also failed to provide the monetary means necessary for remediation of abandoned waste sites. In contrast, the programs effectuated by CERCLA formed a mechanism with sufficient authorization to begin the cleanup of old hazardous waste sites and avoid the consequences of new hazardous waste spills. The

79 See supra note 12.
80 This is important because the cost for cleaning up all of the hazardous waste sites in the United States exceeds the amount in the Superfund. The House Report on the pre-CERCLA bills estimated that it would cost between $13.1 and $22.1 billion to clean up all hazardous waste sites that posed a danger to the health and environment. H.R. REP. No. 1016, 96th Cong., 2d Sess., pt. 1, at 20 (1980), reprinted in 1980 U.S.C.C.A.N. 6119, 6123.

Under the Administration’s proposal some shares of the cleanup liability are to be deemed “orphan shares” by the allocator and paid for out of the Superfund. See 140 CONG. REC. S1068 (daily ed. Feb. 7, 1994). This would be a step towards increasing equity, but will require a significant influx of new funding into the Superfund. Money has been authorized to be appropriated out of the treasury in the amount of $250 million per year from 1995-1999. 140 CONG. REC. S1073 (daily ed. Feb. 7, 1994).

81 See Anderson, supra note 16, at 5 (pointing out that delays seem to be tied to the liability system because the PRPs “clog the system by questioning every move [the] EPA makes and forcing [the] EPA to spend time building a record to support every decision”) (citing General Accounting Office, Superfund: Issues that Need to be Addressed Before the Program’s Next Reauthorization, Statement of Peter F. Guerrero, Doc. No. GAO/T-RCED-92-15, at 9 (Oct. 29, 1991)).
84 Valder, supra note 75, at 2076.
85 Grad, supra note 54, at 2.
preventative mechanism of CERCLA is illustrated by the introductory hypothetical.

The term "hazardous substance" under CERCLA has an extremely broad and inclusive definition. CERCLA did not formulate an exhaustive list of hazardous substances, but acknowledges the hazardous substances and pollutants designated by any one of several other environmental statutes. CERCLA expressly includes the hazardous waste definitions of the Clean Air Act, the Clean Water Act, the Solid Waste Disposal Act, or any substance contained in CERCLA section 102. This all-inclusive definition gives CERCLA authority over virtually any hazardous substance, except oil, gas or petroleum based substances, which were specifically excluded in subsection 101(14)(F) of the statute.

There are four distinct consequences of the 1980 Act. First, the statute established an information gathering and reporting system to monitor waste sites around the country. Second, the statute specified that the federal government had the authority to respond to hazardous waste emergencies and remediate inactive dump sites. This authority resides in the Executive, who acts in accordance with the National Contingency Plan (NCP), contained in CERCLA section 105. Third, the statute established the Superfund to pay for the cleanup of inactive sites. Fourth, strict liability was imposed on persons who contributed to the hazardous substance releases at inactive sites. The original draft of CERCLA section 107 endorsed strict liability and subsequent judicial decisions have adopted that construction with some narrowly drawn and difficult to prove exceptions. The functioning of the current program is illustrated by the introductory hypothetical.

The "Superfund" is a $1.6 billion fund from which the EPA can draw to finance the remediation of the hazardous sites posing the greatest threat to public welfare. In theory, those involved with contamination of the site subsequently reimburse the Superfund. Estimates of the recapture rate of the money expended by the government through 1987, however, gauged that only ten percent of the amounts expended had been recovered through successful cost

86 42 U.S.C. § 9601(14) (1988); see supra note 1 for text of statute.
87 Id.
88 Id.
89 4 RODGERS, supra note 41, § 8.1 at 475.
91 Id. § 9604(a)(1).
92 Id. § 9605.
93 Id. §§ 9611, 9612.
94 See discussion infra notes 98-123 and accompanying text.
recovery actions. Such a poor recovery rate is further evidence to support the imposition of joint and several liability on responsible parties, rather than developing programs that will further reduce the liability of responsible parties.

B. CERCLA Determination of Liability

The CERCLA statute is remedial rather than retributive; its goals concern cleaning up hazardous waste sites and identifying responsible parties, not punishing the polluters. CERCLA liability was designed to have a very powerful reach. Any party who falls within the statutory definition of a potentially responsible party can be held liable for the entire cost of the cleanup, even if that party did not directly contribute to or cause the release of hazardous substances. The rationale for this broad reach is that the larger the group of potentially responsible parties, the higher the probability the Superfund will receive reimbursement for response costs.

Subsection 107(a) of CERCLA enumerates three classes of parties who are potentially liable to the government. These parties include: past and present owners and operators of hazardous waste disposal facilities (owners and operators), parties who arrange for the disposal of hazardous waste (arrangers), and hazardous waste transporters (transporters). Liability is automatic unless the party can prove by a preponderance of the evidence that it fits within one of three very narrowly drawn exceptions: an act of God, an act of war, or an act whereby a third party is the sole cause of the release and that the release occurred outside any contractual relationship. Generally,

96 4 Rodgers, supra note 41, § 8.1, at 480 n.80; see also Anderson, supra note 16, at 5 n.19 ("EPA has collected only $843 million out of the $4.3 billion in costs that could potentially be collected and has written off $270 million.")(citing "U.S. Writes Off Cleanup Costs of Toxic Sites: E.P.A. Fails to Collect Money From Polluters, N.Y. Times, June 21, 1993, at A10").
97 The Administration's Proposed Superfund Reform Act of 1994 encompasses such a program.
99 This could happen if the current owner or operator of a preexisting hazardous waste site were a defendant in a cost recovery action solely because of its status as the owner or operator, regardless of whether it contributed to the polluted site. But see supra text accompanying notes 49-52.
101 Id. § 9607(a)(1)-(4).
102 CERCLA § 107(b), 42 U.S.C. § 9607(b) (1988). A defendant can, in some cases, successfully defend on the basis of acts by a third party even if a contractual relationship exists. For a full discussion of the third party defense to strict liability, see Alfred R. Light, Antidote or Asymptote to Contribution: Non-Contractual Indemnity Under CERCLA, 21 Envtl. L. 321, 326 (1991).
where multiple parties fall within the three categories of responsible parties, all are strictly liable for the response costs. Parties liable to the government in a cost recovery action are also liable in a contribution action.

The standard of liability in the CERCLA statute remains unresolved through judicial interpretation because the bill itself did "little more than declare who is liable under the Act." Three bills were originally debated in Congress: The Hazardous Waste Containment Act, The Comprehensive Oil Pollution Liability and Compensation Act, and The Environmental Emergency Response Act. All three bills provided for strict and joint and several liability. Although the express liability provisions were deleted from the final CERCLA legislation, some courts found, through examining its legislative history, that CERCLA imposes strict and joint and several liability. Other courts have examined the same legislative history and determined that Congress did not mandate joint and several liability. The floor debates on the compromise bill suggest that the deletion of joint and several language does not prevent the imposition of a joint and several standard by the courts. Comments spoken on the floor of the Senate directed the courts to utilize "evolving principles of common law" to determine the liability standard. Because the statute specifies that CERCLA's liability standard would be the same as certain provisions of the Federal Water Pollution Control Act Amendments of

103 H.R. 7020, 96th Cong., 2d Sess. § 100 (1980).
106 Valder, supra note 75, at 2078.
108 In re Bell Petroleum Servs., Inc., 3 F.3d 889 (5th Cir. 1993); Alcan II, 990 F.2d 711 (6th Cir. 1993); Alcan I, 964 F.2d 252, 264 (3d Cir. 1992).
110 126 CONG. REC. 30932 (1980) (statement of Sen. Jennings Randolph). The comments on the liability standard came from both Senators Jesse Helms and Jennings Randolph. Senator Helms would have liked to preclude the imposition of joint and several liability, id. at 30972; Senator Randolph supported the imposition, id. at 30932. The court in A & F Materials discounted the remarks of Senator Helms, as he was an opponent of the bill. 578 F. Supp. at 1254. The court also noted that the members of the House were more uniform in supporting joint and several liability. Both Representatives James J. Florio and James M. Jeffords advocated allowing the common law to establish the standard. Representatives Albert A. Gore, Jr. and Barbara A. Mikulski stated that the compromise bill was essentially the same as the House bill which gave the courts authority to impose joint and several liability. Id. at 1253-54.
which has a strict liability standard, the courts’ inclusion of strict liability is legally sound. CERCLA’s directive on joint and several liability nevertheless remains unresolved in the circuit courts.

The Fifth Circuit articulated three distinct approaches to the issue of joint and several liability in In re Bell Petroleum Servs., Inc. The first, the “Chem-Dyne approach,” requires defendants to prove the amount of harm they caused in order to escape full liability under the doctrine of joint and several liability. Followed by the Second and Third Circuits in Alcan I and Alcan II, the second approach espoused by the Fifth Circuit was dubbed the “Alcan approach.” The Third Circuit in Alcan I utilized the divisible harms principles of the Restatement (Second) of Torts, thereby using the principles of contribution analysis at the cost recovery stage rather than during the contribution action. The critical inquiry was whether a harm was “divisible and reasonably capable of apportionment, or indivisible, thereby subjecting the tortfeasor to potentially far-reaching liability.” The Second Circuit in Alcan II followed what it called a “common sense” approach. The Second Circuit stated that the Alcan I approach, resolving liability at the initial liability stage made a lot of sense. The court did not, however, entirely accept the Alcan I court’s reasoning because of concerns that it might be contrary to the statutory dictates of CERCLA. Instead, the Alcan II court only apportioned liability upon a showing that the harm was divisible. The third approach, followed by the district court in A & F Materials, is called the “moderate approach” but perhaps is more properly called the “liberal approach.” A & F Materials fully utilized the principles of the Gore Factors during an apportionment proceeding. However, the court stated that, in the absence of a reasonable basis for apportionment, joint and several liability legitimately might be imposed. This liberal approach was adopted by one court in a private cost recovery action, but has been rejected by others.

112 Valder, supra note 75, at 2078.
113 3 F.3d 889 (5th Cir. 1993).
114 Id. at 901-02.
115 Id. at 901.
117 Id. at 269.
118 Alcan II, 990 F.2d 711 (2d Cir. 1993).
119 Id. at 722.
121 Id. at 1255.
Litigation brought under CERCLA usually consists of two stages, recoupment and apportionment. The recoupment stage replenishes the monies expended from the Superfund. The EPA files a section 107 cost recovery suit against the potentially responsible parties to recover response costs. CERCLA liability allows the EPA to focus on solvent defendants. The EPA routinely prosecutes only the largest contributors, or those with the greatest ability to pay. The EPA practice of choosing initial defendants who have deep pockets has sparked an ongoing debate over section 107 liability. This practice, undoubtedly viewed as arbitrary by the companies thusly selected, is permitted because the government is under no duty to apportion costs among responsible parties. It is logical that the government will search for the party able to pay for the entire remediation process rather than wasting time on possibly insolvent or missing parties. This "unprecedented" liability regime is permitted under the rationale that strict liability will foster incentives to reduce clean-up costs and encourage the development of cleaner disposal methods. The CERCLA goal of prompt cleanup is also advanced.

The second stage, the apportionment stage, allows the parties who feel that they paid more than their share in the cost recovery action to bring contribution actions against other responsible parties. Contribution actions allow the courts to equitably determine the burden for which each party is responsible, a consideration sacrificed for efficiency in the recoupment stage. Contribution actions smooth the harsh edges from section 107 strict liability. Although courts interpreted the contribution right to exist under the original...
Equity plays a crucial role in the apportionment stage of the litigation. The statute provides that courts "may allocate response costs among liable parties using such equitable factors as the court determines are appropriate." The key to a successful contribution action is identifying solvent defendants who are responsible parties under CERCLA section 107, parties eligible for the cost recovery action but omitted from the section 107 suit.

Occasionally a plaintiff such as Mr. Goodguy will need to look beyond the scope of section 107 to find other potentially responsible parties to share the cost burden. This is necessary because in practice, many parties potentially responsible under section 107 escape liability for their share of the burden due to their defunct, insolvent, or otherwise judgment-proof status. The contribution plaintiff will then explore other means of transferring liability, including contractual transfers of liability, successor liability, or personal liability of corporate officers or shareholders. For example, in the introductory hypothetical, because the international transportation conglomerate, We Truck International, is the successor corporation to the trucking company which transported Mr. Sneak and his salt to the factory site over a century ago, Mr. Goodguy could sue We Truck International for contribution on the basis of successor liability.

C. A Choice of Determining Who Bears the Costs: A Comparison of Methods of Contribution

There are four possible contribution schemes, including the Gore Factors approach, which can be utilized to determine cost apportionment. These schemes are pro rata division of costs, comparative fault based on negligence, comparative causation, and a guided apportionment approach similar to use of the Gore Factors. Each scheme offers certain benefits, such as simplicity or efficiency, but only the Gore Factors approach comprehensively furthers the goals of CERCLA.
The most basic method is a pro rata division of costs. This scheme creates as many equal shares as there are joint tortfeasors, each tortfeasor paying an equal share of the total response costs. Although the EPA previously favored this approach, it is the least likely to advance the goals of CERCLA because it divides the costs of cleanup without any consideration of "fairness." Pro rata cost apportionment fails to provide incentives for prompt and voluntary cleanup.

A second method of determining contribution is evaluating the comparative fault of the parties based on negligence. A percentage of the total fault is assigned to each of the responsible parties based on conduct and causal connection to the harm. Several standardized factors are considered in determining the fault. However, because the factors are derived from tort law rather than environmental law, they are not well tailored for the assessment of environmental negligence. The comparative fault method evaluates fairness but, like the pro rata method, fails to reward cooperative behavior and voluntary cleanups.

A third method of apportioning contribution is through comparative causation. This method divides the costs in proportion to the amounts of hazardous substances contributed by the parties. This method is efficient, protecting small contributors and evaluating the only information consistently available to the parties, the volume of the waste contributed. Focusing on volume reduces the litigation concerning other matters. The problems with this method stem from the practical question of whether harm caused by hazardous waste is actually divisible and the fact that damages are directly re-

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137 See Garber, supra note 17, at 382-87 for a discussion of these four contribution schemes.
138 This approach is also recommended by the Uniform Contribution Among Tortfeasors Act (UCATA) §§ 1(b), 2, 12 U.L.A. 63, 87 (1955) and the Restatement (Second) of Torts § 886A cmt. h (1979).
140 The factors considered by the UCFA are as follows:
   (1) Whether the conduct was mere inadvertence or engaged in with an awareness of the danger involved, (2) the magnitude of the risk created by the conduct, including the number of persons endangered and the potential seriousness of the injury, (3) the significance of what the actor was seeking to attain by his conduct, (4) the actor's superior or inferior capacities, and (5) the particular circumstances, such as the existence of an emergency requiring a hasty decision.
141 Id. § 2 cmt. at 50.
142 Id.
143 Id.
144 See infra part HIIA.
lated to the toxicity of the hazardous substance. Comparative causation is inapplicable to much of the CERCLA liability scheme because it cannot be applied to parties who are liable as landowners and it fails to offer an incentive to perform a voluntary cleanup.

After evaluating the above three methods of contribution, Professor Garber advocated using the Gore factors. He was influenced by the emphasis the Gore Factors placed "on the relationship of the parties to the harm, and [by the fact that] 'fault' [was] measured by how actively involved each party was in creating the harmful situation." The Gore Factors incorporate many of the benefits of the other methods of apportionment. For example, the comparison of the amounts and toxicity of the hazardous waste contributed by each party includes a comparative causation standard. Additionally, the Gore Factors explicitly recognize the importance of cooperation with the government, a distinctive benefit advocating their utilization. Such cooperation encourages voluntary cleanups, which are necessary to fully address the hazardous waste problem because the Superfund alone lacks the resources to address every site. However, Garber criticizes the Gore factors for their "nebulous" character and potential for difficulty. For example, a correlation between amount and toxicity and the cost of cleanup does not always exist; different substances cause different remediation problems. It is also very difficult to measure a party's involvement with the accumulation of hazardous substances. Yet despite the difficulties in application, the use of the Gore Factors is well suited to the CERCLA framework because courts can interpret the factors to further specific CERCLA policies.

D. The Judiciary's Choice: Gradual Adoption of the Gore Factors

As discussed above, courts often impose joint and several liability during the recoupment stage of CERCLA litigation. Despite the A & F Materials court's determination to use all the Gore Factors and the Alcan I and Alcan II courts' examinations of divisibility, the Gore Factors have not been approved in this first stage. Conversely, an increas-

145 See infra part III.C. for a discussion of how toxicity is inseparably linked to the amount of a hazardous substance.
146 Garber, supra note 17, at 385.
147 Id. at 387-88.
148 Id. at 386.
149 Id. at 387; see also Lauren Stiller Rikleen, Sweeping Changes for Cleanups and Settlements: Unresolved Questions Under SARA, Toxics L. Rep., June 10, 1987, at 50 (suggesting that private parties are better able to control costs of a cleanup than the government).
150 Garber, supra note 17, at 387.
151 Id.
152 Id. at 387-88.
ing percentage of courts have shown a willingness to use the Gore Factors in combination with other equitable factors to determine equitable apportionments during a contribution action.\textsuperscript{153}

As stated above, the first reported case recognizing the Gore Factors was \textit{United States v. A \& F Materials Co.}, decided in 1984.\textsuperscript{154} \textit{A \& F Materials} was not a contribution decision, but an order by the court determining pretrial motions. The court instructed that a progressive approach would be followed in allocating costs during the cost recovery action and expressed an intention to examine the identifiability of the wastes, the degree of involvement of the parties in the pollution, the degree of care exercised by the parties, and the parties' cooperation with the government.\textsuperscript{155} Many of the cases utilizing the Gore Factors method of apportionment cite this case as authority.\textsuperscript{156} As an order determining pretrial motions, however, this case did not actually apportion liability during the cost recovery action. The dicta in this case advocating the use of the Gore Factors in recoupment actions has been modified by later decisions to support the use of the Gore Factors, but only in the context of contribution actions.

While not all of the circuits have expressly approved the use of the Gore Factors, no circuit has disapproved of a district court's use of the factors. The Second,\textsuperscript{157} Fifth,\textsuperscript{158} Sixth,\textsuperscript{159} and Seventh\textsuperscript{160} Circuits have directly approved the use of the Gore Factors. Although none of the other circuit courts have made a reported use of the Gore Factors in determining contribution cases, this is not true in the district courts of those circuits. For example, the district courts in the various states

\textsuperscript{153} See infra part III.
\textsuperscript{155} Id.
\textsuperscript{157} B.F Goodrich Co. v. Murtha, 958 F.2d 1192, 1206 (2d Cir. 1992) (not directly referring to the Gore factors but approving the use of the Amount, Toxicity and Care Factors); \textit{Akan II}, 990 F.2d 711, 718, 725 (2d Cir. 1993) (approving the trial court's use of the Gore Factors as federal common law rules).
\textsuperscript{158} \textit{In re Bell Petroleum Servs., Inc.}, 3 F.3d 889, 901 n.12 (5th Cir. 1993); Amoco Oil Co. v. Borden, Inc., 889 F.2d 664, 672 (5th Cir. 1989).
\textsuperscript{160} ETS v. ENSCO, 969 F.2d 503, 508 (7th Cir. 1992).

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of the First, Third, Fourth, Eighth, Ninth and Tenth Circuits have utilized the Gore Factors. The haphazard adoption of these Factors by the district courts is one reason codification of the Factors is crucial to realization of their full benefit.

Several of the Factors appear to weigh more heavily in a court’s decision to apportion damages among the originally and newly liable parties. The section below contains a discussion of each of the Factors.

III
FROM POLITICS TO PRACTICE: AN ASSESSMENT OF THE INDIVIDUAL GORE FACTORS

The introductory hypothetical is used as a demonstration vehicle throughout this section of the Note. Each Factor is introduced with a discussion of how the application of the Factor in the hypothetical contribution action might affect the outcome of that action. The case law concerning the various Factors is also discussed and evaluated.

Because the Factors are used in combination, it is difficult to classify the cases by the most influential Factor. However, by examining the case law directly discussing the Factor under examination, a more comprehensive understanding of the usefulness and desirability of the individual factors will emerge.

A. Virtually Indistinguishable: The Distinguishability Factor

The Distinguishability Factor seeks to separate and weigh the proportion of damage done by the different pollutants that contribute to a contaminated site. However, the physical nature of the polluted sites minimizes the effectiveness of this factor for determining the apportionment of liability in a waste site. The volatile chemicals present at the sites are not separated or contained; if they were, they would likely pose little danger. The usual scenario at a typical waste site in-

167 Some of the factors are more heavily discussed than others. The Distinguishability, Amount and Toxicity Factors all lack the comprehensive discussion in the case law that the Involvement, Care and Cooperation Factors possess.
volves thoroughly mixed substances forming an indistinguishable sludge. The composition of the subsequent pollution is thus inseparable.

For example, in the introductory scenario the soil surrounding the factory is polluted with an indistinguishable mass of chemicals. The Agent Orange pollutants are thoroughly mixed with the ammonia based fertilizers, making it impossible to distinguish between the two. However, one hazardous substance is distinguishable from the chemical "cocktail"—the salt. This is because the salt is fundamentally different from the other chemicals. It behaves differently: it corroded the system of pipes and underground storage tanks. While the fertilizers are capable of harming the soil and the water table, the corrosion of the pipes and storage tanks by the salt threatened an even larger release of the fertilizers. A court would probably find that the different chemical fertilizers are indistinguishable, but may weigh the different nature of the salt in dividing the costs of the clean-up.

Often the essentially indistinguishable nature of an environmental waste site will foreclose distinguishability arguments. Any argument a contribution defendant might make when asking a court for leniency based on the distinguishability of the waste product for which he is responsible will need careful documentation and proof.

For example, in *United States v. Western Processing Co.*, Unocal, one of the numerous defendants of the section 107 cost recovery action, attempted to use the Distinguishability Factor to mitigate its liability for response costs. Although this case did not arise in the context of a contribution action, it clearly illustrates a court's response to a Distinguishability argument. Unocal argued that it could distinguish its own waste from the waste contributed by the other defendants. Unocal identified arsenic-contaminated oxazolidone as its addition to the site and asked that its liability be limited to costs incurred in the cleanup of that substance. Unocal also introduced evidence of compliance with other Gore Factors as further mitigating evidence.

The Government responded by arguing that apportionment of liability during a cost recovery action based on a consideration of the Gore Factors was inappropriate because Unocal was jointly and sever-

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169 *Id.* at 935.
170 *Id.*
171 The party claimed that the amount of arsenic was small and the degree of contamination from that particular contaminant was negligible and irrelevant to the EPA's response costs. It also claimed that Unocal had exercised due care in selecting a disposal company and had cooperated with the Government by taking a leadership role in establishing the Phase 1 consent decree. *Id.*
ally liable.\textsuperscript{172} The role of the Gore Factors is limited to apportioning damages among joint tortfeasors in a subsection 113(f) contribution suit.\textsuperscript{173} The court held that the government was procedurally correct and denied Unocal’s argument.\textsuperscript{174} Although the court in \textit{United States v. A \& F Materials}\textsuperscript{175} had discussed the possibility of apportioning CERCLA liability on the basis of costs incurred rather than on the basis of environmental harm,\textsuperscript{176} the court appeared to agree with the government’s characterization of \textit{A \& F Materials} as an aberration.\textsuperscript{177}

The court questioned Unocal’s analysis of the arsenic’s distinguishability and found Unocal’s conclusion speculative and uncertain.\textsuperscript{178} The court reasoned that even if the amounts Unocal attributed to other defendants in fact arose from the other parties’ pollution, no third party defense was available because Unocal itself had produced a portion of the arsenic contamination.\textsuperscript{179} Later sampling and carbon filtration system results revealed high levels of oxazolidone in the soil, further refuting Unocal’s claim that its portion of the pollution had been remediated.\textsuperscript{180}

The government enunciated another problem with a lenient response to a Distinguishability argument: some costs of remediation are not traceable to a particular contaminant. Many costs arise during site investigation, sampling, analysis, and enforcement, including the negotiation and litigation phases.\textsuperscript{181} That portion of the cost is invisible because it is a prerequisite to the removal of any of the waste. Evaluated from that perspective, Unocal’s arsenic did not cause a specific or separate harm. The court thus directed Unocal to make Distinguishability arguments in the subsection 113(f) contribution action.\textsuperscript{182}

One court purporting to utilize the Distinguishability Factor may have done so incorrectly. The District Court for the Western District of Michigan, when applying the Factor to the facts of \textit{Hastings Building Products v. National Aluminum Corp.},\textsuperscript{183} noted that National had used

\begin{itemize}
\item \textsuperscript{172} \textit{Id.} at 937.
\item \textsuperscript{173} \textit{Id.}
\item \textsuperscript{174} \textit{Id.} at 940.
\item \textsuperscript{175} 578 F. Supp. 1249 (S.D. Ill. 1984).
\item \textsuperscript{176} \textit{Id.} at 1255-57.
\item \textsuperscript{177} \textit{Western Processing Co.}, 734 F. Supp. at 938.
\item \textsuperscript{178} \textit{Id.}
\item \textsuperscript{179} \textit{Id.} Subsection 107(b) allows a third-party defense if a third party was the sole cause of the release and if the release occurred outside any contractual relationship.
\item \textsuperscript{180} \textit{Id.} at 939.
\item \textsuperscript{181} \textit{Id.} at 937, 938. The perception that the government overspends in remediating sites has led many potentially responsible parties (PRPs) to remediate sites on their own initiative and then pursue contribution actions against other PRPs.
\item \textsuperscript{182} \textit{Id.} at 942.
\end{itemize}
the harmful system for approximately eight years\textsuperscript{184} and that Hastings had used the system for only eight months.\textsuperscript{185} The court stated that these facts "demonstrate[d] some distinction between the parties['] relative contribution to the release of hazardous waste."\textsuperscript{186} The use of the Distinguishability Factor to compare the relative contribution of the parties is an incorrect use of the Factor. The comparison of the two parties is more properly evaluated under the Amount Factor, because it is the amount of waste that was leaked during the time of use that is important. As illustrated above, the Distinguishability Factor properly applies when the substances at the site are substantially different in composition or have a substantially different effect on the site rather than when the same substance is used for different lengths of time or when different amounts of the same substance are contributed.

The Third Circuit has recently utilized the Distinguishability Factor as a basis for avoiding the imposition of joint and several liability.\textsuperscript{187} The critical inquiry was whether "a harm is divisible and reasonably capable of apportionment, or indivisible, thereby subjecting the tortfeaser to potentially far-reaching liability."\textsuperscript{188} The burden is on the defendant-tortfeaser to establish divisibility.\textsuperscript{189} In evaluating divisibility, the \textit{Alcan I} court examined "toxicity, migratory potential and synergistic capacity of the hazardous waste at issue."\textsuperscript{190} The \textit{Alcan I} court rejected the argument that the commingling of the waste caused the harm to be indivisible\textsuperscript{191} and the holding of previous courts that this type of determination is properly made at a subsection 113(f) contribution proceeding.\textsuperscript{192} The final resolution of the joint and several liability issue is yet to be determined.\textsuperscript{193}

It is not very surprising that a court would misapply the Distinguishability Factor, which compensates for subtle nuances of toxic waste. There is very little commentary on the proper use of any of the Factors. Also, Distinguishability is the Factor the Senate failed to include in its comments on the new subsection 113(f) contribution action, perhaps signalling its own misunderstanding of the Factor's proper application. Congressional guidelines for each of the Factors would eliminate or greatly reduce the possibility of misapplication.

\textsuperscript{184} Id. at *13.
\textsuperscript{185} Id.
\textsuperscript{186} Id.
\textsuperscript{187} \textit{Alcan I}, 964 F.2d 252 (3d Cir. 1992).
\textsuperscript{188} Id. at 269.
\textsuperscript{189} Id.
\textsuperscript{190} Id. at 270 n.29.
\textsuperscript{192} See supra part II.B.
The practical importance of the Distinguishability Factor is limited. In most of the scenarios targeted by the National Priorities List, the distinctiveness of the different types of wastes at a site will be irrelevant. The entire site will require remediation regardless of the pollutants involved. This Factor only attains determinative importance in scenarios where one of the wastes has significantly different properties and causes harm clearly distinguishable from the other pollutants, as in the introductory hypothetical.

B. Objectively Important: The Amount Factor

The Amount Factor attempts to allocate costs according to the relative amounts of toxins that a particular polluter contributes to a waste site; its relevance is intuitively seized upon by courts but should not be overemphasized. A comparison of the amounts that each party contributes to a site may address other relevant issues. For example, the amount of toxins disposed by a party at the site may give the court an indication of the benefit the party received from the use of the site. One of the goals of CERCLA is recovering the clean-up cost from the parties who profited from the hazardous waste disposal. Therefore, any information suggesting this figure is important. Conversely, even a small volume of waste could be immensely profitable for a polluting party. For example, disposal of a bucket of nuclear waste may save a party substantial costs. Evaluations based on profit thus need to be approached with great care.

In the introductory hypothetical, the Agent Orange pollutant comprised the greatest volume of waste, followed by the ammonia-based fertilizers which leaked and spilled in small amounts throughout the years of operation. The amount of the salt was also quite substantial and with the passage of time was thoroughly mixed throughout the surrounding soil.

The safety procedures during the Agent Orange production were quite lax; vats of the excess pollutant were discarded on the soil and the rinse water from the factory was drained into the soil. The total waste leaked during the other owners' control of the plant was also substantial, but not to the extremes of pollution leaked under Ms. Orange's control. The amount of ammonia-based fertilizer leaked during Mr. Goodguy's control of the plant was sizeable, but less than threatened by the corrosion of the safety precautions. In absolute volume, the recent emissions constitute the smallest amount, a fact that the courts should weigh favorably for Mr. Goodguy. For Ms. Orange, whose large spills seem to be tainted with carelessness and malice, the courts should allocate more contribution because of the large amounts of spilled toxins. The circumstances of Ms. Orange's spills will also be considered under the Care Factor. The somewhat smaller...
amount contributed by Mr. Sneak will be noted in determining his estate's contribution, but other factors such as Toxicity will affect the court's assessment.

The Amount Factor can be lauded for presenting an objective standard. In *United States Steel Supply Inc. v. Alco Standard Corp.* the court allocated eighty-five percent of the remediation cost to the previous owner-operator of the hazardous site after comparing the amount of waste the two parties contributed to the site. Different amounts of waste were generated through different periods of operation. The previous owner-operator of the site had operated it for a longer time, allowing a greater percentage of the waste to accumulate. The court reasoned that a "review of the totality of the circumstances, as presented in evidence to this court, indicates that Alco is primarily responsible for the contamination discovered." It appeared to be a very straightforward and proper allocation by the court.

The Amount factor gives courts an objective standard for evaluating the physical contribution each party made to the site. The apparent clarity of this factor diminishes if parties dispute the amounts contributed to the site. Any absence of clear proof concerning amounts will aggravate the dispute. However, like all the other Gore Factors, this Factor alone is not determinative and must be considered with the court's evaluation of all the other Factors.

C. Potentially Valuable: The Toxicity Factor

The Toxicity Factor, like the Amount Factor, presents an objective standard for evaluation. It crucially modifies the Amount Factor but is virtually ineffective when evaluated independently. Courts need to know the amount of hazardous material a defendant contributed to a waste site and the relative danger that the hazardous substance posed to the site. Different pollutants cause varying degrees of harm to the environment and impose varying costs to remedy their presence. In scenarios where one or more of the contributors to a site dumped a pollutant of high toxicity as compared to the other contributors, equity demands that the high toxicity contributors shoulder more of the remediation costs.

Returning to the hypothetical, recall that Mr. Sneak contributed relatively little volume to the hypothetical hazardous waste site. However, the mixture of the highly corrosive and pervasive salt in the top-soil rendered modern safety precautions useless and accentuated the hazardous effects of the Agent Orange and ammonia-based fertilizers. The high toxicity of the salt compensates for the small volume of the

195 Id. at 1341, 1342.
196 Id. at 1341.
pollutant at the waste site. Because the ammonia-based fertilizers and the Agent Orange are equivalent in toxicity, the Toxicity Factor does not affect the apportionment for the rest of the defendants.

Sometimes a court considers the effect that waste of low toxicity has on an evaluation of the Toxicity Factor. For example, in *B.F. Goodrich Co. v. Murtha*, the Second Circuit considered the role of a municipality as a defendant in a contribution action. The opinion noted that municipal waste has a very low toxicity, only approximately one percent by weight of substances the EPA considers hazardous. The court weighed this low toxicity with the high cost of remedying the tremendous volume of municipal waste and determined that the remediation costs potentially could be more than remediation at similar industrial or commercial waste sites. The court stressed that the amount of the waste was not the sole factor to consider, because the toxicity of the waste engendered the necessity and contributed to the clean-up costs. The court concluded that the defendant municipality was required to contribute to the cleanup.

Other courts have also held that there is no minimum threshold for liability due to "quantity or concentration." CERCLA contains no minimum amount requirement which leads a court to conclude that the "hazardous substance" definition includes even minimal amounts. Because even de minimus amounts are included, toxicity is an important modifier of a party's liability.

The Toxicity Factor allows an evaluation of the pollutants' potential for harm. Expert witnesses can testify about the chemical properties of the pollutants because toxicity is grounded in science. Once the substances present at a site are identified, their relative toxicity can be evaluated. Although this Factor is not important as a sole consideration, it is very important when evaluated in conjunction with the Amount Factor. Courts' consideration of these Factors thus might benefit if the two variables, Amount and Toxicity, were consistently evaluated as a single equitable factor. This is one of the suggestions for modification to the Gore Factors presented below.

197 958 F.2d 1192 (2d Cir. 1992).
198 Id. at 1196.
199 Id. at 1197.
200 Id.
201 Id. at 1206.
202 Id.
203 *Alcan II*, 990 F.2d 711, 720 (2d Cir. 1993) (citing *B.F. Goodrich v. Murtha*, 958 F.2d 1192, 1198 (2d Cir. 1992)).
D. An Evaluator of Objective "Blame": The Involvement Factor

The Involvement Factor examines the role each of the contributors played in the creation of the toxic hazard. It has been utilized in a variety of ways and is arguably the most important factor used by the courts. Under the Involvement Factor, a court searches for the primary contributors. It is somewhat of a "catchall" because it evaluates the role of all parties liable under section 107, rather than only the waste site operators. In evaluating the involvement of the property owners and operators, the court may look at the actions taken by the parties with respect to the hazardous waste. The court will evaluate whether the particular construction of the facility or conduct of the owner or operator caused the spill. The Involvement Factor also evaluates the contribution of the arrangers, owners, and transporters to the hazardous scenario. It is significant that courts evaluate the "whole picture" of a party's contribution to a site and not simply the bare statistics of amount and toxicity.

While evaluating the Involvement Factor, courts may look at evidence of the active or passive role played by each party. Some parties may play a passive role. For example, because salt was considered merely an inconvenient discharge of manufacturing in the nineteenth century, the court may determine that the predecessor to We Truck International transported the salt in ignorance of its dangerous properties. As such, the court may release We Truck from liability. Mr. Sneak, on the other hand, played a more active role in the generation and transportation of the salt to the later site of the factory. Even though salt was considered harmless, Mr. Sneak went through a lot of trouble to avoid proper disposal of the substance. The estate of Mr. Sneak will be evaluated unfavorably under this Factor.

When a court looks for primary contributors, it may discover that one such person is not the owner of the site. For example, in United States v. R.W. Meyer, Inc., the Sixth Circuit found a lessee to be the primary actor in allowing a site to become contaminated, and allocated two-thirds of the clean-up costs to the lessee. The remaining one-third was borne by the appellant property owner. The court based the liability of the property owner on the property owner's defective construction of a sewer line.

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205 It is often difficult to impose liability on generators and transporters because of the "lack of evidence regarding who generated and transported the waste found at the site." Anderson, supra note 16, at 12. However, that particular type of factual question is not at issue in this hypothetical.
206 932 F.2d 568 (6th Cir. 1991).
207 Id. at 571.
208 Id.
209 Id.
The property owner appealed the allocation, arguing that "contribution" should have been narrowly constructed in the manner of the common law, only holding parties liable for the actual percentage of waste which their improper conduct contributed to the toxicity of the site.\(^{210}\) In effect, the appellant appealed to the primacy of the Amount Factor by attempting to avoid an allocation of response costs based on the rationale that he had not physically contributed to the pollution. The Sixth Circuit found the property owner's argument unpersuasive. They determined that the trial court had authority to hold him responsible for his contribution under the Involvement Factor because Congress had provided that "the court may allocate response costs among liable parties using such equitable factors as the court determines are appropriate."\(^{211}\)

In *Amoco Oil Co. v. Dingwell*,\(^{212}\) the United States District Court for the District of Maine utilized the Gore Factors to evaluate the fairness of a proposed settlement agreement.\(^{213}\) The court emphasized the relevance of the last three Factors, Involvement, Care, and Cooperation, for evaluating a dispute between waste generators and the site operator.\(^{214}\)

The agreement in question allocated sixty-five percent of the liability to Dingwell, the owner of the site, in exchange for a promise that his actual monetary contribution would be limited to the proceeds from insurance policies.\(^{215}\) The court found that defendant Dingwell should contribute towards a greater portion of the liability because the waste generators had a favorable equitable position under an evaluation of the Care and Cooperation Factors. The evaluation of the Involvement Factor supported an equal apportionment between the waste generators and Dingwell, but the combination of the Care and Cooperation Factors, supporting a greater contribution by Dingwell, outweighed the Involvement Factor. The waste generators had created and transported the waste, while Dingwell had treated, stored, and disposed of the waste.\(^{216}\)

During its evaluation of the Care Factor, the court found that the majority of the environmental damage had been caused by Dingwell’s failure to exercise care in the containment and disposal of the waste. The evaluation of the Cooperation Factor revealed that the waste generators had taken the initiative in cooperating with the EPA, financing

\(^{210}\) *Id.*
\(^{211}\) *Id.* at 570 (citing 42 U.S.C. § 9613(f)(1) (1988)).
\(^{213}\) *Id.* at 86.
\(^{214}\) *Id.*
\(^{215}\) *Id.* at 85-87.
\(^{216}\) *Id.* at 86.
the initial remediation and negotiating a consent decree. The court balanced the equities by determining that Dingwell properly carried a greater burden of the damages in the agreement.\textsuperscript{217}

The United States District Court for the Western District of Michigan in \textit{Hastings Building Products v. National Aluminum Corp.}\textsuperscript{218} solely relied on the Gore Factors to determine apportionment. In that case, the contribution action arose between the prior owner-operator of the site and the present owner. The original judgment allocated the costs of cleanup equally between the two parties. The district court, however, granted a motion to amend the judgment and reapportion liability, allocating seventy-five percent to the prior owner-operator and twenty-five percent to the current owner of the property.

The court found the Involvement Factor the most persuasive. The court recognized that National, the previous owner-operator, had a greater degree of involvement in the generation, treatment, and storage of the hazardous waste. National designed, constructed, and operated the two underground storage tanks and established the procedure for disposing of the waste.\textsuperscript{219} In contrast, Hastings, the present owner, only operated the storage tanks for a short period of time.\textsuperscript{220} The court also stated that the Distinguishability Factor,\textsuperscript{221} the Care Factor,\textsuperscript{222} and the Cooperation Factor played a role in determining liability. The evaluation under the framework of the Gore Factors led the court to properly and equitably revise its earlier allocation of liability.

The Involvement Factor leads courts to compare evidence of activities that are not easy to evaluate empirically. This Factor, however, allows courts to gain an overview of the actions of all parties potentially liable under section 107 of CERCLA. Evaluating the contribution of parties under this Factor allows the courts to make a subjective, equitable judgment of the parties' actions.

\textsuperscript{217} \textit{Id.} at 87.


\textsuperscript{219} \textit{Id.} at *12.

\textsuperscript{220} \textit{Id.}

\textsuperscript{221} The court found that the Distinguishability Factor was persuasive because National used the mask-wash disposal system for eight years whereas Hastings used the system for only eight months. \textit{Dingwell, 890 F. Supp.} at 87.

\textsuperscript{222} The Care Factor was also evaluated as more favorable to the later occupier because the court found that the earlier occupier of the site had behaved more culpably. The earlier occupier had failed to take any remedial action despite knowledge of the RCRA violations. 1992 U.S. Dist. LEXIS 11533, at *12. In contrast, the court noted that the later occupier took remedial steps, including replacement of underground tanks causing the damage, shortly after taking over the property. \textit{Id.} at *14. In reviewing the actions taken by the two parties, the court linked the Cooperation and Care Factors, concluding that the same facts that implicated one party for not taking adequate care of the waste site would also implicate that party as not heeding the Cooperation Factor. \textit{Id.}
E. An Evaluation of a Party's Behavior Towards the Environment: The Care Factor

The Care Factor, like the Involvement Factor, introduces subjective evaluations into the allocative stage of CERCLA litigation. The Care Factor evaluates whether a party's actions concerning the waste site were the result of recklessness and negligence or merely the result of industry-wide innocence.

All of the parties in the introductory hypothetical exercised due care in their treatment of hazardous substances except for Ms. Orange and Mr. Sneak. Ms. Orange carelessly spilled Agent Orange on the soil and drained her rinsewater into the groundwater. The court will therefore look upon her actions unfavorably. Likewise, Mr. Sneak failed to prevent the release of salt. Although Mr. Sneak may have abandoned the salt in an inconspicuous spot, future expansion of the population into formerly rural areas is a common sociological pattern. The court may therefore find Mr. Sneak at fault for improperly disposing of the dangerous substance. Mr. Goodguy and Mrs. Safety handled their substances in a proper manner; any spills were a result of the normal operation of the business. The court may favorably evaluate the evidence of Mr. Goodguy's and Mrs. Safety's care in attempting to properly dispose of the hazardous waste. Courts find the issue of whether the defendant handled the waste material in good faith to be a significant factor in allocating costs.

The scenario discussed in *Weyerhaeuser Co. v. Koppers Co.* is a classic example of a hazardous waste site that resulted not from an accident or poor judgement, but from past industry standards that were not stringent enough to prevent pollution. In *Weyerhaeuser*, plaintiff Weyerhaeuser, the owner of a wood treatment facility, brought a CERCLA action to recover response costs from its lessee, Koppers, who operated the facility. The court stated that "[t]his is not a case involving reckless or wanton contamination, . . . nor were AL & T [a previous lessee] and Koppers unduly sloppy in their work." The court even recognized that Koppers "'represented leadership in technology of wood preservation as practiced at that time.'" Although the district court held Koppers strictly liable under CERCLA, the good faith practices of the company were relevant to the court in allocating contribution among the liable parties.

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224 Id. at 1423.
225 Id. (quoting Weyerhaeuser's wood treatment expert, a former employee of Koppers).
226 Id. at 1424. The district court determined under Fourth Circuit precedent, United States v. Monsanto Co., 858 F.2d 160 (4th Cir. 1988), that Koppers and Weyerhaeuser were jointly and severally liable. As such, liability could be apportioned if (1) there are distinct harms or (2) there was a reasonable basis for determining the contribution of each cause.
In allocating the damages, the district court considered not only the Gore Factors but also other "factors relevant to the circumstances of the case." The importance of the Care Factor in the district court’s reasoning was stressed initially, as evidence that the facility was properly maintained clearly influenced the court. However, the court also stressed the “benefits received by the parties from the contaminating activities and the knowledge and/or acquiescence of the parties in the contaminating activities,” which indicates that the Involvement Factor may have been equally important to the court.

The district court eventually found both parties liable for the response costs. Koppers had been responsible for operating the property, and proper maintenance was insufficient to prevent the release of hazardous materials. The court also held Weyerhaeuser responsible because of the benefits received from ownership of the site. Based on the above considerations, the court allocated a greater share of the remediation costs to Koppers than to Weyerhaeuser. This allocation is acceptable in light of its use of the Care and Involvement Factors.

The Seventh Circuit briefly considered applying the Care Factor in Environmental Transportation Systems, Inc. v. ENSCO, Inc. but concluded that liability should be determined solely by fault. In so doing, it utilized the comparative causation method of contribution. The pollution incident occurred when an Environmental Transportation Systems (ETS) driver lost control of his rig on an “S” curve, causing the truck to flip and the hazardous substance to spill. The Seventh Circuit emphasized that the Gore Factors were not an exclusive or exhaustive list and relied on the Sixth Circuit’s determination in R.W. Meyer to support its stance that the court could “consider any factor appropriate to balance the equities in the totality of the circumstances.”

ETS argued that ENSCO’s noncompliance with the applicable Department of Transportation regulations indicated a lack of care concerning transportation of hazardous substances and consequently,
that ENSCO should be allocated a portion of the damages.\textsuperscript{237} The court found no evidence to prove allegations made by ETS that the transformers were shipped in nonconformance with the regulations.\textsuperscript{238} The court concluded that neither party had submitted evidence supporting other equitable factors aside from causation and thus affirmed the summary judgment.\textsuperscript{239}

As seen above, the Care Factor is useful because it allows a court to equitably evaluate the actions of the parties to determine their motivations. For example, a hidden "midnight dumping" excursion may suggest that the party was well aware of the costs of his or her actions. In contrast, an open and notorious practice may indicate that a party was performing waste disposal according to the best known technology of the time. Although proper safety procedures which inadvertently permit pollution will not shield a party from liability, they may differentiate a party's contribution to other polluters.

F. Rewarding Prompt Response to the Statute and Authorities: The Cooperation Factor

The Cooperation Factor evaluates the type of response made by the defendants during the initial cost allocation process. This is the Factor that makes the Gore Factors superior to other contribution schemes. This Factor allows courts to encourage cooperation with the EPA, thus advancing CERCLA's goal of voluntary compliance. When apportioning remediation costs, courts look favorably upon honesty and compliance with the authorities.\textsuperscript{240}

None of the parties in the hypothetical gain many equity points under this Gore Factor. The courts look to reward parties who remediate sites on their own initiative, rather than being forced to do so by the government. Mr. Goodguy gains slight equitable favor under this Factor because his prompt cooperation prevented a larger accident. This factor can affect apportionment if some of the potentially responsible parties actively initiate a cleanup and cooperate with the government.

Although liability was not actually apportioned in \textit{Allied Corp. v. Acme Solvents Reclaiming},\textsuperscript{241} the district court specifically singled out the Cooperation Factor as a proper criterion for a court to consider when evaluating third party liability.\textsuperscript{242} The order in \textit{Allied Corp.} de-

\textsuperscript{237} Id. at 510.
\textsuperscript{238} Id. at 511.
\textsuperscript{239} Id. at 512.
\textsuperscript{241} 691 F. Supp. 1100 (N.D. Ill. 1988).
\textsuperscript{242} Id. at 1118.
nied the motion to dismiss and summary judgment motions brought by the defendant operator of a waste disposal site. The plaintiffs had brought a contribution action against other potentially responsible parties for contribution to the clean-up effort. In its order, the court laboriously detailed the rationale for its approval of using the Gore Factors in contribution actions. 243 Courts would not have to spend judicial resources justifying the use of the Gore Factors if they could rely on either a Supreme Court decision endorsing or congressional statute codifying the Gore Factors.

The Cooperation Factor, not found in the other contribution schemes, 244 is the vital provision which tailors the Gore Factors to their intended use in CERCLA contribution actions. With proper use, this Factor can ensure that parties involved in a clean-up action have proper incentive to effectuate CERCLA goals.

IV
EVALUATION OF THE GORE FACTORS' ROLE IN DETERMINING CONTRIBUTION

A. Exploration of Particular Aspects of the Gore Factors

The Gore Factors have been used in many of the circuits for determining the most equitable distribution of cleanup costs in a CERCLA contribution action. 245 The Factors are concise, easy to understand, and effectuate the equitable notion of compensation based on fault. The Factors also function to exclude other factors masking bias or inequity. The most persuasive reason for adopting the use of the Gore Factors is that they are an effective means of advancing the goals of the CERCLA statute within the framework of contribution actions.

1. Flexibility and Fostering Goals

Recently, much commentary has been written on the emergence of the Gore Factors as federal common law, and existing commentary favors their use. 246 As explored above, one commentator, Professor Garber, supports the use of the Gore Factors because they advance the goals of the CERCLA statute through the application of the Cooperation Factor. 247 The characteristics of each of the Factors support this view. Several of the Gore Factors are objective and allow courts to compare a quantifiable difference. Such are the Distinguishability,
Amount, and Toxicity Factors, presenting the courts with clearly comparable evidence. Other factors, such as the Involvement, Care, and Cooperation Factors, are traditional equitable factors and force courts to evaluate intangibles such as the state of mind of the parties. The variable characteristics and considerations of the Factors produce flexibility in their application, thereby encouraging the realization of the CERCLA statute's goals.

Another commentator, Professor Alfred R. Light, supports the use of the Gore Factors because CERCLA subsection 113(f) expressly establishes a comparative fault-like regime, well suited to accommodate the use of the Factors. Light endorses the use of the Gore Factors because subsection 113(f) itself is not very informative and the Factors offer guidance for comparing fault.

A student researcher likewise characterizes the use of the Gore Factors as a comparative fault approach. A comparative fault approach is preferential to other methods of contribution, such as pro rata shares, because "one general formula is inappropriate for all dumpsites." The Gore Factors allow the courts to tailor the cost allocation according to the circumstances of the particular case. This commentator notes that one of the main benefits of utilizing the Gore Factors is that they help the EPA reach settlements "because a party will know that the amount he will ultimately pay will depend on numerous factors." The Gore Factors are therefore favored because of their flexible yet comprehensive approach to contribution.

2. Settlement Difficulties

Another commentator, Jerry L. Anderson, hypothesizes that the lack of a firm formula for allocating costs impairs settlements. Anderson advocates a solution other than codification of a weighted list of the Gore Factors in the contribution provision. However, this Note's proposal also addresses the very difficulties to which Anderson points in support of his argument. Anderson states: "Because there is no way of knowing exactly what factors or what method a court will use to allocate costs, it is difficult for the parties to estimate the alternatives to a negotiated agreement." This proposal, more so than

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248 Light, supra note 101 at 354-55.
249 Id. at 329.
251 Id. at 366.
252 Id.
254 Id. at 41.
the drastic reforms suggested by Anderson,\textsuperscript{255} could address the difficulties of settlement.

3. \textit{The Problems of Confusion and Forum Shopping}

One of the primary reasons for formally adopting the Gore Factors, or similar ones, is that they will reduce the uncertainty for both the parties to the litigation and the courts. The following two cases illustrate the current confusion.

In 1989, the United States District Court for the Southern District of Florida, in \textit{South Florida Water Management District v. Montalvo},\textsuperscript{256} determined an equitable apportionment between a landowner and a generator of waste.\textsuperscript{257} The court rejected the Gore Factors, concluding that they were only helpful when allocating costs between operators and generators, not between landowners and generators.\textsuperscript{258} The court considered the issue to be a "tabla rasa,"\textsuperscript{259} and declined to use the Factors for the apportionment simply because no court had previously done so: "[We are] unable to locate any decision which has allocated response costs among landowners and generators."\textsuperscript{260}

Two years later, in 1991, the Sixth Circuit used the Gore Factors to allocate costs between a landowner and a generator in \textit{R.W. Meyer}.\textsuperscript{261} This disparate use of the Gore Factors in similar situations identifies the confusion as to the relevant standards and produces inconsistent results among different jurisdictions. Such inconsistency in the method of apportionment could lead to forum shopping: a party who has contributed a larger volume of the waste would prefer the pro rata method and therefore seek a jurisdiction using such a method. In contrast, a smaller contributor would rather pay minimal, if any, damages in relation to a larger contributor and therefore seek a jurisdiction using the Gore Factors. \textit{R.W. Meyer} and \textit{Montalvo} illustrate that such forum shopping is possible: under similar fact patterns, the District Court for the Southern District of Florida and the Sixth Circuit reached different results. By establishing firm standards through codification of the Gore Factors, this confusion could be resolved.

\textsuperscript{255} Anderson advocates five solutions to the current CERCLA morass: eliminating joint and several liability, paying for orphan shares with the Superfund, using principles of corporate law in determining successor liability, devising a more effective method of allocating response costs among PRPs, and granting the EPA more flexibility in cleanup determinations. \textit{Id.} at 48.


\textsuperscript{257} \textit{Id.} at *4 n.2.

\textsuperscript{258} \textit{Id.}

\textsuperscript{259} \textit{Id.}

\textsuperscript{260} \textit{Id.} at *2.

\textsuperscript{261} 932 F.2d 568 (6th Cir. 1991).
B. Other Factors That Courts Have Considered

In drafting subsection 113(f), Congress directed courts to use the Gore Factors and any other equitable factors they deemed appropriate in the interest of justice. As a consequence, courts have added many considerations to the federal common law of contribution in addition to those listed in the Gore Amendment.

1. Meritorious Considerations

Some of the additional equitable considerations utilized by the courts in allocating contribution have merit and their inclusion could increase the effectiveness of the Gore Factors. For example, in BTR Dunlop v. Rockwell International, the United States District Court for the Northern District of Illinois evaluated the purchaser's knowledge of the environmental risk. The court explained that the use of this factor would help the court evaluate whether the purchase price of the land had been discounted to account for environmental remediation costs. The court found that knowledge of environmental risk was "clearly relevant" under a subsection 113(f) contribution action because a discounted price may serve as notice that there is a defect with the property.

In another case, Kerr-McGee Chemical Corp v. Lefton Iron & Metal Co., the Seventh Circuit found that the district court erred in holding that an indemnification agreement was irrelevant to the allocation of clean-up costs. While the Seventh Circuit conceded that such agreements were not determinative of liability, it found that they were part of the "totality of the circumstances" to be considered. The addition of this factor, perhaps noted as the Pre-Knowledge Factor, would fill a gap in the equitable coverage of the Gore Factors: the Gore Factors do not provide an avenue to evaluate previous contractual agreements between the parties as to who bears the cost of the clean-up.

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262 See supra note 17 for the text of the contribution statute.
264 Id. at *2. The Third and Fifth Circuits have also considered knowledge of the risk. See Smith Land & Improvement Corp. v. Celotex Corp., 851 F.2d 86, 90 (3d Cir. 1988), cert. denied, 488 U.S. 1029 (1988); Amoco Oil Co. v. Borden, Inc., 889 F.2d 664 (5th Cir. 1989) (approving the use of the Gore Factors in the contribution action, and reversing and remanding the case to the district court for allocation).
266 Id.
267 14 F.3d 321 (7th Cir. 1994).
268 Id. at 326.
269 Id. (quoting ETS v. ENSCO, 969 F.2d 503, 509 (7th Cir. 1992)).
2. Improper Considerations

Many courts have considered factors which detract from the effectiveness of the Gore Factors. For example, in *United States v. R. W. Meyer*,270 the Sixth Circuit, in addition to evaluating the Gore Factors to determine the distribution of the costs,271 expressly reserved the right to consider "any factor . . . deem[ed] in the interest of justice in allocating contribution recovery."272 The discretion to consider any factor detracted from the equitable apportionment established by the use of the Gore factors because the court eventually considered other inappropriate factors. Some of the improper factors mentioned in *R. W. Meyer* include "the state of mind of the parties, . . . any contracts between them bearing on the subject, [and] any traditional equitable defenses as mitigating factors."273 Although some of these may have merit, others mentioned should be omitted from the courts' consideration. For example, the court considered the "moral contribution" of the owner of the contaminated site274 and the economic status of the parties.275 Neither the moral contribution nor the economic status seem to be particularly relevant to fostering the goals of the CERCLA statute because they do not introduce equity into or promote smooth operation of cost allocation procedures. Factors which rely on moral contribution or economic status can only invidiously open the temptation for the courts to punish polluters. Such punishment would operate contrary to the goals of the CERCLA statute, for although it contains some punishment provisions, its primary goal is to obtain remediation to clean up the hazardous waste problem.

Some courts have resisted the temptation to utilize improper factors in contribution actions. For example, in the 1991 case *United States v. Alcan Aluminum Corp.*,276 the court resisted the argument made by contribution defendant Cornell University that it should consider Cornell's status as an "eleemosynary."277 Cornell wanted the court to consider its status as a nonprofit educational institution as compared to the parent company of ALCAN, which possessed assets totalling $10.6 billion.278 The court refused to do so, reasoning that the use of extraneous factors and "specialized treatment would be inequitable and would frustrate the Congressional purpose of allowing parties such as Alcan to seek contribution from other responsible par-

270 932 F.2d 568 (6th Cir. 1991).
271 Id. at 571.
272 Id. at 572.
273 Id. at 572-73.
274 Id. at 573.
275 Id. at 572.
277 Id. at *11.
278 Id.
ties."\textsuperscript{279} The court ultimately ordered Cornell to pay Alcan six percent of the response costs recovered by the government.\textsuperscript{280}

Many inappropriate factors considered by courts have little impact on cost allocation. However, if for some reason the behavior the factor addresses becomes important to allocation, it is likely that the Gore Factors can be stretched to include the offending attitude or action. For example, moral contribution can be evaluated under the aegis of the Care Factor; if a court is offended by the actions of a defendant, it can penalize the defendant through application of the Care Factor. Likewise, the CERCLA statute already takes the economic status of the party into account. Joint and several liability insures that some party will be responsible to the government for the costs of the remediation. A defendant's liability should not be presumed or increased simply because he or she possesses the means to finance the cleanup. Expediency sacrifices equity in the cost recovery action, but the contribution action is designed to reintroduce equity rather than increase the likelihood of an inequitable distribution of costs.


One recent case, \textit{Central Maine Power v. F.J. O'Connor and Westinghouse Electric Co.},\textsuperscript{281} is a quintessential contribution case. In this action, Central Maine Power, the owner of the site, brought a contribution action against both the former owners and operators of the contaminated site, the O'Connor family, and one of the disposal arrangers, Westinghouse Electric Company. The court recited the facts of the case, applied each of the Gore Factors in turn, and then applied the facts to additional relevant factors. These additional factors were financial resources;\textsuperscript{282} benefits received; knowledge and/or acquiescence of the parties;\textsuperscript{283} and for property owners, any special circumstances surrounding the conveyance.\textsuperscript{284} Westinghouse argued that the division of costs should be controlled by the Amount, Distinguishability, and Toxicity Factors. Under the Distinguishability Factor:

\begin{itemize}
  \item \textsuperscript{279} \textit{Id.} at *11-12.
  \item \textsuperscript{280} \textit{Id.} at *14.
  \item \textsuperscript{281} 838 F. Supp. 641 (D. Me. 1993).
  \item \textsuperscript{282} \textit{Id.} at 645. The court found it relevant that Westinghouse and Central Maine Power were "better suited financially to absorb the substantial expense of this cleanup" than was the O'Connor family. \textit{Id.} at 647.
  \item \textsuperscript{283} \textit{Id.} at 645. This factor was not considered at the time of the hazardous waste dumping because it was not generally known that CFCs were dangerous or that the mineral water was contaminated.
  \item \textsuperscript{284} \textit{Id.} Such specialized circumstances would include any special discounts given and the price paid for the property.
\end{itemize}
tor, Westinghouse argued that it should not be liable for any cost of lead contamination because it did not attribute any lead to the site.\textsuperscript{285} Correctly applying the Distinguishability Factor, the court agreed with Westinghouse on this point.\textsuperscript{286} However, the court ultimately determined that the Cooperation Factor and an examination of the parties' financial resources were the most important factors for making the contribution determination.\textsuperscript{287} This case thus exemplifies application of a variety of factors, including the Gore Factors, in conjunction with both meritorious and improper extraneous factors.

C. Explaining the Difficulty: Procedural Stumbling Blocks to Excluding Other Factors

The refusal of many courts to voluntarily limit themselves to the Gore Factors presents a difficulty for excluding other factors. The improper factors mentioned in \textit{R.W. Meyer} could become significant because \textit{R.W. Meyer} is the controlling case in the Sixth Circuit concerning apportionment. Indeed, \textit{CPC International, Inc. v. Aerojet-General Corp.}\textsuperscript{288} cited \textit{R.W. Meyer} as the controlling case expressing the "factors that a trial court may consider in determining the parties' proportionate shares in a contribution action."\textsuperscript{289} Courts from the Seventh Circuit have also cited \textit{R.W. Meyer} as authority for using the Gore Factors in contribution actions.\textsuperscript{290} The prominence of the cases which have introduced the improper factors into the federal common law of contribution ensure that they will not be disregarded by future courts. Without clarification by Congress, these factors are as relevant as the Gore Factors in contribution actions.

D. A Proposal to Modify and Codify the Gore Factors

Congress could avoid the introduction of improper factors and ensure the prominence of the Gore Factors in contribution actions by codifying the Gore Factors into the CERCLA statute. Congressional

\begin{footnotes}
\footnotetext[285]{Id. at 647 n.6.}
\footnotetext[286]{Id.}
\footnotetext[287]{Id. at 646. Although Westinghouse was able to prove that they had contributed a smaller amount of waste to the site, the court looked unfavorably upon the fact that Westinghouse had not contributed to the cleanup of the site thus far, and that Westinghouse had not participated in the negotiation of the consent decree. \textit{Id.}}
\footnotetext[289]{Id. at 575 (factors expressly named were the Involvement Factor, the Amount Factor, and the Care Factor).}
\footnotetext[290]{\textit{See ETS v. ENSCO}, 969 F.2d 503, 509 (7th Cir. 1992) ("Like the Court of Appeals for the Sixth Circuit, we think a court may consider any factors appropriate to balance the equities in the totality of the circumstances.") (citing United States v. R.W. Meyer, 932 F.2d 568 (6th Cir. 1991)); BTR Dunlop, Inc. v. Rockwell Int'l Corp., No. 90 C 7414, 1992 WL 159203, at *2 (N.D. Ill. June 29, 1992).}
\end{footnotes}
codification could ensure exclusivity if the congressional intent was clearly expressed.

Some of the Gore Factors have proved more useful to the courts than others. The more effective Factors are the Amount Factor, the Involvement Factor, the Care Factor, and the Cooperation Factor. These are the Factors which courts have consistently discussed and weighed to determine contribution actions. Courts rely less on the Distinguishability Factor, although it is often discussed, and the Toxicity Factor.

A more effective and consistent allocation of costs in contribution actions would be achieved if the different factors were standardized and prioritized in order of importance. The ranking of each factor on the list would aid the courts in evaluating the relative importance of a specific factor: the evidence concerning a factor at the top of the list would be more significant than evidence concerning a factor at the bottom.

In addition to prioritizing the factors, a few alterations should be made to the original Gore Factors. One is to add a factor, namely the Pre-Knowledge Factor discussed above, to prevent gaps in the equitable equation. Another minor alteration to the original Factors is to combine the Amount and Toxicity Factors to ensure that their consideration is concurrent; the amount of the substance is not significant without a corresponding assessment of its toxicity.

A revised and prioritized list of the Gore Factors might look something like this:

1. The relative amount and toxicity of the hazardous waste involved. [Amount/Toxicity Factor]
2. The degree of involvement by the parties in the generation, transportation, treatment, storage, or disposal of the hazardous waste. [Involvement Factor]
3. The degree of cooperation by the parties with Federal, State or local officials to prevent any harm to the public health or the environment. [Cooperation Factor]
4. The degree of care exercised by the parties with respect to the hazardous waste concerned, taking into account the characteristics of such hazardous waste. [Care Factor]
5. The pre-knowledge of the parties involved concerning the environmental status of the site, as revealed by contractual agreements or purchase price reductions. [Pre-Knowledge Factor]
6. The ability of the parties to demonstrate that their contribution to the discharge, release, or disposal of a hazardous waste can be distinguished. [Distinguishability Factor]
Such a prioritized list, included in further Superfund amendments, would stabilize the field of contribution litigation. This concrete list of factors would give potential litigants the information necessary to evaluate their position and eliminate the uncertainty in prelitigation negotiations.

CONCLUSION: HOW ADOPTION OF THIS PROPOSAL ADVANCES THE GOALS OF CERCLA

The Gore Factors have proved their usefulness to the courts since their introduction into the failed CERCLA amendment in 1980. Although the Senate omitted the amendment from the final CERCLA legislation, courts have drawn the factors out of the statute’s legislative history and imbedded them in the federal common law. The Gore Factors offer the courts a consistent and equitable framework for allocating contribution costs in a manner which promotes the goals of the CERCLA statute.

The courts’ adoption of the Gore Factors has been haphazard. Moreover, courts have often used the Gore Factors in conjunction with improper factors or have even disregarded them entirely. This inconsistency leads to forum shopping and inequitable decisions. A better method of allocating costs would be to limit the relevant factors to the Gore Factors or a modified version thereof. An exhaustive, prioritized list of factors would provide both a simplified framework and guidance in a field where apportionment of clean-up costs has become problematic. Additionally, a standard procedure would reduce uncertainty in litigation, thereby encouraging faster remediation as expedited settlement procedures replace prolonged litigation over liability.

This Note’s Proposal offers the courts a thoughtful means with which they can evaluate the totality of the waste scenario, including factors which advance the goals of the CERCLA statute. These goals are the prompt cleanup of hazardous waste sites, placement of the responsibility for the cleanup on those liable for the harm, inducement of voluntary responses, and conservation of the Superfund.

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