



1-1-2001

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Recommended Citation

Victor B. Flatt, *[H]e Should at His Peril Keep It There: How The Common Law Tells Us That Risk Based Corrective Action is Wrong*, 76 Notre Dame L. Rev. 341 (2001).

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ESSAY

“[H]E SHOULD AT HIS PERIL KEEP IT THERE . . .”:¹ HOW THE COMMON LAW TELLS US THAT RISK BASED CORRECTIVE ACTION IS WRONG

*Victor B. Flatt**

“[*Rylands v. Fletcher*] represents a conviction of what is right and proper so persistent as to become traditional and almost instinctive, a very part of the inner consciousness of the race.”²

INTRODUCTION

First tentatively in small administrative decisions and now with louder fury in proposals for legislation and wholesale administrative changes, “Risk Based Corrective Action” (RBCA or “Rebecca”) (a way of using risk analysis to make risk management decisions by balancing benefits and costs) is a theory of environmental management gaining many adherents. Although benefit-cost analysis is traditionally used in public administration (indeed, by executive order in many cases),³ it has heretofore not been used in the administration of all environmen-

1 *Rylands v. Fletcher*, 3 L.R.-E. & I. App. 330, 340 (H.L. 1868).

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2 Francis H. Bohlen, *The Rule in Rylands v. Fletcher*, 59 U. PA. L. REV. 298, 303 (1911).

3 President Jimmy Carter ordered cost-benefit analysis for executive branch agencies, where not prohibited, in 1978 in Exec. Order No. 12,044, 43 Fed. Reg. 12,661, 12,663 (Mar. 23, 1978). Similar directives were issued by presidents Reagan,

tal laws.⁴ Indeed, it has been explicitly prohibited in many cases.⁵ However, industry and some academics and politicians have hailed the use of risk analysis, and the comparison of risk with benefits of risk management for the purposes of administration, as a way to lower costs of environmental regulation without losing anything in the process.⁶ Even the name sounds pleasant—"Rebecca" as in Sunnybrook Farm.⁷ However, this Rebecca is not necessarily benign, and its impact is more far-reaching than has yet been explored. Although there have been critiques and studies of problems in using benefit-cost analysis to make risk management administrative and policy determinations,⁸ most of these have addressed the problems in acknowledging which values to consider and the problems with the calculation of risks and benefits or costs.⁹ These are certainly important considerations, but they also leave open the possibility that, if technical problems are overcome, Rebecca would be a useful and efficient administrative and legislative policy tool.¹⁰ This is simply not true in all cases.

Far more important are those critiques that focus on the moral and ethical problems of allowing environmental risks to fall involuntarily on innocent people.¹¹ As several articles have noted, the use of benefit-cost analysis (which is the basis of Rebecca) in environmental regulation may not correctly value the social or ethical implications of

Exec. Order No. 12,291, 46 Fed. Reg. 13,193 (Feb. 17, 1981), and Clinton, Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993).

4 See Victor B. Flatt, *Environmental "Contraction" for America? (or How I Stopped Worrying and Learned to Love the EPA)*, 29 LOY. L.A. L. REV. 585, 601 (1996).

5 See, e.g., Endangered Species Act, 16 U.S.C. §§ 1532(19), 1533(b)(2) (1994); Clean Air Act, 42 U.S.C. § 7409(b)(1) (1994).

6 See Celia Campbell-Mohn & John S. Applegate, *Learning from NEPA: Guidelines for Possible Risk Legislation*, 23 HARV. ENVTL. L. REV. 93, 93-94 (1999) (citing articles). See generally STEPHEN BREYER, *BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION* (1993) (promoting benefit-cost analysis as an aid in making administrative decisions).

7 See KATE DOUGLAS SMITH WIGGIN, *REBECCA OF SUNNYBROOK FARM* (1917).

8 See Campbell-Mohn & Applegate, *supra* note 6, at 99-102.

9 See *id.*

10 But see David M. Driesen, *The Societal Cost of Environmental Regulation: Beyond Administrative Cost-Benefit Analysis*, 24 ECOLOGY L.Q. 545, 549-50 (1997) (arguing that cost-benefit analysis is not really economically beneficial in the long term).

11 See MARK SAGOFF, *THE ECONOMY OF THE EARTH: PHILOSOPHY, LAW, AND THE ENVIRONMENT* 45-46 (1988); Victor B. Flatt, *Should the Circle Be Unbroken?: A Review of the Hon. Stephen Breyer's Breaking the Vicious Circle: Toward Effective Risk Regulation*, 24 ENVTL. L. 1707, 1717 (1994).

where risks may fall.¹² For instance, the argument for applying benefit-cost balancing to Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)¹³ cleanup is that the total cost of the risk to the site's neighbors might be less than the cost of site remediation, but this does not account for who bears the loss.¹⁴ Those who support Rebecca and benefit-cost analysis in an environmental context have answered that sometimes individuals may sacrifice for the common good and have then pointed to negligence law to bolster the argument that our common law embraces the doctrine of everyone giving for the common good.¹⁵ To quote the famous Justice Holmes:

A man need not, it is true, do this or that act—the term *act* implies a choice—but he must act somehow. Furthermore, the public generally profits by individual activity. As action cannot be avoided and tends to the public good, there is obviously no policy in throwing the hazard of what is at once desirable and inevitable upon the actor.¹⁶

However, reasoning from negligence theory and the common law does not support an introduction of Rebecca policy to environmental decisions. A closer examination of the emergence of negligence in the common law shows that we as a society have not chosen involuntary risk shifting as an appropriate response to societal problems. Although negligence addresses the sharing of costs between plaintiff and defendant and may allow the risk of loss to fall on plaintiffs in certain cases, an examination of the struggle between negligence and strict liability indicates that this is only in proscribed circumstances and that Rebecca's wholesale shift of entitlements is not supported by

12 See SAGOFF, *supra* note 11, at 46; Flatt, *supra* note 11, at 1717; see also Driesen, *supra* note 10, at 558–59 (stating that benefit-cost analysis has been criticized for, among other things, assigning a dollar value to human life). Richard L. Revesz tackles both the calculation problems in benefit-cost analysis as well as the problems of inter-generational equity in *Environmental Regulation, Cost-Benefit Analysis, and the Discounting of Human Lives*, 99 COLUM. L. REV. 941, 944–45 (1999).

13 42 U.S.C. §§ 9601–9675 (1994).

14 See BREYER, *supra* note 6, at 11–12.

15 See Edward W. Warren & Gary E. Merchant, "More Good Than Harm": A First Principle for Environmental Agencies and Reviewing Courts, 20 ECOLOGY L.Q. 379, 418 (1993); see also *Corrosion Proof Fitting v. EPA*, 947 F.2d 1201, 1222–23 (5th Cir. 1991) (suggesting that benefit-cost analysis indicates that the EPA's spending over \$200 million to save approximately seven lives over thirteen years was not reasonable).

16 OLIVER WENDELL HOLMES, *THE COMMON LAW* 95 (Boston, Brown, Little & Co. 1881).

the common law but is indeed condemned by it.¹⁷ With or without conscious focus, the judges and justices who forged our common law through the emergence of negligence and the re-emergence of strict liability *did* protect the average person from having safety entitlements knowingly and deliberately taken away to enrich other parties.

Protection of these rights is a bedrock principle of our society, and it should not be thrown away lightly.¹⁸ A wholesale embrace of Rebecca would jettison this principle—something I believe to be far more dangerous than her proponents or even critics have suggested.

In this Essay, I will describe the universe of risk based corrective decisions that are currently being adopted or considered at the administrative and congressional levels. Then I will briefly review the previously identified problems with this method. Finally, I will demonstrate how Rebecca is unjustified, not only for those reasons, but for the far more fundamental reason that it works a major change in how our society has historically approached entitlements to safety through the common law of torts. Of course, just because Rebecca is an unprecedented change in societal norms does not mean that we as a society cannot choose to adopt her. But before the members of the American public, one and all, embrace their trip to Sunnybrook Farm, I think we all should know and consider exactly what the trip entails.

I. WHAT IS "RISK BASED CORRECTIVE ACTION" AND WHERE IS IT BEING PROPOSED?

The term "Risk Based Corrective Action" can have many meanings. It has come to be a buzzword in calls for Environmental Protection Agency (EPA) administrative decisions in certain programs,¹⁹ but it also reflects a broader concept that is driving both administrative and legislative decisions. For purposes of this Essay, I describe "Risk Based Corrective Action" as any policy that stands for the proposition

17 See Jonathan Bender, *Societal Risk Reduction: Promise and Pitfalls*, 3 N.Y.U. ENVTL. L.J. 255, 270 (1994) (asserting that societal risk reduction, that is, using cost-benefit analysis in environmental administration, would indeed work a change in common law principles).

18 *Accord id.* at 266.

19 See American Society for Testing and Materials (ASTM) Sub Committee on Storage Tanks, *FAQ 6: What is RBCA or "Rebecca," available at* <http://www.epa.gov/OUST/rbdm/rbdmfaq6.htm> (last modified May 6, 1999) (describing the Guide for Risk Based Corrective Action applied at Petroleum Release Sites [E-1739-95]). The formal definition in the document is as follows: "a streamlined approach in which exposure and risk assessment practices are integrated with traditional components of the corrective action process to ensure that appropriate and cost-effective remedies are selected, and that limited resources are properly allocated." *Id.*

that harm or risk of harm to humans or the environment should be ameliorated or controlled only to the extent that the measurable benefits of that control outweigh the risk of the harm. For purposes of discussion, I will use the term "Rebecca" to describe this policy.

The term has not always been used clearly and has been used to label certain policies that really do not utilize the core Rebecca concept of basing policy decisions on pure benefit-cost analysis. For instance, comparing the costs of different methods of controlling the same risks is often used in administrative actions by the EPA, but this use is generally quite limited. It is generally used only as a method of implementation of "no-risk" statutes; in other words, there could be situations in which the EPA may determine a particular course of action based on costs, but that theoretically does not alter the legal requirement that no risk to human health (or in some cases the environment) remain. This is not, strictly speaking, a risk based corrective action because it does not limit cleanup (managing risk) to the cost of the objective benefits of managing that risk.

For example, under CERCLA, although cleanup levels currently must be set to protect human health as defined by "appropriate" and "relevant" health standards,²⁰ once that level is reached, economic feasibility may be taken into account.²¹ Thus, though CERCLA requires a feasibility analysis when considering otherwise equivalent cleanup schemes, the fundamental goal is still risk reduction.²² This is not a wholesale balancing of total risk versus costs of controlling that risk. Although individual risk assessments may consider alternative remedies such as less expensive and thorough cleanups for property that will continue in industrial usage, this remedy selection must still meet the stringent standard of keeping human exposure below the "applicable or relevant and appropriate standard requirement[s]" that must be used in the remedial investigation.²³ Furthermore, assumptions about land usage in such cases must be reasonable in order to ensure that public health is protected as required by statute.²⁴ Moreover, CERCLA limits the usage of these so-called exposure controls by expressing a preference for treatment over containment.²⁵ If

20 See 42 U.S.C. § 9621(d)(1) (1994); 40 C.F.R. § 300.430(e)(9), (f)(1)(ii)(D) (1999).

21 See 40 C.F.R. § 300.430(f)(1)(ii)(D) (1999).

22 See *id.*

23 42 U.S.C. § 9621(d)(2)(A) (1994).

24 See George Wyeth, *Land Use and Cleanups: Beyond the Rhetoric*, 26 ENVTL. L. REP. NEWS & ANALYSIS 10,358, 10,359-60 (1996).

25 See 42 U.S.C. § 9621(b)(1) (1994).

all appropriate values are taken into consideration,²⁶ this analysis of the costs of controlling risks at a set level in hazardous waste decisions is not problematic, because it does not alter the basic policy of protecting human health or the environment, but just represents a change in how to do it. Instead of reducing the risk by taking it out of the ground, we will reduce the risk by shielding humans (or the environment) from the risk. Presumably this can be based on some confidence in scientific studies and may be preferred by potentially responsible parties and society because it is cheaper.²⁷

Several other environmental regulations utilize technology standards in meeting risk reduction goals that inherently suggest some form of cost balancing,²⁸ but these generally are mandated by law and are not designed to allow for lower costs of control to control lesser risks.²⁹ Instead, they are (or were) considered the closest effective means of completely controlling a particular environmental harm that was acknowledged in the statutes³⁰ and in which residual risk is theoretically not to be allowed.³¹ Although the use of technology standards implicates whether health considerations in some way should be balanced against costs, none of these legislative provisions, even those that acknowledge remedial risk, use any sort of balancing of costs of regulations against the expected reduction in risk to create the technology standard. Instead, the technology standard is tied to the feasibility of technical controls, not the amount of risk that these controls

26 See discussion *infra* Part II.A–B.

27 It could also be preferred by society as a whole, if it speeds cleanups.

28 See *Rybachek v. EPA*, 904 F.2d 1276, 1289 (9th Cir. 1990) (“From this statutory language, it is ‘plain that as a general rule, the EPA is required to consider the costs and benefits of a proposed technology in its inquiry to determine the BPT.’” (citations omitted)).

29 See *generally* Clean Water Act, 33 U.S.C. § 1311 (1994 & Supp. IV 1998) (establishing that the technical requirements for “end of pipe” control though water quality is still taken into consideration); Clean Air Act, 42 U.S.C. § 7411 (1994) (listing new source performance standards); 42 U.S.C. § 7412(d) (1994) (listing technological controls of hazardous air pollutant sources); 42 U.S.C. § 7521 (1994) (listing mobile source standards).

30 See, e.g., Clean Water Act, 33 U.S.C. § 1251 (1994) (declaring the Congressional purpose to be the restoration and maintenance of “the chemical, physical, and biological integrity of the Nation’s waters”); see also Clean Air Act, 42 U.S.C. § 7401 (1994) (declaring the Act’s purpose to be “to protect and enhance the quality of the Nation’s air resources”).

31 See 33 U.S.C. § 1312 (1994) (specifying additional controls if the technological controls mandated in § 1311 do not adequately protect water quality); 42 U.S.C. § 7410 (1994) (establishing health quality standards for the air pollutants that are regulated with technological requirements in § 7411).

would eliminate.³² When considered with the accompanying health-based standards, these technological standards simply reflect the desire to require some measurable action in controlling pollution and the infeasibility of setting health standards at a level lower than technology would allow.³³

Of course, there is evidence that administrative agencies in fact have engaged in risk based corrective action, even where it is not allowed.³⁴ The agencies understandably have been reticent about engaging in this action in any widespread manner, but there is some indication that the courts may be moving toward accepting such administrative discretion as allowed under statutes that specify that only health considerations are to govern the standards. According to an interpretation by Federico Cheever, in its latest Endangered Species Act (ESA) cases, the Supreme Court itself has "dropped a few hints that the lower courts should take a more 'reasonable' [that is, balancing] approach to applying the Endangered Species Act."³⁵ Of even greater concern was the industry appeal to the Supreme Court, and resulting pressure on the EPA, to allow cost to be a constraining factor in the delegation of national ambient air quality standards to the EPA.³⁶

In any event, although the possibility of the EPA using Rebecca inappropriately in the administration of environmental laws is of concern, it is, at least for now, a legal issue, and one that can be resolved by challenging such actions if and when they occur. Far more important are the attempts to bring Rebecca policy into our laws themselves, which would then allow or require Rebecca cost-balancing principles to be used in the administration of environmental law.

At the legislative level, the policy in environmental statutes of utilizing cost in remedy selection alone has begun to give way in cer-

32 See, e.g., *Big Rivers Elec. Corp. v. EPA*, 523 F.2d 16, 21 (6th Cir. 1975) (recognizing that infeasibility of technological controls might allow a change in the overall goal of maximum pollution reduction).

33 See PETER S. MENELL & RICHARD B. STEWART, *ENVIRONMENTAL LAW AND POLICY* 237-38 (1994).

34 See MARC K. LANDY ET AL., *THE ENVIRONMENTAL PROTECTION AGENCY: ASKING THE WRONG QUESTIONS* 65-70 (1990) (describing how benefit-cost considerations were factored into the EPA's decision to alter the ozone standard from .08 parts per million (ppm) to .12 ppm).

35 Federico Cheever, *Butterflies, Cave Spiders, Milk-Vetch, Bunchgrass, Sedges, Lilies, Checker-Mallows and Why the Prohibition Against Judicial Balancing of Harm Under the Endangered Species Act Is a Good Idea*, 22 WM. & MARY ENVTL. L. & POL'Y REV. 313, 314 (1998).

36 Linda Greenhouse, *Attack on Clean Air Act Falls in High Court*, N.Y. TIMES, Nov. 8, 2000, at A1.

tain arenas to competing policies that seek to compare costs of managing risks with the supposed benefits of that management. Although already adopted policies do not represent a wholesale introduction of Rebecca, they do show a general "creep" toward a paradigm of cost-balancing, which could in turn pave the way for Rebecca on a full scale as seen in proposed legislation. For instance, the Food Quality Protection Act of 1996 (FQPA),³⁷ which amended both the Federal Insecticide, Fungicide, and Rodenticide Act³⁸ and the Federal Food, Drug, and Cosmetic Act,³⁹ requires the EPA to determine combined risk assessments for agricultural chemicals and compare them to an "acceptable" level of health risk, as opposed to simply banning all "cancer-causing" agents or food with cancerous residue.⁴⁰ This is probably not a full-scale implementation of Rebecca, however, as it can be argued that the FQPA merely reflects a more sophisticated analysis of cancer risk and not necessarily an abandonment of the desire for total protection of the public. Presumably an "acceptable" level of health risk is at or near zero. Far more profound are the proposals that would adopt the core Rebecca policy—balancing costs of control with a limited list of measurable objective benefits—as a major change to existing environmental statutes.

In 1995, Senator Gorton unveiled Senate Bill 768,⁴¹ which would have dramatically rewritten the ESA by, among other things, incorporating benefit-cost analysis.⁴² The bill restricted the definition of prohibited "harm" of an endangered species to those actions that *directly* result in the injury or death of the animal or plant.⁴³ Moreover, protections for sub-populations would have been substantially reduced unless the Secretary of the Interior found that stricter measures were "in the national interest."⁴⁴ Further, the bill required federal officials to consider economic factors and apply cost-benefit analysis to pro-

37 Food Quality Protection Act of 1996, Pub. L. No. 104-170, 110 Stat. 1513 (codified as amended in scattered sections of 7 U.S.C. and 21 U.S.C.).

38 7 U.S.C. §§ 136–136y (1994 & Supp. IV 1998).

39 21 U.S.C. §§ 301–396 (1994 & Supp. IV 1998).

40 Under the Federal Insecticide, Fungicide, and Rodenticide Act, "unreasonable adverse effects on the environment" can refer to a human dietary risk resulting from use of a pesticide that is not inconsistent with 21 U.S.C. § 346 (1994). See 7 U.S.C. § 136(bb) (1994 & Supp. IV 1998).

41 Endangered Species Act Reform Act of 1995, S. 768, 104th Cong. § 309 (1995).

42 See Timothy Egan, *Industries Affected by Endangered Species Act Help a Senator Rewrite Its Provisions*, N.Y. TIMES, Apr. 13, 1995, at A20.

43 See *Government & Commerce: Endangered Species Act*, 53 CONG. Q. WKLY. REP. 2640, 2641 (1995).

44 See Tom Kenworthy, *Panel Supports Stronger Species Act; Effect of Study on Upcoming Hill Environmental Debate Seen as Questionable*, WASH. POST, May 25, 1995, at A3.

posed efforts to protect a species.⁴⁵ The Secretary of Interior or Commerce, depending on the species in question, would then decide when, how, and whether to save a species.⁴⁶

Specifically, section 309 of the proposed bill, titled "Requiring Risk Assessment and Cost Benefit Analyses in the Consultation Process,"⁴⁷ would have amended the existing section 7(b) of the ESA⁴⁸ by adding language mandating that the Secretary estimate the costs and the benefits of any action taken under the ESA.⁴⁹ This amended section would bring cost-consciousness into the equation for conservation of species.⁵⁰ Costs to be considered included those "to the Federal Government, State and local governments, the applicant, and the private sector . . ." ⁵¹ Further, "quantifiable measures of costs and benefits" as well as "qualitative measures that are difficult to quantify" were to be evaluated.⁵²

Under Gorton's amendment, economic considerations would not be considered in the actual listing process.⁵³ However, once a final listing decision was made, the Secretary would convene a planning and assessment team to review the biological, economic, and intergovernmental impacts of the listing decision.⁵⁴ Under current law, the Secretary must provide for the full recovery of a species once it is listed.⁵⁵ Gorton's bill would have changed this by providing the Secretary with a range of options, including the option not to seek recovery if it were not cost-beneficial.⁵⁶

Environmentalists saw the Gorton bill "as an effort to gut the Endangered Species Act" for the benefit of industry.⁵⁷ Indeed, the National ESA Reform Coalition and the Endangered Species Coordinating Council, lobbies whose members included many industries that would have been most affected by its outcome, drafted the

45 See *Government & Commerce: Endangered Species Act*, *supra* note 43, at 2641.

46 See Egan, *supra* note 42, at A20.

47 Endangered Species Act Reform Act of 1995, S. 768, 104th Cong. § 309 (1995).

48 16 U.S.C. § 1536(b) (1994).

49 S. 768.

50 141 CONG. REC. S7611 (daily ed. May 26, 1995) (statement of Sen. Craig).

51 S. 768.

52 *Id.* § 309(5)(A)(iii)(II).

53 See 141 CONG. REC. S6339, S6340 (daily ed. May 9, 1995) (statement of Sen. Gorton).

54 See *id.*

55 See 16 U.S.C. § 1533(d) (1994).

56 See 141 CONG. REC. S6339, S6340 (daily ed. May 9, 1995) (statement of Sen. Gorton).

57 *Government & Commerce: Endangered Species Act*, *supra* note 43, at 2641.

proposed amendment.⁵⁸ However, the bill, referred to the Senate Committee on Environment and Public Works, did not even have the support to make it out of committee.⁵⁹ Thus, the Senate never voted on Senate Bill 768 during the 104th session, and Gorton did not reintroduce an ESA re-authorization bill in the 105th Congress. However, the Rebecca principles embodied in the proposal and the possibility of re-introduction remain. The bill's supporters and the history of the bill's introduction also illuminate that political and economic interests, not necessarily more rational regulation, lie behind such a change in policy.

Some CERCLA re-authorization proposals have also attempted to utilize risk based cleanups and limitations on benefits to be considered instead of full protection of human health or the environment. In October, 1995, Representative Mike Oxley (R-Ohio) introduced House Bill 2500, Reform of Superfund Act of 1995 (ROSA), in an attempt to amend CERCLA.⁶⁰ The bill proposed that a form of risk based corrective action, wherein costs are to be considered in determining whether and how to conduct CERCLA cleanups, be legislatively adopted for CERCLA.⁶¹ Specifically, ROSA would have required the EPA or a delegated state to give primary consideration to "cost-effectiveness" and "cost-reasonableness" in remedy decisions.⁶² This emphasis on costs in the level of cleanup or level of health protection is in stark contrast to current law, which provides that the EPA first meet the goal of "protection of human health and the environment before a remedial alternative is acceptable."⁶³

Even after utilizing benefits and costs in the remedy decision, ROSA would have also required the EPA or a delegated state to conduct an additional strict benefit-cost analysis of any proposed remedial action.⁶⁴

As characterized by its critics, ROSA "expressly limits protection to the '90th percentile of exposure probability distribution,' in effect designating the ill, the old, the previously exposed, and the nation's

58 *See id.* Members included Chevron, Kaiser Aluminum, the Idaho Power Company, and other companies that object to environmental restrictions on logging, mining, and other industrial activity. *See id.*

59 *See Bill Tracking S 768*, LEXIS, 1995 Bill Tracking S. 768.

60 Reform of Superfund Act of 1995 (ROSA), H.R. 2500, 104th Cong. (1995).

61 *See id.* § 102.

62 *Id.*

63 JOHN S. APPLGATE ET AL., *THE REGULATION OF TOXIC SUBSTANCES AND HAZARDOUS WASTES* 907 (2000).

64 *See* H.R. 2500 § 102.

children as sacrifice populations."⁶⁵ Again, there was also some concern that the goal was not really cost-effectiveness or "rationality" but the blocking of environmental enforcement. Some critics were concerned that with the combination of benefit-cost analysis and site-specific risk assessments, the length of time associated with the cleanup process could be increased if the implementors of the program were forced into an excessive level of detail through the benefit-cost test.⁶⁶

While the bill was approved by the House Subcommittee on Commerce, Trade, and Hazardous Materials, further progress of the bill was delayed by budgetary problems with costs of retroactive repeal.⁶⁷

While not explicitly requiring a balancing of benefits and costs, there have been other legislative proposals that have sought to quantify these numbers, and this may have the effect of reducing environmental protection, as compared to costs, by simply eliminating a consideration of certain environmental values. On February 4, 1999, Representative Richard Pombo (R-California) introduced a bill that would require independent peer review of scientific data used in support of all federal regulations.⁶⁸ The Science Integrity Act, House Bill 574, also calls for federal agencies to have an independent peer review process in place by January 1, 2001.⁶⁹ Review panels would consist of at least two, but not more than five, outside experts selected by "the head of each Federal department or agency which issues or may issue regulations supported by scientific data."⁷⁰ The bill specifies certain criteria that agency heads must follow in creating a list of individuals that are qualified to perform peer review functions.⁷¹ Further, a final rule could not be issued until 30 days after Congress received "(1) each peer review report; (2) all scientific data used in support of the proposed regulation or requested by a peer reviewer; (3) the response of the head of the department or agency to points of disagreement, if any, among the peer reviewers; and (4) all public comments received."⁷²

65 *Reform of Superfund Act of 1995: Hearings on H.R. 2500 Before the Subcomm. on Commerce, Trade, and Hazardous Materials*, 104th Cong. 291 (1995) (statement of Frances Dunham, Citizens Against Toxic Exposure).

66 *See id.* at 31 (statement of James Colman, Assistant Comm'r, Mass. Bureau of Waste Site Cleanup).

67 *See Superfund Retro-Repeal Dropped*, ENVTL. LIABILITY REP., Oct. 1, 1995, at 3.

68 *Briefs*, PESTICIDE & TOXIC CHEMICAL NEWS, Feb. 18, 1999, 1999 WL 9623462.

69 Science Integrity Act, H.R. 574, 106th Cong. (1999); *Briefs*, *supra* note 68.

70 H.R. 574 § (2)(a).

71 *See id.* § (2)(b)-(c).

72 *Id.* § (2)(g)(1)-(4).

The purpose of the bill, according to one Pombo staffer, is to make federal agencies accountable for the science on which they base decisions in the same manner as scientists outside federal agencies.⁷³ However, critics claim that the Science Integrity Act would increase the costs of developing new regulations by requiring agencies to pay peer reviewers for their work and by providing another level of oversight that agency scientists would have to go through to issue regulations.⁷⁴ This, and similar provisions that have been pushed since the 104th Congress,⁷⁵ may not overtly require benefit-cost analysis, but the effect is to force agencies to justify costs incurred by the regulated community. In other words, the provisions create pressure to ensure that all regulation costs are based on similarly severe, quantifiable risks, as that term is understood by Congress.⁷⁶ Such regulatory sleight of hand has been documented at the EPA,⁷⁷ and to the extent that more pressure is applied to the agency to generate such information, there is no reason to believe that such legislative proposals will not encourage the expansion of such methods, particularly when the standard of review of the agency's actions is so deferential.⁷⁸

House Bill 574 is substantially similar to House Bill 3234, a bill introduced in the 105th Congress.⁷⁹ Representative Pombo introduced House Bill 3234 on February 12, 1998, and it was referred jointly to the Committee on Government Reform and Oversight and the Committee on Science.⁸⁰ However, the bill never made it out of committee and was not carried over to the following session.⁸¹ Thus, Representative Pombo reintroduced this similar bill with hopes of gaining more support in the 106th Congressional Session.⁸² Even if this fails, it seems that the pressure to increase the use of this peer review process means that similar proposals will continue for the foreseeable future.

⁷³ *House Bill Would Require EPA Science to be Peer Reviewed*, INSIDE EPA, Feb. 19, 1999, at 13.

⁷⁴ *Id.*

⁷⁵ *See Flatt, supra* note 4, at 586 n.4.

⁷⁶ *See id.* at 606-07.

⁷⁷ *See id.* at 601.

⁷⁸ *See id.* at 608 (providing citations).

⁷⁹ *See Brief Notes: Rep. Richard Pombo (R-Calif.)*, FOOD CHEMICAL NEWS, Feb. 23, 1998, 1998 WL 10981274.

⁸⁰ *Id.*

⁸¹ *See Bill Tracking H.R. 3234*, LEXIS, 1998 Bill Tracking H.R. 3234.

⁸² *See House Bill Would Require EPA Science to be Peer Reviewed, supra* note 73, at 13.

II. SO WHAT IS WRONG WITH REBECCA? PROBLEMS WITH THE PROCESS

A. *Problems with the Determination of Relevant Environmental Values*

The problems with Rebecca are manifold. First, with any type of balancing of costs and benefits, there may be problems with the determination and/or calculation of the values themselves. These problems are exacerbated in the environmental context because of uncertainties and the attempts to control these uncertainties by limiting the consideration of important environmental values.⁸³ Which values are to be considered in such a system? The problem of input consideration can arise even if an agency is not balancing health against cost but simply comparing costs of alleviating the "same" harm. In general, most of our current environmental programs recognize the importance and need of protecting the environment as well as human health.⁸⁴ However, when cost-based decisions designed to lessen risk are utilized administratively, as in CERCLA for instance, the consideration is usually human risk,⁸⁵ and this takes the focus off of Congress's concern about other environmental harms. Although CERCLA is usually classified as a statute designed to protect human health, certain provisions suggest that remediation or cleanup is designed to effectuate other purposes, such as restoring natural resources to their prior condition and protecting environmental health generally.⁸⁶ CERCLA's section 102 clearly indicates that the administrator may designate a substance as hazardous under the Act if it presents substantial danger to the public health or welfare *or the environment*.⁸⁷ Capping a field with concrete for industrial purposes may protect human health as much as cleanup to pristine standards and thus may be favored under an administrative use of Rebecca, but the two remedies are clearly not identical in terms of environmental assistance. Many environmental values that are less tangible than protection of human health are clearly indicated in our environmental laws and are important to many people.⁸⁸ Introduction of wider benefit-

83 See, e.g., Science Integrity Act, H.R. 574, 106th Cong. (1999); *supra* notes 69–72 and accompanying text.

84 See Flatt, *supra* note 11, at 1719–20.

85 See Wyeth, *supra* note 24, at 10,358.

86 See 42 U.S.C. §§ 9602(a), 9607(a)(4)(C) (1994).

87 42 U.S.C. § 9602(a) (1994).

88 See Victor B. Flatt, *The Human Environment of the Mind: Correcting NEPA Implementation by Treating Environmental Philosophy and Environmental Risk Allocation as Environmental Values Under NEPA*, 46 HASTINGS L.J. 85, 97–101 (1994) (providing citations).

cost analysis, either by a limitation of values to be considered or by wholesale changes in risk balancing, will clearly lessen or discard heretofore important environmental values.

B. Problems with Calculation of Values

Second, even if Rebecca proposals sought to explicitly preserve these "important" environmental values, the uncertainties present in quantifying these benefits and balancing them against costs would be extremely difficult and likely would discount these important values. Any attempt to balance costs of risks with benefits of controlling those risks must face the harsh reality that risk assessment is an inexact science. The futility of objective assessment can be seen in the nature of the term "risk" itself. As explained by Howard Kunreuther and Paul Slovic:

The dominant conception views risk as "the chance of injury, damage, or loss." The probabilities and consequences of adverse events are assumed to be produced by physical and natural processes in ways that can be objectively quantified by risk assessment. Much social science analysis rejects this notion, arguing instead that risk is inherently subjective. In this view, risk does not exist "out there," independent of our minds and cultures, waiting to be measured. Instead, human beings have invented the concept [of] risk to help them understand and cope with the dangers and uncertainties of life. Although these dangers are real, there is no such thing as "real risk" or "objective risk." The nuclear engineer's probabilistic risk estimate for a nuclear accident or the toxicologist's quantitative estimate of a chemical's carcinogenic risk are both based on theoretical models, whose structure is subjective and assumption-laden, and whose inputs are dependent on judgment. . . . [N]onscientists have their own models, assumptions, and subjective assessment techniques (intuitive risk assessments), which are sometimes very different from the scientists' models.⁸⁹

Even among "objective" scientists there is disagreement. There are often different risk assessments given on the same data, depending on for whom the risk assessor is working.⁹⁰ The EPA's problems with this inexact science are exacerbated by the fact that the EPA has poor data quality to begin with and therefore starts any potential risk

⁸⁹ Howard Kunreuther & Paul Slovic, *Science, Values, and Risk*, 545 ANNALS AM. ACAD. POL. & SOC. SCI. 116, 119 (1996) (citations omitted).

⁹⁰ See JOHN A. HIRD, *SUPERFUND: THE POLITICAL ECONOMY OF ENVIRONMENTAL RISK* 52 (1994).

assessment at a disadvantage.⁹¹ As stated by Michael Gerrard in his review of books examining risk assessment:

A total of about fifty steps have been counted in the conduct of a risk assessment; each is full of uncertainty and susceptible to challenge. When it is all added up, the range of uncertainty is so great that it is like not knowing whether you have enough money to buy a cup of coffee or enough to pay off the national debt.⁹²

With respect to the ESA, in which Rebecca-type changes have been proposed, much "hard" data is extremely uncertain. As noted by Holly Doremus in her insightful article examining the use of scientific data in ESA listing decisions, data gathering must be supplemented by experimental manipulation of the data in order to confirm or reject theories of species survival and preservation.⁹³ However, with respect to doing experiments on real animal populations in the real environment, field experiments "are often expensive and fraught with practical difficulties."⁹⁴ Doremus explains some other difficulties of field experiments:

They also might be precluded by ethical considerations; it might be illegal or immoral to introduce a pathogen to an island ecosystem. Even if ethically permissible, field experiments often produce less reliable data than laboratory experiments because the field experimenter cannot hope to control all of the many variables

. . . .

. . . [A]ll data is to some degree equivocal. Observations of the natural world are an unavoidably messy business.⁹⁵

With such difficulty come calls for discounting these environmental values, which is similar to the problem identified earlier of failing to acknowledge certain environmental values at all. As the EPA has moved to demonstrate the necessity of regulation by producing benefit-cost justifications for regulations, cries of "poor science" are going up. According to *Inside EPA*, there are concerns that the agency is going to "set a dangerous precedent [in its first ever cost-benefit calculation for a rule under the Safe Drinking Water Act] by overestimating

91 See *GAO Blasts EPA Data Management in Face of Proposed Reforms*, *INSIDE EPA*, Jan. 29, 1999, at 13-14.

92 Michael B. Gerrard, *Demons and Angels in Hazardous Waste Regulation: Are Justice, Efficiency, and Democracy Reconcilable?*, 92 *Nw. U. L. Rev.* 706, 729-30 (1998) (citations omitted).

93 Holly Doremus, *Listing Decisions Under the Endangered Species Act: Why Better Science Isn't Always Better Policy*, 75 *WASH. U. L.Q.* 1029, 1059 (1997).

94 *Id.* at 1060.

95 *Id.* at 1060, 1068 (citations omitted).

the health and environmental benefits of the rule."⁹⁶ Congress is also investigating allegations that the EPA engaged in manipulating scientific information to support pre-determined regulatory safety levels.⁹⁷

What these actions indicate is that, with such scientific uncertainty, the supposed gains from requiring "objective" analysis are simply subsumed in the policy decision that the decision-maker wishes to pursue through its selection of various "competing" risk assessment assumptions and models.⁹⁸ Indeed, this may be one of the main reasons behind the popularization of Rebecca recently. As noted by David Wirth and Ellen Silbergeld, pending legislative proposals quite obviously would exacerbate the less desirable aspects of the current system rather than ameliorate them. "In context, it is difficult to characterize the use of risk assessment in the legislative vehicles currently proposed as anything other than an abuse of that methodology, designed not to promote regulatory reform but to impede desirable or necessary regulatory activity."⁹⁹

Even without any overt political biases, it is doubtful if data free from perspective is even possible. As noted by Doremus, "Where reasonably possible, scientists tend to interpret their observations as consistent with whatever theory currently commands the most adherents, even if other interpretations are equally or even more plausible."¹⁰⁰

C. *Problems with Limitations on Public Review and Input*

A third problem, which is itself not technical, but is the result of the technical complexities of attempting a risk based cost balancing, is that the many layers of risk assessment and scientific review required for such decisions make the resulting decision more inaccessible to the general public.¹⁰¹ Formal risk assessments, buried as they are under statistics, are often difficult for the public to understand. In-

96 *EPA Charged With Overstating Benefits in First Drinking Water Rule Analysis*, INSIDE EPA, Feb. 19, 1999, at 13.

97 *See Congressional Committees to Investigate EPA Science Practices*, INSIDE EPA, Feb. 5, 1999, at 4.

98 *See Flatt, supra* note 4, at 606.

99 David A. Wirth & Ellen K. Silbergeld, *Risky Reform*, 95 COLUM. L. REV. 1857, 1895 (1995) (book review); *see also* Flatt, *supra* note 4, at 607 (arguing that the EPA's utilization of its own values in benefit-cost analysis would minimize the impact of the proposed "Contract with America").

100 Doremus, *supra* note 93, at 1066.

101 *See* Robert W. Collin & Robin Morris Collin, *The Role of Communities in Environmental Decisions: Communities Speaking for Themselves*, 13 J. ENVTL. L. & LITIG. 37, 78-79 (1998); Nancy Perkins Spyke, *Public Participation in Environmental Decisionmaking at the New Millennium: Structuring New Spheres of Public Influence*, 26 B.C. ENVTL. AFF. L. REV. 263, 270, 293 (1999).

deed, even supporters of Rebecca contend that the public is underinformed about risk, indicating a need for greater public involvement and understanding.¹⁰²

This is a grave problem. The increasing opacity that would result from these additional, *scientific* review layers flies in the face of requirements for administrative decision making. Administrative agencies are not directly elected and thus not immediately responsible to the electorate. Public participation is critical in the administrative process as a way to make modern regulation democratic.¹⁰³

In such a situation, only the wealthy and empowered can make arguments based on science. This allows the EPA to make decisions without effective review from all sectors of the public. However, as many of the environmental statutes make clear, the EPA's job is to protect *all* of the public.¹⁰⁴

III. PROBLEMS WITH THE CONCEPT ITSELF

While the foregoing problems with Rebecca are themselves enough to call into question its use in a broad administrative or legislative sense, at least many of these issues of concern, such as the legality of administrative actions and problems with data, have been examined or are generally understood in other contexts.¹⁰⁵ What has yet to be fully explored, with respect to implementation of a pure risk based decision paradigm for environmental decisions generally, is the effect that such proposals will have on society's entitlements to a clean environment and the abandonment of the driving policy in American common law and historic legislation that private actors should not be allowed to shift their costs or harms upon innocent third parties.

102 See BREYER, *supra* note 6, at 20–21.

103 See Spyke, *supra* note 101, at 267.

104 See Toxic Substances Control Act, 15 U.S.C. § 2601(b)(3) (1994) (“[T]he primary purpose of this chapter [is] to assure that . . . such chemical substances and mixtures do not present an unreasonable risk of injury to health or the environment.”); 42 U.S.C. § 300-g-1(b)(3)(A) (1994) (“[T]he contaminant [must be regulated if it] may have an adverse effect on the health of persons.”); see also 33 U.S.C. § 1312(a) (1994) (establishing effluent limitations to maintain water quality to protect the public); 33 U.S.C. § 1314(a) (1994) (providing for development and publication of criteria to protect water quality for public water supplies, wildlife, and recreational activities); 42 U.S.C. § 6902(a)–(b) (1994) (establishing hazardous waste provisions to protect the public); 42 U.S.C. § 7401(b) (1994) (authorizing regulation of hazardous substances that present substantial danger to the public health and welfare); 42 U.S.C. § 9602(a) (1994) (stating the statute’s purpose “to promote public health and welfare”).

105 See generally Flatt, *supra* note 88 (promoting a NEPA analysis that focuses on environmental philosophy and environmental values).

The use of risk based assessments to make regulatory determinations fails to account for the critical element of the allocation of those risks and benefits.¹⁰⁶ As stated in a previous article, many of our environmental laws impose costs upon polluting parties not because these cost impositions are necessarily "economically efficient," but because these parties are the "cause" of the harm.¹⁰⁷ A wholesale reform of administrative decisions through legislation or covert administrative action to simply balance risks with costs (Rebecca) in pollution abatement would represent a retreat from the tried and true policy of forcing the actor to bear the costs of his or her harm or, in the environmental context, the "polluter pays" principle.¹⁰⁸ Although this policy decision is not necessarily off limits to our society, it should be entered into thoughtfully and not as merely an adjunct to creating more efficient administrative decisions.

What is most damning of Rebecca in this context is its divergence from our principles of historic common law and, indeed, our dedication to individual liberty. Before, when we had a problem tracing costs to private parties who had benefited from the harm of others, particularly when that harm was by choice, it was seen as a common law failure to be corrected by legislation.¹⁰⁹ Rebecca would turn this correction of the common law on its head and create a safe harbor for defendants that has never existed at common law.

A general examination of the historic common law of compensation does not provide justification for Rebecca principles in our environmental laws. The predominant model of civil liability in the common law of torts is negligence.¹¹⁰ Though there appears to be some superficial similarities between Rebecca and the economic justi-

106 See Flatt, *supra* note 11, at 1716.

107 See *id.*

108 See Michael J. Gergen, *The Failed Promise of the "Polluter Pays" Principle: An Economic Analysis of Landowner Liability for Hazardous Waste*, 69 N.Y.U. L. REV. 624, 627-28 (1994) ("[C]ommon law liability rules are consistent with a popular adage among environmental economists and legal scholars which asserts that the polluter should bear direct responsibility for the cost of the pollution she imposes on the rest of society—the 'polluter pays' principle."); see also John R.E. Bliese, *Conservative Principles and Environmental Policies*, 7 KAN. J.L. & PUB. POL'Y, Spring 1998, at 1, 26-27 (discussing the "polluter pays" principle as a means by which the negative externalities involved in production and consumption are internalized in the market price of the product); Susan R. Poulter, *Cleanup and Restoration: Who Should Pay?*, 13 J. LAND USE & ENVTL. L. 77, 85 n.47 (1998) ("Polluters must live by this simple rule: If you pollute our environment, you should pay to clean it up." (quoting President Clinton, 1997 State of the Union address)).

109 See Flatt, *supra* note 11, at 1716.

110 RICHARD A. EPSTEIN, *CASES AND MATERIAL ON TORTS* 115 (6th ed. 1995).

fication sometimes put forward for the boundaries of negligence liability, a closer look shows this comparison to be flawed.

First, it should be recognized that the negligence standard is not designed exclusively to promote economic efficiency.¹¹¹ Fairness is also a traditional justification for our common law of torts.¹¹² Though negligence may occasionally lead to unfair results, generally, the failure to hold defendants liable can be justified on the fairness ground that precautions that the defendant could have taken to avoid the harm were not reasonable and that it would thus be unfair to penalize defendants without fault.¹¹³ No such assertions of "fairness" can be made about Rebecca. While certain narrow analyses of cost efficiency may suggest that a defendant should not clean up her own mess or, as suggested by Justice Breyer, should not clean up the "last ten percent" of the mess,¹¹⁴ this can hardly be justified by any claim of fairness. We rarely consider it fair to let parties cause harm to other parties, because the first parties would receive some benefit. To paraphrase Lisa Heinzerling: we do not let one person shoot another, because the shooter might enjoy it a lot!¹¹⁵ And though economists have struggled mightily to explain the difference between this concept and the concept of letting known, purposeful risks fall on innocent parties, all evidence indicates that allowing environmental harms to knowingly fall on innocent victims is just as egregious and just as unfair as the former situation. As stated by Kai Erikson in *A New Species of Trouble: Explorations in Disaster, Trauma, and Community*:

People who are victimized by [environmental harms] feel a special measure of distress when they come to think that their affliction was caused by other human beings. And that sense of injury becomes all the sharper and more damaging when those other human beings respond to the crisis with what is seen as indifference or denial.¹¹⁶

Moreover, the rallying cry of so-called economic efficiency in Rebecca regulation is not the same as the economic efficiency that is said to be at the heart of the common law of negligence, precisely because the economic efficiency of negligence does not seek to leave burdens on a plaintiff placed there purposefully for the enrichment of a defen-

111 See KENNETH S. ABRAHAM, *THE FORMS AND FUNCTIONS OF TORT LAW* 64 (1997) ("There are, of course, other values worth promoting besides economic efficiency.").

112 See *id.*

113 EPSTEIN, *supra* note 110, at 155.

114 BREYER, *supra* note 6, at 11-12.

115 Lisa Heinzerling, *The Rights of Statistical People*, 24 *HARV. ENVTL. L. REV.* 189, 189 (2000).

116 KAI ERIKSON, *A NEW SPECIES OF TROUBLE: EXPLORATIONS IN DISASTER, TRAUMA, AND COMMUNITY* 129 (1994).

dant. Judge Posner's respected writings on the common law of torts have indeed suggested that decisions in the common law of negligence can be explained by showing that the common law systematically allows the harm to fall on the person who can avoid that harm at least cost, thus increasing society's overall wealth and economic efficiency by not requiring precautions by a defendant when the precaution is more expensive than the probability of loss times the magnitude of that loss.¹¹⁷ Indeed, this principle is even stated as a formula, introduced by Judge Learned Hand, for determining whether certain actions on the part of a defendant are reasonable and therefore immune from negligence liability.¹¹⁸

However, the simplistic application of this "economic efficiency" to environmental cleanups and protections proposed under Rebecca fails to account for half of the equation. For instance, the Rebecca application to CERCLA cleanup processes only examines economic efficiency *after* the creation of the harm. Rebecca has not been proposed, nor justified, on the theory that it was more expensive for the polluter to control the original disposal of the pollutant than to simply let it be a health hazard to the public. Presumably, relatively simple precautions such as disposal in non-leaching landfills, as required by the Resource Conservation and Recovery Act of 1976,¹¹⁹ would be cheaper than the wholesale harm that can result from human exposure to uncontrolled toxins.

Common law does not recognize *ex ante* economic efficiency as its primary goal. If it did, we would never compensate the plaintiff for loss, since the mere transfer of assets from the defendant to the plaintiff would be more inefficient to society as a whole than simply letting the plaintiff bear the burden of the loss. In such a case, after the harm has already occurred, it almost always would be better for society to allow the plaintiff to bear his or her own costs due to the cost of money transfers, the cost of proof, and other transaction costs.¹²⁰ Clearly with respect to that one transaction, society as a whole would be better off if the loss were born by the plaintiff because total wealth

117 See Richard A. Posner, *A Theory of Negligence*, 1 J. LEGAL STUD. 29, 32-33 (1972).

118 See *United States v. Carroll Towing Co.*, 159 F.2d 169, 173 (2d Cir. 1947) (Hand, J.) ("Possibly it serves to bring this notion into relief to state it in algebraic terms: if the probability be called P; the injury, L; and the burden, B; liability depends upon whether B is less than L multiplied by P: i.e., whether B is < PL.").

119 See 42 U.S.C. § 6924(o) (1994 & Supp. IV 1998).

120 As stated by Justice Holmes, the allocation of tort responsibility based on fault is a "cumbersome and expensive machinery." HOLMES, *supra* note 16, at 96. However, we avail ourselves of this shift of cost because there is "some clear benefit . . . to be derived from disturbing the status quo." *Id.*

would increase. However, our law of negligence rejects this theory. This rejection is not only due to fairness, but also classical economic theory, as it would provide an incorrect incentive to avoid precautionary approaches when that would be cheaper than post-event compensation. But this same justification could apply to preventing the adoption of Rebecca policies as well. By allowing parties to escape liability for harm simply because the remediation of that harm is more costly than doing nothing, one encourages these parties not to take the proper cost-effective precautions to control the harm before it occurs.¹²¹ Laws such as CERCLA or underground storage tank laws are consistent with the economic underpinnings of negligence in that they encourage cheaper pro-active behavior rather than after-the-fact correction. Even in our modern society, an ounce of prevention is still worth a pound of cure. The failure to heed that advice should not result in the perpetrator getting to throw the pound of loss onto another.

Moreover, under the classical Coase theorem of the common law, entitlement allocation under the common law would only be economically rational if it helped reduce transaction costs by letting the entitlement rest at the point of wealth maximization.¹²² Indeed, our whole notion of fairness may grow out of this simple common sense notion. From the Coase viewpoint, any allocation of entitlements that follows from the application of the Learned Hand, or economic efficiency, theory of negligence must be justified because transaction costs are not zero, and the entitlements should thus be placed to allow the lowest cost of bargaining.¹²³ This in turn will result in economic efficiency. Or to state it in Learned Hand's terms: negligence allows the defendant to avoid taking precautions that might lead to plaintiff harm if the plaintiff can more efficiently avoid or weather that harm.¹²⁴

Yet this justification does not exist for the application of Rebecca in the environmental context. In most environmental situations,

121 This is also one reason why using a modified version of Rebecca, wherein some control costs (up to the level of protective benefit) are still charged to the defendant, is not any better. Although the defendant may spend *some* money on the clean-up, the possibility of escaping liability altogether and the uncertainty of the liability amount would again not provide enough incentive to push the defendant into taking cost-effective precautions.

122 Brenda Greenberg Bryn, *Refusals to Cross Stranger Picket Lines and the Wealth Maximization Principle: An Economic Analysis of the Views of the NLRB and Judge Posner*, 41 U. MIAMI L. REV. 533, 542 (1987).

123 *Id.*

124 See EPSTEIN, *supra* note 110, at 205.

plaintiffs have no real control over their level of exposure, and throwing the burden of precaution on them would neither prevent the harm nor allow them to determine the appropriate level of harm avoidance. Thus, the defendant cannot use economic efficiency to justify requiring the plaintiff to bear the imposed environmental harm simply because the cost of precaution is higher than the cost of harm; economic efficiency would exist simply by requiring the defendant to pay the cost of the harm to the plaintiff in lieu of the cost of precaution.¹²⁵

Taking a step back from negligence and looking at it in the context of the evolution of tort laws over the centuries brings the importance of the preservation of the plaintiffs' entitlements into sharp relief throughout our common law of harm compensation. The shift in the nineteenth century from a system of predominant strict liability to one of negligence is one of the watersheds of tort law.¹²⁶ It worked a major change in how injury losses would be allocated.¹²⁷ However, this change, revolutionary though it seems, still did not change the ultimate allocation of responsibility in law or the entitlement to be free from externally imposed harm and provides no justification now for moving to risk based administration. According to the *Restatement (Third) of Torts*, the reasonable person standard in negligence is strongly predicated on foreseeability, not economic feasibility.¹²⁸ The so-called balancing test only comes into play to question what the defendant should have endeavored to learn—not what the defendant already knew.¹²⁹

Applying this reasoning to the environmental context strongly discourages the adoption of Rebecca. Most of the parties regulated under the environmental laws are business entities who have profited from their actions. The production of pollution, or the potential danger of that pollution, may not have been regulated by the law at one time, but that does not indicate that the harms from these wastes were not foreseeable, that containing their risks was not manageable, or that their release was not similar to a breach of duty at common law. Indeed, the extent that negligence does not countenance such risk shifting may show why overall economic efficiency is not the sole, ulti-

125 *Id.* at 201-02.

126 *See id.* at 52.

127 *See id.*

128 *See* RESTATEMENT (THIRD) OF TORTS § 48 (Discussion Draft, Apr. 5, 1999) (on file with the author).

129 *See id.*

mate goal of negligence and why *reasonable* behavior in negligence is not necessarily the same as *rational* economic behavior.¹³⁰

This distinction is illustrated by a close examination of the history of torts, which indicates that the shift from strict liability to negligence as the predominant theory of tort compensation really was only to assist in the efficiency of allocation based on proof, not "economic efficiency" as that term is used in benefit-cost analysis. As harms grew more remote from their causes, there were simply some actions that were impossible to prevent, some harms that were impossible to allocate, or some cases in which determining appropriate levels of precaution was simply economically prohibitive. The economic efficiency justification of negligence thus goes only to the reasonableness of the precautions, not to any choice to allow harm to be inflicted knowingly on the plaintiff.

Historically, a form of strict liability governed allocation of losses.¹³¹ At that time, the form of the case dictated the standard by which liability attached to actions. The general writ for a tortious harm was "trespass," which alleged that the defendant caused a direct and traceable harm to the plaintiff.¹³² It was well settled that the defendant should compensate the plaintiff for any harm caused by the defendant. It was only later, when more complex cases could not allege an immediate and direct harm, that the concept of negligence (or indirect harm) arose in the "trespass on the case."¹³³

However, the rise of "trespass on the case" was not linked with any new theory regarding fault or the policies of liability or even a restriction on the liability of the defendant. Instead, it worked an expansion in the protection of plaintiffs by creating a way to compensate in situations in which the "trespass" pleadings "could by no extension of their ordinary meanings apply."¹³⁴ The kind of cases requiring the "trespass on the case" pleading continued to grow as commerce and transportation (with its attendant harms) increased.¹³⁵

Thus, the emergence of negligence did not deprive potential plaintiffs of legal entitlements that they already enjoyed. The emergence of negligence *increased* the universe of potential defendant liability from the historical case, wherein a direct harm and force was alleged, to the doctrine that a defendant's inaction or removed action

130 See Robert L. Rabin, *The Historical Development of the Fault Principle: A Reinterpretation*, 15 GA. L. REV. 925, 959-60 (1981).

131 See EPSTEIN, *supra* note 110, at 93, 97.

132 See *id.* at 104-05.

133 See *id.*

134 *Id.* at 105.

135 See *id.*

could make that defendant liable.¹³⁶ Indeed, it has been stated that, far from a retreat from absolute liability, the emergence of negligence is part of a long line of cases that increase or advance liability and increasingly protect the plaintiff.¹³⁷ Under this theory, when we examine the removal of barriers to sue and the temperance of strict defenses to tort liability, we as a society have been *increasing* each individual's entitlement to protection of her own health or well being.¹³⁸

The doctrine of traditional strict liability, therefore, is not one that is alien to the notion of negligence, but one that gave rise to the concept of negligence. Negligence, although appearing to create a fault-based scheme in derogation of strict liability, should instead be seen as a system that deals with the increasing complexity of tracing harms in a more technical and complex society. Thus, the emergence of negligence did not really change the proposition that a party is responsible for the harm that he or she causes.

This recognition of complexities in tracing harms and faults has its counterpart in modern environmental law. The Clean Air Act recognizes that hazardous air pollutants must be governed by technology standards rather than through a complete elimination of risk,¹³⁹ and other environmental laws allow technological standards in a nod to the realities of regulation.¹⁴⁰ But this is not an unrestricted license to harm human health up to a cost-beneficial level.

Negligence is thus an innovation in compensation that in no way should be interpreted as allowing plaintiffs to involuntarily lose entitlements to their interests in health and well being. Indeed, when it appears that an unthinking application of negligence law would do such a thing, its strict application has been modified to support a scheme more akin to strict liability.¹⁴¹

136 *See id.* at 114.

137 *See* Rabin, *supra* note 130, at 959-60.

138 *See id.*

139 *See* 42 U.S.C. § 7412(d) (1994).

140 *See generally* 33 U.S.C. § 1311 (1994 & Supp. IV 1998) (establishing the technical requirements for "end of pipe" control though water quality is still taken into consideration); 42 U.S.C. § 7411 (1994) (new source performance standards); 42 U.S.C. § 7521 (1994) (mobile source standards); 42 U.S.C. § 7412(d) (1994) (technological controls of hazardous air pollutants).

141 *See* *Sterling v. Velsicol Chem. Corp.*, 647 F. Supp. 303, 313 (W.D. Tenn. 1986) ("The defendant's enterprise . . . is required to pay its way by compensating for the harm it causes because of its special, abnormal and dangerous character." (quoting RESTATEMENT (SECOND) OF TORTS § 519 cmt. d (1977))); *Smith v. State*, 222 S.E.2d 412, 419 (N.C. 1976) ("[S]ince the public purpose involves injury-producing activity, injuries should be viewed as an activity cost which must be met in the furtherance of

The modern line between negligence and strict liability illustrates this principle well and further demonstrates why Rebecca is an unprecedented departure from our common law. The kind of shift in entitlements suggested by Rebecca is the very type of "liability balancing" that has been explicitly rejected in the modern line of cases that establish strict liability. These cases maintain the plaintiff's entitlement to be free from harm imposed by some external choice or chosen action regardless of the cost of prevention to the defendant.¹⁴²

An obvious comparison is to the tort of nuisance, which imposes liability on a defendant for interfering with the plaintiff's reasonable use and enjoyment of land, irrespective of fault or cost.¹⁴³ Despite the attempts over time to assault this theory with arguments regarding economic efficiency and high abatement costs to the defendant, the doctrine remains firm and essentially unchanged.¹⁴⁴ In *Ensign v. Walls*,¹⁴⁵ the Michigan Supreme Court enjoined a nuisance even though it existed prior to the plaintiff, and thus would, under economic efficiency, presumably be allowed to continue because of prior sunk costs.¹⁴⁶ Thus, even in cases in which activities were perfectly legal at one time, they can still be enjoined to protect the plaintiff's right to be free from hazards. Indeed, both before and after the passage of CERCLA, hazardous waste sites have been held to be nuisances without reference to their economic efficiency or benefit.¹⁴⁷

Even in the rare cases in which courts have refused to enjoin a nuisance based on the economic hardship of doing so, the courts have still recognized the plaintiff's right of entitlement to be free from the nuisance. In the famous case of *Boomer v. Atlantic Cement Co.*,¹⁴⁸ the New York Court of Appeals refused to award an injunction to close a private nuisance but did award the plaintiffs damages based on their right to be free from the nuisance.¹⁴⁹ The court noted that the judg-

public enterprise." See generally George L. Priest, *The Invention of Enterprise Liability: A Critical History of the Intellectual Foundations of Modern Tort Law*, 14 J. LEGAL STUD. 461 (1985) (describing the origins, evolution, and applications of the theory of enterprise liability).

142 See cases cited *supra* note 141.

143 See EPSTEIN, *supra* note 110, at 688.

144 See *id.*

145 34 N.W.2d 549 (Mich. 1948).

146 See *id.*

147 See *Vill. of Wilsonville v. SCA Servs., Inc.*, 426 N.E.2d 824 (Ill. 1981); *State v. Fermenta ASC Corp.*, 608 N.Y.S.2d 980, 985 (N.Y. App. Div. 1994) ("[R]elease or threat of release of hazardous wastes into the environment is a public nuisance" without evidence of fault.).

148 257 N.E.2d 870 (N.Y. 1970).

149 See *id.* at 873.

ment would “fully redress” the plaintiffs.¹⁵⁰ According to this court, the damages award was not in opposition to the prior historic rulings that required the granting of an injunction in cases where substantial damage had been found.¹⁵¹ This is in marked contrast to the use of *Rebecca* that does not simply compare the efficiencies of various complete remedies, but instead balances the proposed remedy against *no* remedy for plaintiffs at all—in other words, a taking away of the victim’s entitlement to be free from harm or at least to be compensated for that harm.

More explicit reasoning against the imposition of *Rebecca* can be seen in the common law of strict liability for ultra-hazardous activities. Most jurisdictions recognize that where an injury is caused by an abnormally dangerous or ultra-hazardous activity of the defendants, absolute or strict liability may be imposed.¹⁵² The origin of this concept of absolute or strict liability is found in an English case decided in 1868, *Rylands v. Fletcher*.¹⁵³ This doctrine, enunciated by Justice Blackburn in the lower court’s opinion, specifies

that the person who for his own purposes brings on his lands, and collects and keeps there anything likely to do mischief if it escapes, must keep it in at his peril, and, if he does not do so, is prima facie answerable for all the damage which is the natural consequence of its escape.¹⁵⁴

However, on appeal to the House of Lords, Lord Cairns introduced the idea that a “non-natural” use of land could result in liability.¹⁵⁵ Lord Cairns indicated that he “entirely concur[red]” with Justice Blackburn, but his reasoning was more narrow.¹⁵⁶ He concluded that the rule of absolute liability applied where a “non-natural” use was introduced onto the land.¹⁵⁷ According to Lord Cairns, “If in conse-

150 *Id.*

151 *See id.* at 874.

152 *See* 57A AM. JUR. 2D *Negligence* § 396 (1989). Absolute liability has been imposed in cases in which an injury is caused by blasting or by the storage of explosives, by trespassing livestock, by the keeping of wild or dangerous animals, by poisons used for the destruction of vermin or for agricultural purposes, or by the use of exceptionally powerful instrumentalities which by their nature cause harm to persons or property over a wide area. *See id.* § 398.

153 3 L.R.-E. & I. App. 330 (H.L. 1868).

154 *Fletcher v. Rylands*, 1 L.R.-Ex. 265, 279 (1866).

155 J.W. Looney, *Rylands v. Fletcher Revisited: A Comparison of English, Australian and American Approaches to Common Law Liability for Dangerous Agricultural Activities*, 1 DRAKE J. AGRIC. L. 149, 154 (1996) (quoting *Rylands*, 3 L.R.-E. & I. App. at 339).

156 *Id.* (quoting *Rylands*, 3 L.R.-E. & I. App. at 340).

157 *Rylands*, 3 L.R.-E. & I. App. at 339–40.

quence of such a use there was an escape onto the land of others, liability would follow."¹⁵⁸

In *Rylands*, the defendants constructed a reservoir on land separated from the plaintiff's land by intervening land.¹⁵⁹ Coal had been mined under the site of the reservoir and under part of the intervening land.¹⁶⁰ Further, the plaintiff had opened an underground "communication" between his own land and the old coal mines under the reservoir.¹⁶¹ Neither the defendants nor the persons employed by them in the construction of the reservoir¹⁶² were aware that such communication existed or that there were any old coal mines under the site of the reservoir.¹⁶³ When the reservoir was filled, the water burst down these shafts and flowed by the underground communication into the plaintiff's mines.¹⁶⁴

Of course, the adoption of *Rylands* is not universal. Some states do not recognize the *Rylands* doctrine of strict liability, but the courts in those jurisdictions often reach the same result by applying nuisance law.¹⁶⁵ Even in those jurisdictions that recognize the *Rylands* doctrine, some courts limit its application to dangerous activities on the land, as opposed to merely non-natural activities.¹⁶⁶ Another limitation on the application of the doctrine is that it has not always applied to damage resulting from the construction and maintenance of ordinary buildings and erections next to the land of an adjacent owner.¹⁶⁷ Finally, some courts hold that no liability exists where the escape of the dangerous substance from the defendant's premises is due to the plaintiff's own fault, an act of God, or acts of third parties that the defendant had no reason to anticipate.¹⁶⁸

158 Looney, *supra* note 155, at 154 (citing *Rylands*, 3 L.R.-E. & I. App. at 339).

159 62A AM. JUR. 2D *Premises Liability* § 758 n.4 (1990).

160 *Id.*

161 *Id.*

162 *Id.* For purposes of the disposition of this case, it was determined that contractors may have been negligent in failing to warn of the underground shafts, but this negligence was not attributed to the landowner. See Bohlen, *supra* note 2, at 298-99.

163 62A AM. JUR. 2D *Premises Liability* § 758 n.4 (1990).

164 *Id.*

165 See Andrew Allen Lemmon, *The Developing Doctrine of Rylands v. Fletcher: Hazardous Waste Remediation Contractors Beware*, 42 LOY. L. REV. 287, 293 (1996); see also Kennedy v. Brandenburg, 470 S.W.2d 789 (Tex. App. 1971) (rejecting the *Rylands* doctrine, but reaching virtually the same result under nuisance law).

166 See Jon G. Anderson, Comment, *The Rylands v. Fletcher Doctrine in America: Abnormally Dangerous, Ultrahazardous, or Absolute Nuisance?*, 1978 ARIZ. ST. L.J. 99, 100 n.5.

167 See *Ainsworth v. Lakin*, 62 N.E. 746, 746 (Mass. 1902).

168 See *Brown v. Gessler*, 230 P.2d 541 (Or. 1951) (holding that, under the rule, the defendant was not liable for damages caused by the escape of water from an exca-

The *Restatement (Second) of Torts* recognizes a rule somewhat similar to the *Rylands* doctrine, making one liable without fault where the activity is considered abnormally dangerous.¹⁶⁹ "Abnormally dangerous" activities are described as dangers that "arise from activities that are in themselves unusual, or from unusual risks created by more usual activities under particular circumstances."¹⁷⁰

The commonalities in the adoption of the *Rylands* doctrine and/or the *Restatement* position militate against the use of Rebecca. Generally, American courts applying the *Rylands* doctrine do not require that a defendant intended for the damage to occur or that the defendant failed to follow a prescribed degree of care.¹⁷¹ "It has often been said that strict liability arises from conduct which is so far legitimate that it will not be enjoined, but it will make the defendant liable when it causes damage."¹⁷² However, courts applying the doctrine do recognize the culpability of choice.¹⁷³ When determining the comparative fault of the parties, many courts hold that "the defendant acting for his own profit or pleasure is more at fault than the innocent plaintiff who has no part in the creation of the abnormal risk."¹⁷⁴ This theory is often referred to as "enterprise liability."¹⁷⁵ The crux of this theory is that the defendant's enterprise will be tolerated by the law, but the costs of accidents resulting from the profit-making activity should be treated as a cost of business to be borne by the defendant's enterprise.¹⁷⁶ Thus, many courts apply *Rylands*, which clearly tells us where the liability lies for such activities.

vation on his premises where he had not brought the water or caused it to be collected therein, but where the accumulation was due entirely to heavy rains).

169 See RESTATEMENT (SECOND) OF TORTS § 519 (1977).

170 *Id.* § 520 cmt. f.

171 See *Peneschi v. Nat'l Steel Corp.*, 295 S.E.2d 1, 5 (W. Va. 1982).

172 *Id.* (quoting WILLIAM PROSSER, LAW OF TORTS 495 n.35 (4th ed. 1971)).

173 See *Peneschi*, 295 S.E.2d at 5.

174 *Id.* at 5-6; see also *Smith v. State*, 222 S.E.2d 412, 419 (N.C. 1976) (concluding that taxpayers who profit from the government's injury-producing activity should bear the cost of the tort liability, not the innocent victims).

175 See sources cited *supra* note 141.

176 See *Mowrer v. Ashland Oil & Ref. Co.*, 518 F.2d 659, 662 (7th Cir. 1975); *Ind. Harbor Belt R.R. Co. v. Am. Cyanamid Co.*, 662 F. Supp. 635, 639-40 (N.D. Ill. 1987), *rev'd*, 916 F.2d 1174 (7th Cir. 1990); see also *Sterling v. Velsicol Chem. Corp.*, 647 F. Supp. 303, 313 (W.D. Tenn. 1986) ("The judicial rationalization seems to be that one who conducts a highly dangerous activity should prepare in advance to bear the financial burden of harm proximately caused to others by such an activity." (quoting CLARENCE MORRIS & C. ROBERT MORRIS, JR., MORRIS ON TORTS, ch. IX, at 231 (2d ed. 1980))); RESTATEMENT (SECOND) OF TORTS § 519 cmt. d (1977).

For an illustration of this concept, one could imagine the situation where the defendant has elephants parachuting onto his farmland to entertain his

What is instructive about the *Rylands* case and its progeny are the commonalities concerning the defendant's profit and the choice of the defendant in carrying out the activity. Indeed, the facts that the defendant may profit from the dangerous activity and that a conscious choice was made to pursue this activity are pivotal in applying this notion of strict liability.¹⁷⁷ These cases center not so much on unreasonably dangerous activities that were still useful and to be allowed, but on the fact that these activities were also *behavioral choices* from which the perpetrator usually gained some kind of profit.¹⁷⁸

The re-emergence of strict liability in *Rylands* re-emphasizes the entitlement of the plaintiff. It is thus further recognition that economic efficiency alone is not the goal of all tort law, but that the economic balancing in negligence is the result of either the plaintiff being unable to efficiently avoid harm or the realities of the defendant's ability to avoid cost when faced with unknown factors. Where

family—in such a case he is acting for his own purposes, and is seeking a profit or benefit while creating an abnormal risk; if the elephant should not land on target but rather on the plaintiff's roof, the plaintiff would be confounded if he had to prove either a negligent pilot or a defective parachute; that would be tantamount to asking about the negligence of the elephant.

57 AM. JUR. 2D *Negligence* § 397 n.96 (1989) (citing *Peneschi*, 295 S.E.2d at 6).

177 See EPSTEIN, *supra* note 110, at 131.

178 Courts have applied the *Rylands* doctrine of strict liability for a variety of "abnormally dangerous" or "ultrahazardous" activities in which the defendant engaged for private purposes. See *Am. Cyanamid*, 662 F. Supp. at 644 (concerning a toxic chemical spill in a shipyard near a residential area); *Opal v. Material Serv. Corp.*, 133 N.E.2d 733, 747 (Ill. App. Ct. 1956) (concerning the use of explosives in a densely-populated residential area); *Kelley v. R.G. Indus.*, 497 A.2d 1143, 1159 (Md. 1985) (concerning the manufacture and sale of "Saturday night special" guns because they were made specifically to kill people, although later repudiated by the Maryland legislature); *Clark-Aiken Co. v. Cromwell-Wright Co.*, 323 N.E.2d 876, 887 (Mass. 1975) (concerning the escape of water from the defendant's failed dam that he erected for his own benefit); *Peneschi*, 295 S.E.2d at 5 (concerning accumulation and use of combustible gas for private purposes); *Vaughan v. Miller Bros. "101" Ranch Wild West Show*, 153 S.E. 289, 290 (W. Va. 1930) (concerning the keeping of an ape for a circus act when the ape escaped and injured someone). However, courts have also refused to extend the *Rylands* doctrine of strict liability to certain activities when the nature and/or location of the activities does not render them "abnormally dangerous" or "ultrahazardous." See *Copier v. Smith & Wesson Corp.*, 138 F.3d 833, 836 & n.3 (10th Cir. 1998) (holding that the manufacture of handguns is not an ultrahazardous activity for which strict liability applies, and noting other jurisdictions that have refused to extend the *Rylands* doctrine to the manufacture and sale of firearms); *Heinrich v. Sweet*, 49 F. Supp. 2d 27, 42 (D. Mass. 1999) (refusing to apply the *Rylands* doctrine to experimental surgeries); *Walker Drug Co. v. La Sal Oil Co.*, 902 P.2d 1229, 1233 (Utah 1995) (refusing to apply strict liability to leakage of gasoline from a gas station in an area of the city where gas stations were common and beneficial to the community).

the factors of precaution are known and in control of the defendant, the Coase Theorem would predict that the entitlement need not be shifted to the defendant.¹⁷⁹ *Rylands* follows this logic by taking away the ability of negligence to award a defendant's considered choice to take the plaintiff's entitlement, even where there is superficial economic feasibility. Thus, even where pre-occurrence precautions may be more expensive than cumulative harm to plaintiff (something that is not highly likely with environmental harms), *Rylands* recognizes that negligence was not meant to be a way for one party to profit, merely because the plaintiff's marginal cost of avoidance was lower than the defendant's cost of precaution. Instead, it simply reasserts the principle that people have a right to their own health and well-being and that this right is not to be taken in profit by another, simply because it is more economically efficient at that point in time. Certainly, economists have explained the *Rylands* doctrine as merely another way to allocate costs rather than a drain on economic efficiency,¹⁸⁰ but this reasoning would apply equally well to Rebecca. If it is too expensive for an economic concern to fully contain or compensate for its risks, then it should not be engaging in those risks in the first instance.¹⁸¹ This doctrine re-emphasizes that tort law is not a system in which efficiency is the complete good, but one in which fairness and rights to one's own health and well-being are the pre-eminent considerations.

Expanding risk based analysis to areas of human health or the environment, such as hazardous waste or endangered species, would eviscerate this principle. People or organizations would be able to choose to undertake an activity for which part of the cost would fall upon others, but these others would not have to be reimbursed—the exact opposite of the holding in *Rylands* and a far cry from simply stating that precautions do not have to be taken if they are unreasonable and/or not practical in the course of daily life. Indeed, where the continuation of the *Rylands* doctrine has recently been challenged in the United Kingdom and Australia, the support of the *Rylands* doc-

179 For discussion of Coase Theorem, see *supra* text accompanying notes 122–26.

180 EPSTEIN, *supra* note 110, at 349.

181 See *Powell v. Fall*, 5 Q.B.D. 597, 601 (1880) (“[I]f the reward which he gains for the use of the machine will not pay for the damage, it is mischievous to the public and ought to be suppressed, for the loss ought not to be borne by the community or the injured person.”).

trine for preserving the plaintiff's entitlement in modern environmental laws has been explicitly recognized.¹⁸²

Interestingly, an examination of the environmental statutes shows how similar they are to the operating principles of common law. For instance, the only real difference between proving harm under CERCLA and the common law is the ease of establishing the prima facie case. Traditional tort law was inadequate to compensate or deter hazardous waste exposures—not because such exposures were to be encouraged or allowed, but because the common law had not evolved to compensate for issues of probabilistic causation. It was not that tort law would not recognize that hazardous waste sites were a breach of the duty of due care *under a negligence standard*, but that causation under this negligence standard was difficult to prove.¹⁸³ Thus, CERCLA is not an expansion of liability without regard to fault so much as it is a way to bring “negligent” parties under the causation net.¹⁸⁴ It is true that CERCLA is a so-called strict liability statute in that “fault” does not have to be proven,¹⁸⁵ but CERCLA is implemented in such a fashion that costs may be paid and/or allocated with respect to fault or wrongdoing.¹⁸⁶ This is not done in the statute itself, because it is difficult to put the burden of allocating responsibility (which would again require proof of a causation element) on the plaintiff.¹⁸⁷

The major criticisms of these environmental statutes and their lack of economic efficiency are in fact no different from a criticism of the underlying common law principles themselves. In *Imposing Individual Liability as a Legislative Policy Choice: Holmesian “Intuitions” and Superfund Reform*, David Spence argues that CERCLA is wrong or “unfair” because it imposes strict and joint and several liability.¹⁸⁸ Although Spence notes that hazardous waste disposal has often been characterized as ultra-hazardous, he claims, without explanation, that CERCLA liability is “broader.”¹⁸⁹ In reality, CERCLA liability is predicated on “imminent endangerment,”¹⁹⁰ which is not the standard normally seen at common law, but is similar to an “ultra-hazardous” risk.

182 See John C. O'Quinn, Note, *Not-So-Strict Liability: A Foreseeability Test for Rylands v. Fletcher and Other Lessons from Cambridge Water Co. v. Eastern Counties Leather PLC*, 24 HARV. ENVTL. L. REV. 287, 295 (2000).

183 See Bender, *supra* note 17, at 268.

184 See Flatt, *supra* note 11, at 1716.

185 See *United States v. Monsanto Corp.*, 858 F.2d 160, 167 (4th Cir. 1988).

186 See *id.* at 173.

187 See *United States v. Wade*, 577 F. Supp. 1326, 1332–33 (E.D. Pa. 1983).

188 David B. Spence, *Imposing Individual Liability as a Legislative Policy Choice: Holmesian “Intuitions” and Superfund Reform*, 93 NW. U. L. REV. 389, 399–400 (1999).

189 *Id.*

190 42 U.S.C. §§ 9604, 9607 (1994 & Supp. IV 1998).

Moreover, joint and several liability under CERCLA is no more problematic than it is for common law torts. In the common law of torts, with multiple defendants, relatively innocent defendants may be saddled with 100% of the liability because, at common law, the relatively innocent plaintiff is favored over the defendant.¹⁹¹ This is no different from the CERCLA context, where it is difficult to see how the “more” innocent defendant, who obeyed all relevant laws at the time of disposal, is not more culpable than the potential victim of the hazardous waste exposure. After all, these are business entities that secured some profit by their actions. If strict and joint and several liability are still valid policies at common law, what makes the “unfairness” imposed by these policies in CERCLA an effective argument for bringing about a change in entitlements in similar environmental laws under the guise of *Rebecca*?¹⁹² Changing CERCLA or other environmental laws to require a benefit-cost analysis of risk in determining remedy would not be a way of moving back to a scheme more akin to negligence, but would be introducing a wholesale change in the entitlements of victims to be free from harm.

CONCLUSION

What has really happened over time? Have we become more sophisticated? Do we as a society really wish to change the way that we allocate harm and view risk? I do not think so. What has happened is that we have become more cynical and, at least in the EPA's (now a mature agency) case, more captured by industry. Thus, it is simply easier to go along with these new proposals about risk allocation that seem to offer more “efficient” management and seem to be more justified under benefit-cost analysis than to really question what is at play and what we may be giving up. One looks in vain to find any real reason to change the underlying principles that we as a society have developed about risk and the allocation of harm. Efficiency is good, but the risk balancing proposed in *Rebecca* is not for efficiency but for a change in our whole paradigm of risk and harm allocation developed in the common law. The drum-beat of benefit-cost analysis has been playing for so long that we have forgotten the pre-eminence we

191 See RESTATEMENT (THIRD) OF TORTS: APPORTIONMENT OF LIABILITY § 15 cmt. a (2000).

192 Some jurisdictions alleviate some of the burden of joint and several liability by the doctrine of comparative negligence, which can relieve some or all of the risk that one defendant will bear the loss of another, insolvent defendant. See *id.* § 188. But even in such a case, the comparison is dissimilar since there generally is no “plaintiff” culpability, which would give rise to the use of a comparative negligence policy. See *id.*

place on the ability of our citizens to protect their own lives. "We do not . . . believe that so long as it is worth \$10 million to one person to see another person dead, and so long as current estimates of the value of human life are lower than \$10 million, it is acceptable for the first person to shoot and kill the second."¹⁹³ At least not yet. But, in the embrace of Rebecca, we are moving in that direction.

This is a big change. Rebecca would move us away from the "polluter pays" principle, which has governed our hazardous waste and pollution laws since their inception, to a "we all pay for economic efficiency" rule. For the good of the State, Rebecca would ask one individual to give up her life or health for another, making a mockery of our preservation of individual liberty. This is nothing less than a wholesale change in legal entitlements.

In conclusion, Rebecca is not what it claims to be. It is not a logical plan for allocating scarce resources. Instead, it is a wholesale change in one of our most bedrock common laws—that the harming party should compensate the victim when that is possible. No theory of the common law of torts suggests that voluntary decisions to impose controllable harms on innocent plaintiffs should not be redressable. Indeed, the examination of the history of common law strikingly indicates that the opposite is true—that the common law has changed to preserve the right to be free from this kind of arbitrary harm. As stated by the commentator Francis Bohlen, this right to be free from such arbitrary and unfairly imposed harm is "a very part of the inner consciousness of the race."¹⁹⁴ We should not reject that consciousness lightly.

193 Heinzerling, *supra* note 115, at 189.

194 See Bohlen, *supra* note 2, at 303.

