Contemporary CERCLA: Reversals of Fortune and Black Holes

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ARTICLES

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I. INTRODUCTION

A. CERCLA Background

Since the 1980’s, contamination phobia has gripped industry, government, and the public. The Love Canal disaster sparked the creation of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA").\(^1\) CERCLA was enacted in 1980\(^2\) and strengthened by the Superfund Amendments and Reauthorization Act in 1986.\(^3\) CERCLA’s focus is twofold: the identification, investigation, and clean-up of contaminated sites and the allocation of financial responsibility for the clean-up.\(^4\)

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As originally enacted, CERCLA did not envision the same type of federal-state partnership as many other environmental statutes like the Clean Water Act,\(^5\) the Clean Air Act,\(^6\) and the Resource Conservation Recovery Act ("RCRA").\(^7\) These latter statutes allow the United States Environmental Protection Agency ("EPA") to transfer primacy under these environmental laws to states to administer, including permitting and enforcement, but subject to the EPA continuing oversight. However, the 2002 Brownfield amendments to CERCLA give states more direct responsibility for cleaning up certain "brownfield" sites.\(^8\)

Although EPA was mainly in charge of CERCLA clean-ups before 2002, it could enter into cooperative agreements with states that can have a lead in some CERCLA clean-ups.\(^9\) Normally, EPA can use federal funds to initiate investigations and clean-ups\(^10\) or it can order responsible parties to conduct clean-ups.\(^11\) When private entities are ordered to conduct a clean-up, they may enforce CERCLA through cost recovery and contribution actions.\(^12\) The Superfund trust fund has primarily financed EPA action over the years.\(^13\) However, the Superfund tax expired in 1995 and was not renewed.\(^14\) This funding void has required continued Congressional resolutions, using interest earned on cost recovery, or reliance on EPA abatement orders to potentially responsible parties, and opened the option for more state involvement in CERCLA clean-ups.

EPA may make extensive use of Superfunds for longer-term remedial actions, but may make only limited use of the Superfunds for short-term removal actions.\(^15\) To be classified as a longer-term

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7. Id. § 6901.
9. 42 U.S.C. §§ 9604(a), (c), (d) (2004).
10. Id. § 9604.
11. Id. § 9606 (2002).
12. Id. §§ 9607, 9613(f) (2005).
14. APPLEGATE, supra note 1, at 1023.
remedial action EPA must declare a site, through a hazard analysis and rule making, to be one of the most contaminated properties in the nation. This declaration will place the site on the National Priorities List ("NPL") and enable the EPA to make almost unlimited use of Superfunds.\footnote{16} NPL status is not required for the short-term removal actions, for EPA abatement orders issued to private parties to clean-up, or for purely private remediation. All clean-ups must follow the National Contingency Plan ("NCP").\footnote{17} The NCP is the blueprint for a CERCLA site's evaluation, investigation, documentation, and remediation. The NCP applies to both private clean-ups as well as EPA clean-ups.\footnote{18}

Perhaps the heart of CERCLA is its cost recovery action, which applies to both EPA and states seeking response cost recovery, as well as to private parties seeking cost recovery or contribution. The elements of CERCLA liability that lead to cost recovery lawsuits are the following: "a release or threatened release, of a hazardous substance, from a facility, which causes the incurrence of response costs, filed against a defendant who is a potentially responsible party."\footnote{19} Potentially responsible parties include those with a status as owner, operator, arranger, generator, and in some cases transporter, of waste at a contaminated property. CERCLA's liability is retroactive, strict, and joint and several.\footnote{20}

CERCLA has not been a failure by any means. After twenty years, 6,400 removal actions reduced immediate threats.\footnote{21} Of 1,450 final

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\footnote{17}{42 U.S.C. § 9602 (2005); 40 C.F.R Part 300 (2005).}

\footnote{18}{40 C.F.R. § 300.700(c)(3)(i) (2005).}


\footnote{20}{MILLAN ET AL., supra note 19, at § 4:11; see also United States v. Chem-Dyne Corp., 572 F.Supp. 802 (S.D. Ohio 1983).}

\footnote{21}{U.S. EPA, Fulfilling the Promise of Earth Day, 5-1 (2000), at www.epa.gov/superfund/action/20years/ ch5pg1.htm (last visited May 20, 2005).}
NPL sites, 219 were deleted and 1,200 have had final clean-up plans approved. Of 59 proposed NPL sites, 28 are already subject to clean-up. Six hundred fifty five-year reviews by EPA of cleaned-up sites have been conducted to ensure effectiveness of prior remedies. Responsible parties have performed over 70 percent of new clean-ups at NPL sites since 1992. Private party settlements have a value of $18 billion. Love Canal has been cleaned up and is now considered a desirable place to live. Three million, four hundred thousand cubic yards of contaminated soil and sediment were cleaned up under EPA in fiscal year 2004. These statistics, however, do not cover the estimated 450,000-1,000,000 brownfield sites in the United States, nor do they assure that performance in terms of human exposure and groundwater contamination are under control. Statistics on contamination are not well tracked worldwide, nor are environmental indicators useful for informed decision-making well developed. EPA estimates that at least $253 billion in today's dollars will still be needed to clean up many of these CERCLA sites, including some brownfield sites, over the next

22. Id.
23. Id.
24. Id.
25. Id.
26. Id.
27. Id.
several decades. \textsuperscript{31} CERCLA’s advancement of our quality of life still can be demonstrated better. Site responsibility should expand, not contract.

This background is the baseline to discuss the scope of CERCLA liability. These various recent developments have changed for the better the poor fortune of some potentially liable parties and created uncertainties or “black holes” for others. They are also the focus of this article. Rather than answer questions, this article seeks to ask more questions in a light different than the usual technical bend of CERCLA writings.

II. SUSTAINABILITY

In evaluating the reversal of fortunes and black holes, we must bear in mind the unitary focus of CERCLA among environmental laws. CERCLA requires reporting of new releases, \textsuperscript{32} but unlike the thrust of most environmental laws, which are forward looking into permitting and management of pollution media regimes, CERCLA is mostly backward looking. It mostly looks to clean-up the results of past contamination. Therefore, it may conflict with one basic theme of environmental law to “save the planet”. CERCLA’s thrust seeks to undo, not save, though additional natural resource damages may result in partial recreation of damaged (contaminated) resources. Sustainability must be the touchstone of any statutory program that is geared to saving anything. Does CERCLA promote environmentally responsible reuse of restored areas?

Too many decades of growth, pollution, and contamination, may have pushed the earth beyond the event horizon of saving in a literal sense. Its carrying capacity to support life could be diminished. This reminds us of the Malthus and Neo-Malthus doctrines that growth and physical existence cannot co-exist. \textsuperscript{33} Is an industrialized society

\textsuperscript{31} U.S. EPA, Cleaning Up the Nation’s Waste Sites: Market and Technology Trends, (Sept. 2004), at xiii to ix.
\textsuperscript{32} 42 U.S.C. § 9603(a).
compatible with a pristine world? Are high baseline cancer rates indicative of poor carrying capacity or of poor quality life styles?\textsuperscript{34}

However, the earth can be restored, but selectively. Many other environmental laws have restoration as a goal, though not perhaps as unitary as in CERCLA. For instance, the Oil Pollution Act provides for oil removal and natural resource restoration;\textsuperscript{35} the Clean Water Act provides for improvement of water quality through its own regime of establishing total maximum daily loads;\textsuperscript{36} the Endangered Species Act provides for species recovery plans;\textsuperscript{37} the Clean Air Act provides for clean-up of dirty ambient air known as non-attainment areas;\textsuperscript{38} RCRA provides for corrective action at contaminated areas of regulated hazardous waste sites;\textsuperscript{39} and last but not least, wetlands can be restored by monitoring and mitigating illegal wetland filling activities.\textsuperscript{40} Federal funding for such vast projects as the Comprehensive Everglades Restoration Program is available, and the future Louisiana coastal restoration is another example of a restoration as a means to "save" the planet, albeit more in the form of natural resources recreation rather than mere remediation.\textsuperscript{41}

Despite the reported statistical success of CERCLA, we must see if the lessons learned from the various reversals of fortune and black holes recently opened in CERCLA are consistent with use of recovery in saving the earth. Is CERCLA, through actions of all branches of government as well as voluntary initiatives, achieving sustainable development? By this, do we mean: are CERCLA's

\begin{footnotesize}
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\item \textsuperscript{34} University of America), \textit{at} http://arts-sciences.cua.edu/econ/faculty/aguirre/resenv.htm (last visited May 20, 2005).
\item \textsuperscript{34} APPLEGATE, \textit{supra} note 1, at 70-72.
\item \textsuperscript{35} 33 U.S.C. § 2702 (2005).
\item \textsuperscript{36} \textit{Id.} § 1313(d).
\item \textsuperscript{37} 16 U.S.C. § 1533(f) (1973).
\item \textsuperscript{38} 42 U.S.C. §§ 7501-7515 (2005).
\item \textsuperscript{39} \textit{Id.} § 6930(h).
\item \textsuperscript{40} \textit{See}, e.g., U.S. Army Corps of Engineers, Regulatory Guidance Ltr. No. 02-2 (Dec. 24, 2002).
\item \textsuperscript{41} \textit{See} Louisiana Coastal Wetlands Conservation and Restoration Task Force Website, (U.S.G.S.National Wetlands Research Center), \textit{at} http://www.lacoast.gov (last visited May 20, 2005).
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trends meeting the needs of the present without adversely affecting future generations?  

III. REVERSALS OF FORTUNE

A. Lenders and Fiduciaries

At face value, it would not seem that a financial institution would be a liable party under CERCLA. However, CERCLA has cast a broad fishnet over potentially responsible parties. They include present owners or operators of contaminated property, past owners or operators of contaminated property if the waste was disposed of during their tenure, arrangers who are generators of hazardous substances at disposal sites, and transporters who transport hazardous substances to the disposal sites they select. Where are the lenders?

Lenders can face exposure to environmental liability under CERCLA in several ways. One such way is if property ownership transfers to the lender upon a customer default on a real estate loan which turns out to be on contaminated property. The real estate security is simply unmarketable. The customer may not be able to repay a loan if she faces environmental liability for remediation. Lenders may also face losses if a senior lien that they expect to have on a property is primed by a super environmental lien. Finally, and more relevant to direct CERCLA liability, if a lender forecloses upon secured property, it may be exposed to liability as the new owner or operator of contaminated property.


43. The judicial trend is away from holding as liable past owners/operators who merely suffer passive migration of contamination, e.g., previously contaminated groundwater seepage (but not leaking drums or tanks), during their ownership or occupancy. See Carson Harbor Vill. Ltd. v. Unocal Corp., 270 F.3d 863 (9th Cir. 2001), cert. denied 535 U.S. 971 (2002). This could be another good reversal of fortune for some past owners and operators.


For instance, a lender which forecloses on property and then contracts to have the property "broom clean," during which time asbestos in buildings and drums stored on the land are adversely affected, the lender loses its safe harbor provisions under CERCLA. In the Fleet Factors case, the lender became liable under Section 9607(a)(2) of CERCLA due to its participation in financial management to a degree indicating its capacity to influence a corporation's treatment of hazardous waste. The result in Fleet Factors involved the day-to-day operations of the facility; the court held that it is not necessary for the secured creditor to participate in management decisions relating to hazardous waste to incur liability. A secured creditor can be liable if its involvement with the management of the facility is sufficiently broad to support the inference that it could affect hazardous waste disposal decisions if it chooses. CERCLA liability can attach if a lender acquires contaminated property through foreclosure. Lenders have migrated from a safe harbor to be liable parties under CERCLA, a definite reversal of fortune.

EPA has "intervened" and promulgated a rule to protect lenders from both foreclosure and repurchase at a foreclosures sale as long as the transactions are simply mechanisms for protecting security interest and the foreclosing lender acts quickly to divest itself of the property. A court invalidated the rule holding that CERCLA does not delegate authority to EPA to define potentially liable parties

48. United States v. Fleet Factors Corp., 901 F.2d 1550, 1557-58, nn.13-14 (11th Cir. 1990); see also 42 U.S.C. § 9601(20)(E) (excluding from the list of potential responsible parties as an owner or operator any person who held indicia of ownership in a facility, in order to protect a security interest without participating in management of a facility).

49. Fleet Factors Corp., 901 F.2d at 1557-60; see also 42 U.S.C. § 9601(20)(E).

50. Fleet Factors Corp., 901 F.2d at 1557-60; see also 42 U.S.C. § 9601(20)(E).


through a regulation. Lenders' lost fortune was saved by Congress in 1996, however, in the Asset Conservation, Lender Liability and Deposit Insurance Protection Act, which specifically rejected the capacity of the influence test espoused by Fleet Factors. Now lenders must actually participate in the management or operational phase of a borrower to be a liable party under CERCLA. A lender will not become owner/operator through acquisition of contaminated property by foreclosure or by undertaking related post-foreclosure activities. This law also provides a safe harbor for fiduciaries. Undertaking responsibility for hazardous substances or negligence, however, could bar the safe harbor.

It would appear that the lender and fiduciaries statutory successes here are consistent with a sustainable environment. CERCLA embodies the principle that the polluter pays. In one sense, a mere lender or fiduciary which is servicing a customer has nothing directly to do with contamination. Only if the lender or fiduciary takes over site operations would it stand in the shoes of a polluter. These financiers are enabling polluting activities to continue by their funding mechanisms. Fleet Factors expanded lenders' roles into being anti-pollution barons. If other potentially responsible parties are not found, the Superfund would have to bear the cost of the clean-up but for another deep pocket target. The statutory safe harbors for lenders and fiduciaries will protect them as long as they act as lenders and fiduciaries and do not take a more active role at the contaminated facility. It is an unfortunate consequence to future sustainability that we have lost the direct incentives for these barons. Responsible lenders may still be environmental police for their customers at least out of fear that jurisprudence has not cloaked them with ironclad interpretations of the 1996 amendments.

55. See id.
56. Id.
57. Id. § 9607(n)(5)(A).
58. See, e.g., Canadyne-Georgia Corp. v. Nationsbank, N.A., 183 F.3d 1269 (11th Cir. 1999).
B. Recyclers

CERCLA can deem automobile dealers and service station owners as potentially responsible parties if they disposed of used waste oil. This is true for any business that ships used oil to a site for recycling only to find that they are liable for substantial clean-up costs even if they had no knowledge that the oil recycling site was releasing hazardous substances.

Businesses that dispose of used oil can now avoid CERCLA liability if they qualify for a service station dealer’s exemption under Section 9614(c) of CERCLA. The conditions of the exemption are fourfold. First, the entity claiming the exemption must be a service station, filling station, garage or similar establishment in the business of selling, repairing, or servicing motor vehicles. Second, the establishment must accept used oil from do-it-yourselfers, i.e., one who accepts used oil from the owner of a light duty motor vehicle or household appliance, and who presents used oil to the oil recycling facility. Third, the used oil must not have mixed with any other hazardous substance. Finally, the used oil must be stored, transported and otherwise managed in compliance with state and federal regulations.

There is little guidance as to how much a service station must do to notify do-it-yourselfers of their acceptance of used oil. Service station dealers should post a notice, keep a log detailing the identities of the do-it-yourselfers that utilize the service, insure they accept

64. Id.
65. Id.
66. Id.
some used oil from do-it-yourselfers annually, and separate used oil from all of the other waste.  

Although constituents of used oil, such as heavy metals, can certainly constitute hazardous substances under CERCLA and warrant clean-up if a site is contaminated from waste oil, this CERCLA exemption seeks to sever dealers who service the community and who properly manage and recycle used oil from those who wantonly mismanage used oil. These responsible dealers must engage in best management practices in storing, transporting and delivering used oil for recycling; therefore, they are not likely to be future polluters who should pay for clean-up. As long as the dealers follow the statute, their potential for CERCLA liability is minimized, simply because they are not arranging to have hazardous substances disposed of at a potentially contaminated site. Therefore, servicing the community and preventing pollution certainly seems to be in accordance with sustainable development, even though past practices of similar entities may have been substandard.

C. Parent Corporations

Corporations may be responsible parties under CERCLA. Corporations achieved somewhat of an environmental boom in 1998. The Supreme Court in United States v. Bestfoods held that parent corporations are not liable for the acts of their subsidiaries solely because of the exercise of control through stock ownership. The Court further held that the dual status of some or all directors or officers of the parent corporations at the subsidiary level did not translate to environmental liability under CERCLA. The Court also held that as a matter of common law, the corporate veil might be pierced, thus holding shareholders liable for corporate conduct.

68. See Ekotek, 881 F. Supp at 1524-25; Nixon Egli; 949 F. Supp. at 1441-42..
69. 40 C.F.R. §§279, Subpart C, and 279.30(b) (2004).
70. 42 U.S.C. § 9601(21).
72. Id. at 62.
73. Id. at 61-62.
Nothing in CERCLA rewrote these well-settled rules of corporate law. Therefore, a parent corporation could be held directly liable under CERCLA for its own actions in operating a facility owned by the subsidiary.

CERCLA defines "operator" as one who manages, directs, or controls operations specifically related to pollution at the subsidiary's facility. A parent company's direct liability under CERCLA for subsidiary facilities is based on the parent's actual control over the facility in question. The parent's actual control is evidenced by participation in the activities at the subsidiary's facility. In Bestfoods, the Court held that operation under CERCLA was something more than "mechanical activation of pumps and valves." Operation includes "the exercise and direction of a facility's operation." A parent's activities at the facility, which are consistent with parent corporations' investment status, such as monitoring of the subsidiary's performance, supervision of subsidiary's financing and budget decision, and issuance of general policy and procedures would not rise to the level of direct parent control. A parent's provision of many functions for a small subsidiary, such as supplies, personnel, accounting, tax, insurance, policies, inspection, or consulting services through service agreements should not rise to the level of operation. Care should be taken that these particular parent-subsidiary oversight functions, when they touch directly upon environmental management systems or decisions of a subsidiary's facility, are structured between the subsidiary and outside consultants directly, rather than through the parent's personnel itself.

Bestfoods, however, did not address certain other situations. Neither the status of successor corporations who merged or acquired shares of a potentially responsible party, nor the status of a

74. 42 U.S.C. §9601 (20)(A)
75. Bestfoods, 524 U.S. at 67-68.
76. Id.. at 68.
77. Id.. at 71.
78. Id.
80. See Datron, 42 F. Supp. at 748.
corporation as an arranger of waste disposal were addressed.\textsuperscript{82} Finally, the court did not consider whether corporate officers are automatically absolved from liability if they personally participate in the wrongdoing causing pollution; such as through the design of, or the faulty maintenance of structures that cause pollution.\textsuperscript{83}

The \textit{Bestfoods} holding does not appear consistent with sustainability. Where subsidiaries are fully funded and are capable of defraying clean-up costs through earnings or insurance, the role of the parent company is minimized. In those cases where, absent fraud, the subsidiaries lack the assets or resources to fund clean-ups caused by pollution of their own doing, the insulation provided by \textit{Bestfoods} does not serve well for long-term use of the site. Absent Superfunds, a site may have to be abandoned and sustainability suffers a void.

\textbf{D. Municipal Generators}

Municipal solid waste landfills have been a focus of CERCLA action in the past.\textsuperscript{84} The 2002 amendments to CERCLA have exempted generators of municipal solid waste sent to NPL sites.

The exemption covers both residential property owners as well as small businesses and their affiliates.\textsuperscript{86} Municipal solid waste includes household waste as well as commercial or industrial waste that is essentially the same as household waste.\textsuperscript{87} Commercial or industrial waste is essentially the same as household waste and would qualify as a municipal solid waste if it is collected as municipal solid waste as part of normal services and contains the same relative amount of hazardous substances as does typical single-family household waste.\textsuperscript{88} This includes food and yard waste, paper, clothing, appliances, consumer product packaging, disposable diapers, office supplies, cosmetics, glass and metal food containers,

\begin{itemize}
\item \textsuperscript{82} See Gen. Corp. v. Olin Corp., 390 F.3d 433 (6th Cir. 2004).
\item \textsuperscript{84} See B. F. Goodrich v. Betkoski, 99 F.3d 505 (2d Cir. 1996).
\item \textsuperscript{85} 42 U.S.C. § 9607(p)(2002). See exception at § 9670(p)(2), e.g., if MSW contributes significantly to clean-up costs.
\item \textsuperscript{86} § 9607(p)(1).
\item \textsuperscript{87} § 9607(p)(4).
\item \textsuperscript{88} Id.
\end{itemize}
elementary or secondary school science waste, and household hazardous waste.® It does not include combustion ash or material from manufacturing and processing operations that is not essentially the same as normal household waste.® Contribution actions against residents are barred except with respect to governmental actions. The burden of proving the exemption is on a party other than the governmental party; for waste disposed of before April 1, 2001, the burden of proof is on the party bringing the cost recovery or contribution action.® The exemption does not cover the municipality itself if it “owns” the landfill.® Furthermore, the exemption does not appear to apply to the transporters of municipal solid waste, as opposed to the generators.® Finally, the exemption applies only to Superfund sites on the NPL; lesser contaminated (non-NPL) sites would not benefit from the exemption.®

The new exemption, however, does not remove municipal solid waste sites from the reaches of CERCLA; it just exempts certain parties if municipal solid waste is exclusively involved.® Municipal solid waste may involve degrees of hazardous substances, so other liable parties, including municipalities, possibly transporters, and generators who do not meet the proof requirement of the exemption, would still be liable parties under CERCLA.® Although a headache for many businesses, the exemption does appear to carve out a large swath of potentially responsible parties who would no longer be responsible in cost recovery actions.® To the extent the remaining parties can fund the clean-up, one can argue no harm, no foul. Successful clean-up cost recovery may not always be the case and the exemption may put a strain on shrinking Superfunds and other parties. To that extent, it is not consistent with sustainable development.

89. § 9607(p)(4)(B).
91. § 9607(p)(6).
92. § 9607(p)(5).
93. § 9607(a)(1) and (p)(2).
94. §§9607(a)(4) and (p)(1).
96. §9607(p).
97. Id.
98. Id.
E. Redevelopers

Considering the breadth of CERCLA liability, developers and lenders have been reluctant to invest in what had been called "brownfields" properties. These are properties historically known or suspected to have contamination. Revitalization protects public health, protects greenfields, increases tax base, creates jobs, eliminates blight and urban sprawl, and brings vitality to neighborhoods. The developers and lenders fear that they would become liable for clean-up costs associated with that property, or that the property would be worthless.

Besides providing for brownfield redevelopment grants and loans to certain quasi-public and non-profit entities, the 2002 amendments to CERCLA have several liability exemptions to favor the redevelopment of some contaminated properties. For instance, historically, only an innocent purchaser would be exempt from CERCLA liability for previously unknown contamination that manifested during his or her tenure. Now, bona fide prospective purchasers (or their lessees) who acquired property after January 11, 2002, will also be exempt if the known contamination occurred prior to his or her acquisition of property.

Unlike the innocent landowner who has no knowledge or reason to know of any prior contamination, the post-2002 bona fide prospective purchaser may actually know about contamination during an appropriate environmental inquiry prior to the purchase.

99. APPLEGATE, supra, note 1, at 1026.
100. Id. § 9601(39)(B). These sites do not include NPL sites, sites subject to CERCLA or RCRA orders, RCRA corrective action or RCRA closure, certain federal lands, PCB sites under the Toxic Substances Control Act or sites covered under the underground storage tank trust fund.
102. APPLEGATE, supra, note 1, at 1026.
103. 42 U.S.C. §§ 9601(39)(C), 9604(k). Congress must still appropriate the funds annually.
104. Id. § 9601(35)(A)(i).
105. Id. § 9601(40).
106. Id. § 9607(r). However, EPA is entitled to a super lien on the property to the extent property values are increased if it cleans up the site.
Additionally, the 2002 amendments to CERCLA add exemptions for a past or present owner or operator of a site who has land contiguous to a contaminated property, which became contaminated only due to spillover from the contaminated property and through no fault of their own.\textsuperscript{107} Although these are reversals of fortune for parties who may now acquire or develop property and are now free from CERCLA liability, there are some unknowns associated with the status of exempt parties in the 2002 exemptions related to what types of duties and inquiries they must make with respect to any contamination once it becomes known. These unknowns, also known as "black holes," are discussed in the next section.

These new exempt parties may participate in limited clean-up under state voluntary clean-up laws and receive exemptions not only from the state but possibly from CERCLA as well.\textsuperscript{108} CERCLA amendments and the state laws create an incentive for the redevelopment of brownfields by creating voluntary remediation markets. Voluntary remediation or clean-up programs encourage clean-up of brownfields in lieu of the use of greenfields for industrial developments. Besides receiving no further action letters or certificates of completion from state agencies that give these voluntary applicants exempt status in state clean-up law, EPA will not pursue a potentially responsible party who cleans up a site eligible for clean-up under approved state response programs.\textsuperscript{109} Windfall liens, however, may still apply against bona fide prospective purchases.\textsuperscript{110}

The elements of a state clean-up program must include a timely survey inventory of Brownfields sites, oversight and enforcement authorities with respect to response actions, mechanism and resources to provide for meaningful public participation, mechanisms for approval of clean-up plans, and requirements for verification of

\begin{enumerate}
\item[107.] Id. § 9607(q).
\item[109.] 42 U.S.C. §§ 9601(39), (41), 9628.
\item[110.] Id. § 9607(r)(2).
\end{enumerate}
response actions. The 2002 amendments to CERCLA still provide for certain limited site re-openers in order for EPA to take action, such as: state required assistance, migration of contamination across state lines, which pose an imminent or substantial endangerment to public health or the environment, necessary additional responses in order to mitigate contaminant release if additional contamination information about the site comes to the attention of EPA.

The basic thrust of the 2002 amendments is to allow EPA to focus on the worst contaminated of the sites around the nation and leave to the states and private parties the ability to address sites of lesser environmental concern. As public input is required under both federal and state laws for the clean-up of these lesser contaminated sites under state voluntary clean-up programs, it would appear at face value that the new amendments do provide for sustainable development. That is, they require some form of clean-up and preserve the rights of states, third-parties, and the federal government to seek follow-up response action and costs should additional problems that are not the responsibility of the exempt and voluntary clean-up parties crop up. If this follow-up action fails, then so will sustainability. There are also commercial standards that require sustainability as part of brownfields sites redevelopment to aid the cause of redevelopment, but these are keyed to the undefined “long term” rather than expressly to future generations. Community relations seem to be a key under those standards.

F. Risk Assessors

When discussing risk assessors, consultants who worsen or spread contamination due to their investigation or remediation and thereby
become liable under CERCLA are not discussed here.\textsuperscript{116} Instead, a trend of clean-ups based on risk evaluations by experts is discussed. This trend started with the government's reliance on risk assessment in the late 1980's.\textsuperscript{117} This trend basically worked down to a level at which the government arguably tolerates death and disease and sets a low-cost standard.\textsuperscript{118} Zero risk is not a goal here.

One likely reason for the growth of risk assessment and related risk management is that EPA realized it could not handle the plethora of legislation it had to administer.\textsuperscript{119} Additionally, the technology of detection advanced significantly and it is virtually impossible to regulate smaller and smaller levels of contamination. EPA did not want to employ a disproportionate amount of resources on perceived smaller problems if it could concentrate on protecting society against larger problems.

Later in the 1990's, risk-based corrective action programs grew.\textsuperscript{120} Risk-based clean-up levels are not based on the usually more stringent background levels of contamination.\textsuperscript{121} Site-specific criteria are often developed statistically for risk-based corrective actions.\textsuperscript{122} Under a typical risk-based program, "cookbook" health standards of contamination are set forth in a table.\textsuperscript{123} These cookbook standards are screening levels that determine whether or not further action is needed at a site. If any contamination is found through an environmental assessment of the site, and the findings are below the screening levels, no further action is required.\textsuperscript{124} If, however, the contaminants are found above screening levels, then the

\textsuperscript{117} Interview of William Riley, former EPA Administrator (EPA, October 1, 1993), \textit{at} www.epa.gov/history/publications/reilly/20.htm.
\textsuperscript{118} \textit{Id.}
\textsuperscript{119} \textit{Id.}
\textsuperscript{120} See, e.g., Louisiana Risk-Based Corrective Action Program (LDEQ 1998).
\textsuperscript{122} See \textit{MILLAN, ET AL., supra} note 19 at §§4:40 to 4:41.
\textsuperscript{123} See \textit{MILLAN, ET. AL, supra} note 19, § 4:35.
\textsuperscript{124} \textit{Id.} at §4:39.
screening levels can be used for clean-up action levels of a remediation program. The potential purchasers of the site can decide to manage the contaminated site by doing a site-specific risk-analysis that shows additional remediation is not justified at the site. Frequently, risk-based corrective actions are also accompanied by engineering controls (e.g., slurry walls) or institutional controls (e.g., deed restrictions on residential use).

The clean-up standards vary and are lower for residential use than for industrial usage. These risk-based corrective actions can be used not only for brownfields sites, but for other contaminated sites as well.

Risk-based corrective action uses a tiered framework consisting of a screening option and management options. Site evaluation and corrective action can be tailored to specific sites. As levels of contamination increase in the findings, the approach becomes even more site-specific. Risk-based corrective action examines the total risk profile of a contaminant. For instance, when does a small amount of benzene in groundwater pose a risk? Under a parking lot or under a nursing home? Concentration, distance, ecology, and use all have a bearing on risk-based corrective action. Although the goal of corrective action is to protect human health and the environment, critics of risk-based methods refer to risk-based corrective action as “risking away” contamination, or “do nothing” clean-ups.

Owners of contaminated properties have experienced a small boom from the growth in risk assessment into corrective action programs. The immediate benefit is that clean-ups are often less expensive than

125. Id. at §4:36
126. Id. at §4:40 to 4:41.
127. Id. at §4:42.
128. Id. at §4:36.
129. Id. at §4:33 and 4:35.
130. Id. at §4:35.
131. Id.
132. Id.
133. Id.
134. Id.
135. Id.
a pure health-based standard would require.\textsuperscript{136} One criticism of the risk-based method is that it is not consistent with CERCLA. That is, CERCLA clean-ups are focused on appropriate and relevant health standards, and only at the time that a set of health-based levels is achieved may economic feasibility be taken into account.\textsuperscript{137} However, CERCLA does not oust cost-effectiveness and state standards from being appropriate for the degrees of clean-up required.\textsuperscript{138}

Larger criticism, coupled with scientific uncertainty, points to the fact that the effects of risk-based corrective action will mean private actors will be allowed to shift their clean-up costs or harms on to innocent third parties. Furthermore, the complex mathematical processes used in risk-based corrective action limits the value of public review and input.\textsuperscript{139} In brownfields scenarios and voluntary remediation programs, an innocent party may actually be the one cleaning up a site, thus there is no cost shift to society since the agency can still pursue any additional clean-up costs required against another responsible party.

Well taken is the criticism that there are so many scientific layers of review needed for risk assessment that the resulting decisions are more inaccessible to the general public. The actual formal risk assessments are buried under statistics and are difficult for the public to understand. Mathematics is a concept; contamination is real. How dangerous low levels of contamination are involves a trade-off among concepts, reality and costs. Without valued public input, the value of risk-based corrective actions is another unknown in the realm of scientific uncertainties of appropriate clean-up levels.

To the extent that risk-based corrective action allows an agency and innocent parties to obtain a bigger bang for the clean-up buck, it does, in the broad sense, promote sustainability. Responsible parties are not automatically free from the cost of additional clean-up unless they too benefit from a "do nothing" clean-up. That anomaly can be mitigated if site use is restricted to industrial purposes only. Greenfields can be preserved. Any long-term threats to the

\textsuperscript{137} \textit{Id.} at 345; see also 42 U.S.C. § 9621(a)(d).
\textsuperscript{138} 42 U.S.C. §§ 9621, 9628.
\textsuperscript{139} See Flatt, \textit{supra} note 136 at 356-363.
environment, such as groundwater contamination, would still have to be borne out by the agency with resort to a windfall lien or cost recovery from a responsible party to preserve the integrity of sustainability in risk-based corrective actions.

IV. BLACK HOLES

A. Reasonable Landowners

In the previous section we saw that redevelopers enjoy a boom to some extent from CERCLA liability. These non-liable owners include previously described innocent landowners and bona fide prospective purchasers, as well as contiguous property owners. The 2002 amendments to CERCLA, therefore, exempt a past or present owner or operator who has land contiguous to contaminated property and who did not participate in the contamination of his or her own property. All of these owners and operators must undertake "all appropriate inquiry" before their acquisition in order to qualify for the exemptions. This all-appropriate inquiry is discussed in the next section. Furthermore, if the contiguous property owner knows of the contamination of the site before his or her acquisition, they lose the status of an exempt contiguous landowner and must revert to the exempt status of a bona fide prospective purchaser. Contiguous property owners are entitled to an EPA opinion of their status; others must rely on the discretion of state agencies or courts for an opinion.

Under the 2002 brownfields amendments to CERCLA, innocent contiguous landowners, new bona fide prospective purchasers, and innocent landowners must take reasonable care of the property while they own it. The innocent landowner who truly does not learn of contamination before acquisition of a site is further removed from a contamination problem than the other two exempt parties. Although these exempt parties should not have to clean up the site, they may have to give notice to state agencies of any contamination, install

140. 42 U.S.C. § 9607(q).
141. Id.
142. Id.
143. Id. § 9607(q)(1)(C).
144. Id. § 9607(q)(3)(A).
145. Id. § 9607(a)(1)(A)(iii).
fences in contaminated areas, cooperate with agencies and maintain any existing barriers to prevent contamination from escaping.\(^{146}\) This is referred to as taking "reasonable steps" under the 2002 amendments to CERCLA.\(^{147}\)

EPA issued guidance to property owners on March 9, 2003, describing the common elements of these exempt owners, including the taking of "reasonable steps."\(^{148}\) However, EPA did not define the meaning of "reasonable steps." Future EPA guidance or rule-making is expected. At a minimum, if an innocent landowner becomes aware of contamination after the acquisition, he or she cannot allow the site to sit vacant and remain completely susceptible, allowing the contamination to spread. The absence of due care will invalidate a defense in that case.\(^{149}\)

Sustainability is achieved as long as the landowners take reasonable steps to prevent the spread of any contamination on site. The scope of that duty remains unclear. It may be problematic for them to pursue other responsible parties who caused the contamination long after the fact.\(^{150}\) The uncertainty for the new landowners may chill the redevelopment initiatives voiced in the 2002 amendments to CERCLA. That would not strike the cause for sustainability.

**B. Environmental Site Assessors**

EPA regulations will soon define the standard for conducting due diligence audits of property as a prerequisite to establishing defenses to liability under CERCLA. Under the 2002 amendments to CERCLA,\(^{151}\) Congress required EPA to promulgate regulations that

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146. *Id.* at §§ 9601(35)(B)(i)(I) (commenting on innocent landowner), 9601(40)(D) (commenting on bona fide prospective purchasers (all appropriate care)), 9607(q)(1)(A)(iii) (commenting on contiguous property owners).
147. *Id.*
148. MILLAN, ET AL., *supra* note 19 at §4:11, Chart 4.1
150. *See infra* Section E for a discussion of volunteers later in this part.
151. *Id.; see also* 42 U.S.C. § 9601(35)(B).
define "all appropriate inquiry [AAI]." This new definitional basis establishes the innocent landowner defense and the contiguous property owner and bona fide prospective purchaser exemptions to CERCLA liability. EPA did not meet the January 11, 2004 statutory deadline for promulgation of such regulations. Proposed AAI rules were not issued until August 26, 2004.

In 2002 Congress authorized an interim standard for use by EPA: the American Society for Testing and Materials (ASTM) Standard E 1527-00, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. ASTM Phase I site assessment standards have been in existence for many years and have served as the commercial guidance for conducting property due diligence. Until the 2002 amendments to CERCLA, the ASTM standards did not necessarily have any legal force or effect. They also do not address what CERCLA "reasonable steps" will be required of otherwise non-liable landowners who discover past (or off-site source) contamination, as discussed above. "Data gaps" inherent in the site assessment process will likely drive landowners to more and more "reasonable steps" to quell suspected contamination. Perhaps that is the agenda of new AAI rules.

The most important distinction between ASTM and EPA is that an EPA promulgated standard faces the rigors of administrative

154. Standards were only proposed on August 26, 2004, not finalized. See infra, note 155.
rulemaking and will then have the force and effect of a rule, including being subject to EPA interpretations. In contrast, ASTMs commercial practice is only incorporated into a rule and is still subject to the environmental professional’s judgment and experience. EPA seems to acknowledge that the adequacy of an AAI is for a judicial, not EPA determination.\textsuperscript{159}

It does appear the scope of the AAI, presently known as the Phase I Environmental Site Assessment, will expand and be more costly. More negative report findings (e.g., data gaps) may mean that fewer contaminated property deals will close. Nevertheless, the states voluntary remediation/clean-up programs are structured to benefit purchasers/lenders of brownfields. An AAI report will also be the first step in this redevelopment process and obtaining a Brownfields grant. It remains to be seen if the new AAI favors or disfavors brownfield redevelopment and sustainability, but it will favor a select band of site assessors.\textsuperscript{160}

\textit{C. Minority and Impoverished Communities}

Many still view minority and impoverished areas as being subject to a disproportionate share of pollution, increased risks and contamination threat.\textsuperscript{161} The law is soft on this area and there appears to be no one single solution in sight.\textsuperscript{162} Should the goal of sustainability be to exercise preferential options for the poor and oppressed?

The EPA has proposed a \textit{Toolkit for Assessing Potential Allegations of Environmental Injustice}.\textsuperscript{163} Under EPA's methodology, this toolkit utilizes a tiered approach to assess whether a locale has been potentially subject to a potentially and

\textsuperscript{160.} See infra Appendix A for a comparison of AAI and Phase I.
\textsuperscript{161.} Robert D. Bullard, \textit{Mississippi River Symposium, Building Just, Safe, and Healthy Communities}, 12 TUL. ENVTL. L. J. 373 (1999).
\textsuperscript{162.} MILLAN, ET. AL, \textit{supra} note 19, § 8:17.
disproportionately high adverse environmental and human health impact from pollution. EPA, after receipt of an environmental injustice complaint from a locale, conducts an on-site visit while also researching existing databases for environmental, health, social and economic indicators of environmental injustice.

While EPA's model is designed only for a tentative conclusion of an environmental injustice at the screening level, EPA may share its data with the state permitting agency. A more refined assessment, including health studies and subsurface contamination studies, may still be needed before negotiations with facility owners can begin. Although the assessment is envisioned mainly for permit processing and not for clean-up enforcement, the EPA draft notes many statutory factors for assessing penalties. These include other general factors as justice may require and suggest that these general factors may incorporate a heightened penalty assessment for environmental injustice infractions where appropriate. The model could also serve to target clean-up sites and levels in some cases. Appendix C to the draft, Example Application of the Environmental Justice Assessment Methodology, contains a summary of EPA's method on a hypothetical town, not unlike some locales in Louisiana.

The methodology entails six steps: Step 1, problem formulation, includes context, scope, participants, community of concern, reference community, assessment endpoints, indicators for assessment, conceptual model and analysis plan. Step 2 includes identification of environmental sources of stress and likelihood of exposure, including number of regulated facilities in a community, length of time, number of permit violations, number of non-point sources of pollution, noise levels, proximity, multiple stresses, potentially highly exposed groups, number of biomarkers of exposure (blood or tissue studies), environmental conditions (including air, water and other media), and environmental

164. See id.
165. See id.
166. See id.
167. See id.
168. See id.
169. See id.
170. See id.
171. See id. § 4.
vulnerability (climate, etc.). Step 3 includes an assessment of potential adverse environmental conditions and impacts. Step 4 includes an assessment of potential adverse human health and welfare impacts. Step 5 includes the characterization of the community of concern (demographics, vulnerability factors such as a lack of public transportation, sewage treatment, etc.), government commitment, community participation in government and its economic status. Step 6 includes the assessment of potential for disproportionately high and adverse impacts. The final step includes a tentative conclusion and sharing of information with the state agency and the possibility of approaching the facility. Additional study, however, is envisioned at this stage in the EPA model. In other words, there may be no end to the assessment and the model may be frustrating to communities.

Dr. Barbara Allen's recent publication provides an overall assessment of the history and methodologies available to assess environmental injustice along the Louisiana Industrial Corridor; her model of national pollution. Her book contains strong rhetoric, but nevertheless, presents a good historic summary of environmental justice issues. In the book, a "feminist" approach is often referred to as standpoint theory or as "strong objectivity" to help solve environmental justice in Louisiana. This method uses the experience of community members to form the basis for asking questions, developing theoretical concepts, designing research, collecting data, and interpreting findings. This process may start with simply interviewing residents, examining public records and placing the results of this general survey on a neighborhood map.

172. See id. § 4.
173. See id. § 4.
174. See id. § 4.
175. See id. § 4.
176. See id. § 4.
177. See id.
178. See id.
180. See generally id.
181. See generally id.
182. Id. at 118.
183. See id.
The map shows the proximity of the community to polluting facilities and attempts to delineate health problems among the community.\textsuperscript{184} This data can then be presented to an agency like the LDEQ or EPA.

In other words, according to the book, “feminist” theory starts with the live community as a center point rather than starting with the polluting facility.\textsuperscript{185} It also starts with the perspective of individuals and does not accept all scientific methods (including risk-based corrective action) as bias free.\textsuperscript{186} In this way, Dr. Allen suggests that a community science advocate can collect data on health clusters among the inhabitants of a community.\textsuperscript{187} Her approach does not solve all sampling or data concerns. Indeed, comparison of data from small towns to that of data from broader populations serving as control groups, and the use of statistics to avoid chance findings remain cornerstones of the scientific method.\textsuperscript{188}

Absent a long-term solution for preventing contamination or requiring clean-up or relocation of minority communities, there can be no sustainability. "Risking away" a community’s health concerns places people as “quotients” of scientific notations they cannot well understand. Sustainability requires communication, not mathematical guess work. Integrating community acceptability into the risk assessment scheme is a goal.\textsuperscript{189}

\textit{D. “Old” Indemnitors}

Private parties can re-allocate risk from environmental liabilities among themselves by an indemnity agreement, but indemnities cannot be used to bar agency actions.\textsuperscript{190} What surprises many businesses is that older indemnities negotiated prior to CERCLA can be found to apply to new environmental claims under CERCLA.\textsuperscript{191}

\begin{itemize}
  \item \textsuperscript{184} See id. figs. 5.2 -5.3.
  \item \textsuperscript{185} See id.
  \item \textsuperscript{186} See id.
  \item \textsuperscript{187} See id.
  \item \textsuperscript{188} RONALD E. GOTS, TOXIC RISKS, SCIENCE, REGULATION, AND PERCEPTION (Lewis Publications 1993).
  \item \textsuperscript{189} See Northwest-Midwest Institute, supra note 29, at 130-131.
  \item \textsuperscript{190} 42 U.S.C. § 9607(e)(2); see also Jocelyn Mfg Co. v. Koppers Co., 40 F.3d 750 (5th Cir. 1994).
  \item \textsuperscript{191} Id.
\end{itemize}
For instance, a 1994 court decision held that certain indemnity agreements completed in 1938 and 1949, undertaken before the passage of CERCLA, were intended to cover all forms of environmental liability, though environmental statutes were not specifically contemplated at the time of the underlying transaction. Certain broad language like indemnifying one for "any and all claims and expenses" may cover CERCLA clean-ups in the future. However, other courts examine the state public policy to see what effect a state gives to indemnity agreement language in an environmental context. In another case in 2000, dealing with transactions from 1969 and 1973, a facility was sold subject to an indemnity against "all claims . . . arising from ownership or operation of the [a]ssets . . . and accruing from and after [c]losing." The indemnity laws of the states involved express different tests in determining the scope of the indemnity. The indemnities in question did not expressly cover either negligence or strict liability claims, such as those arising from CERCLA. The court found that the indemnity claims were basically unenforceable under state law with respect to CERCLA strict liability.

The Department of Defense was surprised recently when it found that old indemnity agreements it had with war-time contractors are still effective today in subjecting the federal government to liability for CERCLA clean-ups of those manufacturing sites. For instance, in the Ford Motor Co. case, Ford was a manufacturer under a government contract to make bomber planes during World War II. Ford was then required to clean-up its manufacturing site

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192. **Id.**
193. Fina, Inc. v. Arco, 200 F.3d 266 (5th Cir. 2000), *rehearing and suggestion for rehearing en banc denied*, 210 F.3d 365 (5th Cir. 2000).
194. **Id.** at 268.
195. **Id.** at 269-271.
196. **Id.** at 271-274.
197. **Id.**
199. *Ford*, 378 F.3d at 1314.
200. **Id.**
by the Michigan Department of Natural Resources. Although Ford was assigned only nine percent of the total clean-up costs, it demanded reimbursement from the federal government. The federal government denied its request for reimbursement. The court found that the government was liable under the Contract Settlement Act of 1944 in light of the World War II indemnity agreement. The court cited cases that held indemnity provisions in World War II contracts providing that "the government shall hold [contractor] harmless against any loss, expenses... or damage of any kind whatsoever arising out of or in connection with the performance with the work under this title...", also covered later arising CERCLA claims. The court found that the equivalent clause in Ford's contract included as allowable cost "loss or destruction of or damage to property as may arise out of or in connection with performance of the work under this contract" also covered CERCLA claims.

The dissent disagreed that the indemnification clauses in World War II contracts required the government to reimburse Ford for its contribution under a then future unknown CERCLA settlement. The dissent felt that the parties could not have intended in World War II that the indemnification clause would cover future claims based on CERCLA. However, this is obviously not a view accepted by the majority of courts today.

It seems that good or bad luck befalls indemnitees under past agreements. Sometimes they are not liable, and of course they would contend there was no intent before 1980 to subject themselves to a future liability under a law not conceived at the time of the transaction, called CERCLA. Bad luck can befall them, however, more so to the extent that they are more deep pockets available to fund clean-ups. Although the scope of the indemnities remain unclear as long as federal courts must interpret both state law and CERCLA in deciding the scope of the indemnity, burden shifting to

201. Id.
202. Id.
203. Id. at 1316.
204. Id. at 1314.
205. Id. at 1319, citing Dupont, 365 F.3d at 1373-74.
206. Ford, 378 F.3d at 1319.
207. Id. at 1320-21.
208. Id. at 1321.
solvent parties does not seem to be inconsistent with CERCLA sustainability.

E. Volunteers

We have seen in the prior part of this article that redevelopers have achieved some of the boom under the brownfield and voluntary remediation programs around the country. One drawback is a recent case before the United States Supreme Court, regarding the issue of whether volunteers who have begun a partial clean-up may in turn obtain contribution from those who are responsible for the contamination in the first place.

In a 2001 case, *Aviall Services, Inc. v. Cooper Industries, Inc.*, the Fifth Circuit initially held that a volunteer may not sue other responsible parties for contributions under Section 9613(f)(1) of CERCLA, to cover clean-up costs incurred. The case involved a purchaser of maintenance sites in Texas that had become contaminated from leaking underground storage tanks operated by the seller, Cooper, and later the purchaser, Aviall. The Texas environmental agency informed the purchaser it was in violation of environmental law, but took no judicial or administrative enforcement action against it. The purchaser cleaned up the sites and then sued the seller for contribution under CERCLA.

On rehearing en banc, however, the Fifth Circuit rejected the panel's majority decision. The court en banc ruled that clean-up volunteers, without prior EPA or other potentially responsible party civil actions, may nevertheless file a CERCLA contribution claim against others. The court did not resolve whether the volunteers

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209. 263 F.3d 134 (5th Cir. 2001), rehearing granted, 278 F.3d 416 (5th Cir. 2002).
210. *Id.*
211. *Id.*
212. *Id.*
213. *Id.*
214. *Aviall Serv., Inc. v. Cooper Indus., Inc.*, 312 F.3d 677 (5th Cir. 2002).
215. *Id.*
may use only contributions or cost recovery mechanisms to recover the clean-up costs.\textsuperscript{216}

The Supreme Court granted certiorari\textsuperscript{217} on the question of whether a private party who has not been the subject of an underlying civil action pursuant to CERCLA contribution or cost recovery actions may bring an action under Section 9613(a)(1) seeking contribution under CERCLA to recover costs spent voluntarily to clean up property contaminated by hazardous substances.\textsuperscript{218}

In \textit{Cooper Industries, Inc. v. Aviall Services, Inc.},\textsuperscript{219} the Supreme Court, through statutory interpretation and environmental apathy, reversed and simply rejected a clean-up volunteer as having a CERCLA contribution action against a responsible party for its clean-up costs. The Court refused to consider the varied purposes of CERCLA in its ruling.\textsuperscript{220} The Court held that, reading Section 9613(f)(1) plainly and as a whole, only a party who is subject to a civil action under Section 9606 (abatement) or 9607 (cost recovery) of CERCLA can sue under Section 9613(f)(1).\textsuperscript{221} Aviall, though cleaning up at the request of a state agency, was not a party to a prior 9606 or 9607 civil action.\textsuperscript{222} The Court did not decide if Aviall had a Section 9607(a) cost recovery action or an implied contribution action under Section 9607(a), but in dicta implied based on past jurisprudence that Aviall did not have a CERCLA cause of action.\textsuperscript{223} This implication was probably based in part on Aviall’s status as a

\begin{itemize}
\item 216. 42 U.S.C. §§ 9613(f)(1), 9607(a). Here, the volunteer was a responsible party and thought it could only use the contribution procedures.
\item 220. \textit{Id.} at 584.
\item 221. \textit{Id.} at 583.
\item 222. \textit{Id.} at 582.
\item 223. \textit{See id.} at 584 n.5 (The Court also neither addressed if an EPA abatement order (absent a consent decree) under Section 9606 is a “civil action” triggering a Section 9613(f) contribution action, nor did it address the scope of any potentially responsible person Section 9607 action – considering policy issues of joint and several liability, statutory limitation periods, and contribution claim bars based upon clean-up settlements with the state or federal governments).
\end{itemize}
responsible rather than innocent party and in part on Congress’ 1986 codification of CERCLA implied contribution actions under Section 9613(f). The dissent read CERCLA more broadly and felt the Court should at least decide on the other causes of action (cost recovery and implied contribution) under CERCLA.\(^{224}\)

One aftermath of this finding is increased litigation over the nature of any implied contribution actions under Section 9607 or other causes of action under federal environmental laws (i.e. Resource Conservation Recovery Act) or state mini-CERCLAs.\(^{225}\) The clean-up at many voluntary remediation sites may also become slower and more complex, as such sites do not necessarily require EPA involvement or federal or state judicial or administration enforcement or settlement action. Enforcement action may be needed, if requested by voluntary clean-up participants, in addition to the routine technical submissions, reviews, and agreements at such voluntary sites. Truly innocent volunteers who purchase contaminated sites after first qualifying for a CERCLA responsible party exempt status, however, may still possibly benefit from a Section 9607 or state cost recovery action. Remember, Aviall was not an innocent party under CERCLA and apparently could not use the traditional Section 9607 cost recovery mechanism. *Aviall* did, however, place private Section 9607 actions in a state of turmoil, absent future Congressional or judicial clarification.

Volunteers may choose not to seek recovery of their cost, however, as they may be content with the prize of their redevelopment and partial clean-up allowed under brownfields or partial remediation programs. Nevertheless, there will be a percentage of redevelopers who do wish to seek recovery of their clean-up costs, regardless of whether any further clean-up or not must be undertaken by others. Oddly, the problem may relate to federal facilities operated by

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224. *Id.* at 586-88.
contractors or by future owners who voluntarily clean up without indemnities. \textsuperscript{226} This unknown may deter that portion of developers from redeveloping the some 450,000 -1,000,000 brownfields. \textsuperscript{227} That uncertainty or loss would be a strike against sustainability.

V. CONCLUSIONS

In these days when neo-Malthusians question the environment's limited resources and see people as the greatest threat to Earth as polluters, \textsuperscript{228} we must question whether CERCLA is really serving the goal of sustainability. This is debated in the context of global warming, land degradation through deforestation, desertification and development, and air and water pollution. The issues of land degradation certainly must include contamination.

Trends incurred in the redevelopment of brownfields through voluntary remediation programs support sustainability. This trend protects greenfields from the stress of development. Though voluntary remediation places a lesser burden of clean-up on innocent parties, it does not free liable parties from the obligations with respect to remnants of contamination left on brownfields. Providing larger loopholes for some parties, such as parent corporations, does not serve the ends of sustainability. Federal Superfunds are drying up, and the federal government needs as many responsible parties as possible to have a fair share in the clean-up. Discouraging volunteers from acquiring brownfields, however, is a negative trend if they do not wish to be involved in new site assessment regulations or do not have the prospect of cost recovery and contribution when needed. Indemnitors who are liable for new CERCLA claims tend to compensate, at least at some contractor operations and facilities, the loopholes that let others escape. The growth of the pollution insurance industry in terms of coverage and clean-up policies also provide additional revenue resources. Some parties are left

\textsuperscript{226} See Brief of Amici Curiae Lockheed Martin in support of respondent at 6-7, 24-29, Cooper Indus., Inc. v. Aviall Serv., Inc., (Apr. 8, 2004).

\textsuperscript{227} GAO-Community Development, supra note 29, at 118 (Nationwide, 450,000 brownfields await clean-up and conversion to productive uses); Northeast-Midwest Institute, supra note 29, at 2 (estimating the number of brownfields to be as many as 1 million).

\textsuperscript{228} Wolfgram, supra note 33, at Part II.
untouched, however, because they are lost in the environmental justice movement.

One solution is to have a “sustainability advocate” as a member of the team of decision-makers, rather than as the often scorned peanut galleries or advisory committees. This advocate should be trained in risk and sociology so she can communicate with communities and also debate at arms length with the bureaucrats and statisticians. Only truly low risks would then be risked away.

Additionally, the 450,000 – 1,000,000 brownfield sites should be tracked through new EPA “score cards” that are more understandable to the public. Environmental indicators must replace bean counting cubic yards of dirt removal.

Another solution is sustainable brownfield reuse. Beyond use restrictions, site enhancements should include open space, parks, smart growth (providing residents with options to live, work, and play within walking distance), “green buildings” (research and development into energy efficiency plus “green roof” systems to cleanse and reuse storm water in landscaping), and housing environmental friendly companies (recyclers). More state brownfield programs should add incentives for sustainable re-use through revolving loans, grants, tax credits, loan guarantees, loss reserves, and environmental insurance.

On balance, CERCLA’s prospect for long-term sustainability of the planet is a mixed bag. When it meets sustainability, it seems it is more due to chance than design. It must be remembered, CERCLA’s remediation approach is akin to using restoration to save the planet, as indeed if neo-Malthusians are correct, the planet is past saving in the pure sense. To the extent there can be lessons learned from CERCLA, including remediation and clean-up, making the polluter

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231. STATE BROWNFIELDS AND VOLUNTARY RESPONSE PROGRAMS: AN UPDATE FROM THE STATES, 7 (EPA 2005).
pay, insuring that the clean-up is completed to proper health-based standards, requiring good corporate governance of the brownfields so that pollution does not reappear, and maintaining clean-up status, that can help us avoid repeating the contamination errors of the past and serve to benefit developing international laws modeled after CERCLA. In that way, CERCLA, as well as other laws that provide for restoration can help us save a planet. The planet "saved," however, will be the next one inhabited by humans, not necessarily the Earth. All Earth can be is a selectively restored world with the hope it lasts for as long as possible. Thus, sustainability may meet its true test through NASA in Bradbury's chronicled world at last.

APPENDIX "A"

COMPARISONS OF AAI AND PHASE I

Section 312.10 of EPA's proposed rule states its purpose is to provide for CERCLA defenses, exemptions and brownfield grants. The standard covers both hazardous substances and petroleum releases (which relate mostly to the brownfield programs), and emphasizes the potential disclosure obligations of the environmental professional under environmental laws, e.g., reporting. \(^{234}\) ASTM Section 1 similarly defines commercial and customary practices but does not discuss the potential disclosure obligations of the professional. Thus, the duties of the site assessor remain slightly unclear but clients may still expect confidentiality of their business transactions.

Section 312.10 of EPA's proposed rule defines an "environmental professional," one who may lawfully conduct or supervise the AAI, more narrowly than ASTM section 3.2.12 in terms of state licenses, degrees, and years of experience. This could lead to a proliferation of state licensing requirements; the EPA will not propose a licensing scheme. Individuals with ten years of relevant experience are grandfathered under EPA's proposal. It is incumbent on their customers to demand that they are properly credentialed.

Section 312.20 of EPA's proposed rule allows for the use of prior environmental site audits by purchasers, but establishes more rigorous conditions than existing ASTM standards. EPA requires reviews of the prior information with reference to the pending real estate transaction. ASTM Section 4.7.2 allows use of a prior assessment if site conditions have not materially changed in the opinion of the user. EPA's proposed provision allows for the inclusion of information collected in compliance with the final AAI rule within the prior year and imposes certain additional updating requirements, e.g., interviews and record checks, that must be conducted within 180 days before purchase. ASTM Section 4.6 does not mandate updating a report less than 180 days old. Most important, the EPA proposed rule affirms the date of title transfer as the date before which AAI must be accomplished.

\(^{234}\) 40 C.F.R. §§ 312.1(d), 312.21(d). However, EPA explains that the proposed rule contains no new reporting requirements. Standards and Practices for All Appropriate Inquiries, 69 Fed. Reg. at 52551.
ASTM Section 4.5 contains principles that a site assessment does not eliminate uncertainties, is not exhaustive, and allows for variable inquiries.\footnote{235} The EPA standard does not state similar flexibility principles. Rather it focuses on identification of information on current and past uses and occupancies, current and past uses of hazardous substances, waste management and disposal activities that caused releases or threatened releases, current and past corrective actions, engineering and institutional controls, and adjoining and nearby properties with conditions indicating releases to the subject property.\footnote{236} It also focuses on performance factors requiring environmental professionals to gather relevant information within a reasonable time and costs that are practicably reviewable and to review the information for thoroughness and reliability.\footnote{237} This may drive a consultant to stress the significance of "data gaps."

Section 312.20(f) of the EPA's proposed rule provides that "data gaps" must be described and suggests but does not mandate that sampling be conducted to develop information to address those data gaps. The ASTM standards contain a similar concept, "data failure",\footnote{238} but do not require any sampling for a Phase I investigation.\footnote{239} This new EPA approach may eliminate the tiered approach between a Phase I and II, if the environmental professional states that any "data gaps" are significant.

Section 312.21 of EPA's proposed rule requires interviews, reviews of government records, visual inspections and so forth. Section 6 of the ASTM standard has similar requirements for a Phase I investigation. The proposed EPA standard places greater emphasis than the ASTM standard, on past operations and on activities on adjoining properties. Section 312.23 of EPA's proposed rule requires interviews of past and present owners and also requires interviews of owners or occupants of adjacent properties in the case of "abandoned properties," but does not specify questions to be asked or the number of people to be interviewed. ASTM Section 9 requires only interviews of present owners, including site managers. Section 312.24 of EPA's proposed rule requires inquiry into initial structures on the property and when it was first used for residential, agricultural, commercial, industrial, or government purposes. ASTM Sections 7.3 and 7.3.2 only require the environmental

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\begin{itemize}
  \item \footnote{235} See ASTM, Standard E 1527-00, §§ 3.3.27, 7.1.4.3.
  \item \footnote{237} Id. at 52578.
  \item \footnote{238} ASTM, supra note 235 § 7.3.2.3.
  \item \footnote{239} Id., supra note 235 § 6.4.
\end{itemize}
}
professional research back to 1940 for undeveloped land or when the property was first developed, whichever is earlier.

Section 312.25 of EPA's proposed rule suggests that the environmental professional search for liens but allows the client to do the search instead. ASTM Section 5.2 requires the user to provide lien information to the environmental professional.

Section 312.26 of EPA's proposal requires the environmental professional to search for federal, tribal, state or local records, on the subject property and on adjoining properties. Search for public health records regarding the subject property is also required. The proposal also establishes search distances for nearby properties but provides that those distances may modified based on professional judgment. ASTM Sections 7.1.7, 7.2 and 10 are not as detailed on local government searches and rely more on interviews with local government officials. Search distances on nearby facilities are similar. ASTM does not require inquiry into public health records.

Section 312.27 of EPA's proposal requires visual inspections of the subject property and adjoining properties. ASTM Section 8.4.1.3 requires that current uses of adjoining properties be identified if the properties appear impaired (contaminated). The EPA proposal is more onerous and requires the professional in "good faith" to seek access of adjoining sites or explain why efforts to gain access were unsuccessful. Visual inspection from other vantage points are also options EPA's proposal allows if there are access problems, e.g., snow, overgrowth, high water, and so forth.

Section 312.28 provides that the person conducting the inquiry must account for specialized knowledge of the subject property and surrounding area. ASTM Section 5.3 only requires users to report specialized knowledge to the environmental professional, if known. Section 312.29 of EPA's proposal imposes an obligation on the inquirer to consider the fair market value of the subject property and compare the price to the value of the property, as if not contaminated. A real estate appraisal is not required. ASTM at Section 5.4 requires actual knowledge of price disparity by the user before it is described in the environmental report. Section 312.30 of EPA's proposal broadly requires the environmental professional to gather information about commonly known or reasonably ascertainable information. This information includes the professional or personnel experience of the

240. Id., supra note 235 § 7.1.2.1.
Section 5.2.1 of the ASTM standard does not require use of information that is not recorded. EPA's proposed standard appears to require a more exhaustive investigation.

Section 312.31 of EPA's proposal requires that the environmental professional's report include an opinion regarding additional appropriate investigation. ASTM Section 11 states the primary focus should be on finding certain recognized environmental conditions, i.e., releases, and provides that any additional opinions or work scope be assessed in the terms of an engagement letter. Thus, the new reports may mandate a never-ending story.

242. Id.