

TOXIC ASSETS: THE EPA'S SETTLEMENT OF CERCLA CLAIMS IN BANKRUPTCY

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The Environmental Protection Agency's (EPA) recent settlement of environmental cleanup claims against Asarco, the highest such settlement in history, highlights the incongruity between the tools at the Agency's disposal to recover cleanup costs and its actual behavior in pursuing such claims. The Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA) provides statutory authority that should allow EPA to force polluters to fully bear the burden of cleaning up pollution. However, despite EPA's relative success against solvent responsible parties, EPA appears to be less aggressive in pursuing CERCLA claims against insolvent polluters, even though the Bankruptcy Code provides additional tools to give EPA an advantage relative to creditors. This Note explains the statutory advantages that EPA has under CERCLA and the Bankruptcy Code, and then explores how EPA fails to behave like a rational economic actor in pursuing its CERCLA claims. I conclude by positing political factors and budget shortfalls as two potential explanations of EPA's behavior.

INTRODUCTION

The Environmental Protection Agency (EPA) recently made headlines for achieving “the largest recovery of money for environmental cleanup in U.S. history.”¹ EPA settled its claims under the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA)² in the American Smelting and Mining Corporation (Asarco) bankruptcy for \$1.8 billion. At first glance, the settlement seems praiseworthy because Asarco is responsible for twenty-six Superfund sites³ across the United States.⁴ However, a closer examination of the Asarco bankruptcy reveals that EPA settled

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¹ Tim Steller, *\$1.8B in Asarco Money Will Be Used for Environmental Cleanups*, ARIZ. DAILY STAR, Dec. 11, 2009, at A9 (quoting U.S. Associate Attorney General Tom Perrelli).

² CERCLA is codified at 42 U.S.C. §§ 9601–9675 (2006). CERCLA, commonly referred to as “Superfund,” is a legislative scheme designed to clean up hazardous waste sites across the nation. RICHARD C. PORTER, *THE ECONOMICS OF WASTE* 218 (2002).

³ Superfund sites are hazardous waste sites that are recognized and monitored by the federal government under CERCLA. See *Superfund: Cleaning up the Nation's Hazardous Wastes Sites*, EPA, <http://www.epa.gov/superfund/index.htm> (last updated Oct. 3, 2011).

much less than the costs at particular sites.⁵ Similarly, EPA did not invoke its statutory authority to force any other polluters of Asarco's waste sites to pay the difference. The shortfall in cleanup cost recovery will be borne by the Agency, and hence the American taxpayers.

Criticisms of EPA's enforcement of CERCLA occupy two extreme positions: Either EPA enforces CERCLA too aggressively⁶ or the Agency is too lax because it is captured by the industries it regulates.⁷ This Note uses the perspective of bankruptcy to expand those critiques. When a polluter is solvent, EPA is usually assured that cleanup will occur and that the polluter will pay for it.⁸ When a polluter is insolvent, however, the situation changes dramatically. EPA is then responsible for funding any cleanup the polluter cannot pay for and must compete with other creditors for the polluting debtor's assets. By looking at EPA's actions in bankruptcy, we can evaluate how aggressively it pursues cleanup costs using the statutory tools available to it.

This Note posits that EPA does not pursue claims in bankruptcy against Superfund sites in a sufficiently aggressive manner, and that the Agency does not make up the difference between its claims and settlements by pursuing other responsible polluters. After explaining that the Agency's behavior deviates from that of a rational economic actor, I propose two possible explanations for EPA's actions: (1) political factors, such as support for polluters from the local community or politicians, may scare EPA from pursuing maximal settlements, or (2)

⁴ *American Smelting and Refining Company (ASARCO) Bankruptcy Settlement: EPA Funded Sites and Communities*, EPA, <http://www.epa.gov/compliance/resources/cases/cleanup/cercla/asarco/community.html> (last updated Sept. 30, 2011).

⁵ See *infra* notes 89–92 and accompanying text (describing how EPA settled with Asarco for less than expected costs to the government at two sites).

⁶ See PORTER, *supra* note 2, at 234 (arguing that CERCLA must be reformed to “recognize . . . that everything cannot be made perfectly clean right away”); see also ROBERT T. NAKAMURA & THOMAS W. CHURCH, *TAMING REGULATION: SUPERFUND AND THE CHALLENGE OF REGULATORY REFORM* 61–62 (2003) (discussing Republican attacks after the 1994 congressional elections that Superfund was “absurdly costly” and “unfair”).

⁷ See, e.g., Hillary Sigman, *The Pace of Progress at Superfund Sites: Policy Goals and Interest Group Influence*, 44 J.L. & ECON. 315, 317 (2001) (observing that the presence of wealthy polluters decreases cleanup speed).

⁸ EPA's assured recovery may explain the reason that most studies of CERCLA and EPA's enforcement focus on the pace and level of cleanup. See, e.g., Sigman, *supra* note 7, at 316–17 (explaining a methodology that measures the length of cleanup time for hazardous waste sites); W. Kip Viscusi & James T. Hamilton, *Are Risk Regulators Rational? Evidence from Hazardous Waste Cleanup Decisions*, 89 AM. ECON. REV. 1010, 1010 (1999) (explaining a methodology that measures whether politics and risk perceptions influence EPA cleanups).

budgetary pressures on EPA may force it to take guaranteed money now rather than all the money later.

To reach this conclusion, I analyzed EPA's actions from the records of each bankruptcy proceeding the Agency has been involved in since 2006. My list of bankruptcies involving EPA comes from searching the *Federal Register* for notices of settlements.⁹ To find court documents, including EPA's initial claims and objections from other creditors, I used the Public Access to Court Electronic Records (PACER) database.¹⁰ Finally, I searched two EPA databases to cross-reference the polluters at several sites¹¹ with enforcement actions at the sites to determine whether the Agency made up shortfalls in cleanup contributions by pursuing other polluters at waste sites.¹²

⁹ The Department of Justice (DOJ) regularly publishes announcements of major settlements to provide an opportunity for public comment. See 28 C.F.R. § 50.7 (2010) (mandating that DOJ receive and consider public comments before accepting settlement offers).

¹⁰ See PUBLIC ACCESS TO COURT ELECTRONIC RECORDS, <http://www.pacer.gov> (last visited Oct. 19, 2011). For several of the bankruptcies I examine in this Note, information was unavailable on PACER. Instead, information was available online in separate bankruptcy databases run by the companies hired to manage publication and notice of bankruptcy documents. The Asarco, Chemtura, Crucible Materials, G-I Holdings, Lyondell, Mark IV Industries, Old Carco, Shapes/Arch-Holding, Smurfit, and Tronox bankruptcies were all available on websites. See *Asarcoreorg.com*, ALIXPARTNERS, LLC, <https://www.asarcoreorg.com/> (last visited Oct. 19, 2011); *Chemtura Corporation*, KURTZMAN CARSON CONSULTANTS LLC, <http://www.kccllc.net/chemtura> (last visited Oct. 19, 2011); *Crucible Materials*, EPIO SYSTEMS, <http://chapter11.epiqsystems.com/CBM/project/default.aspx> (last visited Oct. 19, 2011); *General Information*, EPIO SYSTEMS, <http://chapter11.epiqsystems.com/GIH/project/Default.aspx> (G-I Holdings) (last visited Oct. 19, 2011); *Welcome to the LB Trust Official Information Website*, KURTZMAN CARSON CONSULTANTS LLC, <http://www.kccllc.net/lbtrust> (last visited Oct. 19, 2011) (providing materials from the Lyondell Litigation Trust, Creditor Trust, and Creditor Representative); *Mark IV*, EPIO SYSTEMS, <http://chapter11.epiqsystems.com/MIV/Project/default.aspx> (last visited Oct. 19, 2011); *Old Carco LLC (f/k/a Chrysler LLC)*, EPIO SYSTEMS, <http://dm.epiq11.com/CHR/Project/default.aspx> (last visited Oct. 19, 2011); *Shapes/Arch Holdings LLC*, EPIO SYSTEMS, <http://documents.epiq11.com/clientdefault.aspx?pk=782f86b8-d875-4406-a6c3-e38bfc6b3848&l=1> (last visited Oct. 19, 2011); *Smurfit-Stone*, EPIO SYSTEMS, <http://dm.epiq11.com/SMU/project/Default.aspx> (last visited Oct. 19, 2011); *Tronox Incorporated, et al.*, KURTZMAN CARSON CONSULTANTS LLC, <http://www.kccllc.net/tronox> (last visited Oct. 19, 2011).

¹¹ EPA's Superfund Enforcement Tracking System (SETS) is a database used by attorneys, engineers, and other parties involved in Superfund cleanup to identify Potentially Responsible Parties (PRPs) that EPA considers liable for the waste at each Superfund site and the date each polluter received notice of liability. POTENTIALLY RESPONSIBLE PARTIES (PRP) SUPERFUND ENFORCEMENT TRACKING SYSTEM, LEXISNEXIS, <http://www.lexisnexis.com> (follow the "Find A Source" hyperlink; then search for "ENVIRN;PRP"; then follow the "Potentially Responsible Parties" hyperlink); ENVIRONMENTAL DATA RESOURCES—SUPERFUND MATERIALS, WESTLAW, <http://www.westlaw.com> (enter "EDR-SFUND" in the "Search for a database" box).

¹² EPA's Enforcement and Compliance History Online Database (ECHO) lists the Agency's enforcement activities at each Superfund site and the value of its settlements and

Although there is little information available about EPA's negotiating style, public documents have circumstantial explanatory power by showing the results of EPA's negotiations.

This Note uses those public documents to examine EPA's settlement behavior in bankruptcy cases and to explain the deviation of that behavior from a rational economic actor's behavior. Part I explains the CERCLA and bankruptcy statutory schemes, which entitle EPA to ask for joint and several liability and also require judicial deference to its cleanup cost estimates. In Part II, I propose a model of how a typical creditor¹³ would act in EPA's position and argue that, if it acted like such a creditor, EPA should be able to recover most of its claims. In Part III, I demonstrate that EPA does not act in an economically rational manner in four respects. Finally, in Part IV, I explore political pressure and underfunding of Superfund as two possible explanations for EPA's undervaluation of its claims.

I

CERCLA AND THE BANKRUPTCY CODE PLACE EPA IN AN ADVANTAGEOUS POSITION AGAINST INSOLVENT POLLUTERS

The first Section of Part I lays out the legislative history and statutory scheme of CERCLA and explains how EPA is provided with powerful legislative tools to clean up waste sites. The second Section provides a brief overview of the bankruptcy process and how courts have interpreted CERCLA to require them to give EPA substantial deference, keeping the Agency's ability to clean up waste sites largely unimpaired.

A. *CERCLA and EPA's Ability To Recover Cleanup Costs*

In 1980, Congress responded to a series of environmental disasters by passing CERCLA.¹⁴ Prior to CERCLA's passage, no federal law regulated waste management, allowing serious pollution incidents

judicial victories. See EPA, ENFORCEMENT & COMPLIANCE HISTORY ONLINE (ECHO), <http://www.epa-echo.gov/> (last visited Aug. 2, 2011).

¹³ By "typical creditor" I mean a party that is influenced only by maximizing the monetary value of their claim and minimizing the cost of litigation. See ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 15 (4th ed. 2004) (defining a "rational economic actor" as one who seeks to maximize utility, choosing the best alternative under given constraints).

¹⁴ See CAROLE STERN SWITZER & LYNN A. BULAN, *CERCLA: COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT 3-4* (2002) (arguing that the public attention on the environmental contamination of Love Canal, New York, pushed Congress to enact CERCLA).

to occur.¹⁵ Legislators designed CERCLA to promote waste cleanup by funding EPA's cleanup of hazardous waste sites through Superfund¹⁶ and authorizing EPA to sue potentially responsible parties (PRPs) who violate CERCLA.¹⁷

A hazardous waste site cleanup begins when EPA is notified that waste is present.¹⁸ After notification, EPA conducts a Preliminary Assessment and Site Investigation (PA/SI) to determine the site's dangerousness. Extremely hazardous sites are placed on the National Priorities List (NPL). EPA may use Superfund to pay for cleanup of these sites.¹⁹ The Agency then conducts two related studies, a Remedial Investigation and a Feasibility Study (RI/FS), on NPL sites to determine the best cleanup method.²⁰ After a period of public notice and comment, EPA begins the Remedial Design and

¹⁵ See, e.g., CRAIG E. COLTON & PETER N. SKINNER, *THE ROAD TO LOVE CANAL: MANAGING INDUSTRIAL WASTE BEFORE EPA 151-54* (1996) (describing the serious pollution of Love Canal, New York, in the 1920s and 1930s and the common law response). Much of the area around the Love Canal, was evacuated until the early 1990s, when New York declared parts of the area habitable once more. *NEW THINKING ABOUT POLLUTION 102* (Robert Curley ed., 2011).

¹⁶ Superfund was established to permit EPA to clean up "orphan" sites, which the polluters are unwilling or financially unable to clean up. See KATHERINE N. PROBST ET AL., *SUPERFUND'S FUTURE: WHAT WILL IT COST? A REPORT TO CONGRESS 33* (2001). Initially, taxes on petroleum and chemical companies financed Superfund, but these taxes expired in 1995 and have not been reenacted. Since then, Congress has funded Superfund through general revenues. However, insufficient funding has delayed cleanup at numerous sites. See Kate Probst, *Reinstating the Superfund Taxes: Good or Bad Policy?*, in *ISSUES OF THE DAY: 100 COMMENTARIES ON CLIMATE, ENERGY, THE ENVIRONMENT, TRANSPORTATION, AND PUBLIC HEALTH POLICY 78, 78-79* (Ian W.H. Parry & Felicia Day eds., 2010) (explaining that, after Superfund taxes expired and EPA's funding decreased, the percentage of sites where cleanup is completed has fallen to an all-time low); see also *infra* Part IV.C (discussing how budget shortfalls may pressure EPA to settle).

¹⁷ The report on CERCLA from the Senate Committee on the Environment and Public Works identified three major goals for the statute: (1) to "provide [an] incentive for maximum care . . . by establishing strict liability," (2) to "provide an immediately available source of funding for cleanup and mitigation," and (3) to "provide prompt and adequate compensation for injured parties." S. REP. NO. 96-848, at 12 (1980). The statute was designed to force "those who benefit financially from a commercial activity [to] internalize the health and environmental costs of that activity." *Id.* at 13. CERCLA designates as a PRP any previous owner or operator of a waste site, transporter of waste to a site, or party who arranged for waste disposal to the site. CERCLA § 107(a), 42 U.S.C. § 9607(a) (2006). PRPs are the parties encompassed by section 107(a). See, e.g., MICHAEL B. GERRARD & JOEL M. GROSS, *AMENDING CERCLA: THE POST-SARA AMENDMENTS TO THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT 1* (2006) (noting that parties liable under CERCLA are "commonly called potentially responsible parties or PRPs").

¹⁸ See 40 C.F.R. § 300.405 (2010) (describing the methods by which EPA is notified).

¹⁹ For a detailed explanation of the steps involved in cleaning a Superfund site, see RICHARD L. REVESZ, *ENVIRONMENTAL LAW AND POLICY 635-37* (2008).

²⁰ See 40 C.F.R. § 300.430.

Implementation Phase and cleans up the long-term damage.²¹ On average, the entire process takes twelve years and each cleanup costs around \$30 million, excluding litigation and administrative costs.²²

Because Superfund cleanups are complicated and expensive processes, Congress provided EPA powerful enforcement tools to shift costs from public funds to the responsible polluters. Congress designed CERCLA to render as many parties as possible liable and to give EPA²³ a strong position when it brings actions for cleanup costs.²⁴ Studies suggest that the number of PRPs at toxic waste sites varies significantly.²⁵ At some sites, such as those with a single factory, there is only one PRP.²⁶ Often, however, multiple PRPs are responsible for waste at a site, such as when multiple factories or mines discharge

²¹ See generally *id.* (detailing the RI/FS process). The RI/FS phase is when EPA determines how best to clean up a site, and as such includes a comprehensive assessment of the extent of pollution at a site, ways to clean up the site, the risks of failing to clean the site, and cost estimates for the proposed remediation. *Id.* § 300.430(a)(2), (d)(1), (e)(1), (e)(7)(iii). Depending on a site, an RI/FS can take several years. BARRY L. JOHNSON, ENVIRONMENTAL POLICY AND PUBLIC HEALTH 301 (2007).

²² PORTER, *supra* note 2, at 219 (citing W. Kip Viscusi & James T. Hamilton, *Cleaning Up Superfund*, 124 PUB. INT. 52, 52 (1996)). Porter notes that CERCLA litigation is so expensive that the statute has been nicknamed “the Comprehensive Employment for Regulators, Consultants, and Lawyers Act.” *Id.* (citing DIXY LEE RAY & LOU GUZZO, ENVIRONMENTAL OVERKILL: WHATEVER HAPPENED TO COMMON SENSE? 140 (1993) (internal quotation marks omitted)).

²³ Although CERCLA claims are brought on behalf of EPA, DOJ brings enforcement actions. However, DOJ expenditures for CERCLA enforcement are linked to specific cases and sites to ensure that the Agency’s work advances Superfund goals. See PROBST ET AL., *supra* note 16, at 118 (observing that DOJ expenditures are linked to specific cases). DOJ received control of CERCLA litigation because of “the allegedly cozy relations between [polluters] and the [EPA] during the [early years of the Reagan administration].” NAKAMURA & CHURCH, *supra* note 6, at 58–59.

²⁴ The congressional record indicates that CERCLA was designed to allow EPA to rapidly recover cleanup costs from polluters. See 126 CONG. REC. 30,939 (1980) (statement of Sen. Bill Bradley) (emphasizing the importance of rapid response capability); 126 CONG. REC. 30,971 (statement of Sen. John Chafee) (“Our . . . [g]overnment[] must have a tool for holding liable those who are responsible for these costs.”).

²⁵ One recent study showed that while the average number of PRPs at Superfund sites is 26.7, the median number is 3, Howard F. Chang & Hilary Sigman, *An Empirical Analysis of Cost Recovery in Superfund Cases: Implications for Brownfields and Joint and Several Liability* 30 tbl.1 (Pa. Law Sch. Pub. Law & Legal Theory Research Paper Series, Paper No. 10-23, 2010), available at <http://www.ssrn.com/abstract=1640680>, suggesting that some sites with a large number of PRPs may skew results. An earlier study found that “[a]pproximately 15 percent of the [Superfund] sites involve only one PRP.” JAN PAUL ACTON & LLOYD S. DIXON, SUPERFUND AND TRANSACTION COSTS: THE EXPERIENCES OF INSURERS AND VERY LARGE INDUSTRIAL FIRMS 47 (1992), available at <http://www.rand.org/pubs/reports/2007/R4132.pdf>. Although one might expect that EPA forces solvent PRPs to compensate for the deficiencies of insolvent ones, this Note argues that EPA typically does not pursue that course of action.

²⁶ For example, the only polluter at the Behr Dayton Thermal Products LLC Site was the Chrysler Corporation, which ran an air conditioning manufacturing plant on the site from 1937 until 2002. See *Behr Dayton Thermal Systems VOC Plume Site*, EPA,

waste into a local water supply, which then spreads over a large geographic area.²⁷ Determining liability for each PRP at a waste site may be difficult, but courts have held that CERCLA was drafted to impose joint and several liability, allowing EPA to hold any individual polluter liable for the entire cost of cleaning up a site.²⁸ The joint and several liability provision is supplemented by the imposition of strict liability for “all costs of removal or remedial action incurred.”²⁹ Further, courts defer to EPA’s estimate of cleanup costs,³⁰ rejecting them only if EPA acted arbitrarily and capriciously.³¹ EPA may also pursue punitive damages³² and damages for harm to natural resources.³³ These powerful tools make sense given Congress’s intent to “facilitate the prompt cleanup of hazardous waste sites by placing

<http://www.epa.gov/region5/sites/behr/background.htm> (last updated Aug. 3, 2011) (describing pollution at a site owned and operated by Chrysler for 65 years).

²⁷ See, e.g., EPA, BUNKER HILL MINING AND METALLURGICAL COMPLEX SUPERFUND SITE: FIVE-YEAR REVIEW REPORT, at ES-1 (2005), available at <http://www.epa.gov/superfund/sites/fiveyear/f2006100001395.pdf> (describing the site as including “mining-contaminated areas in the Coeur d’Alene River corridor, adjacent floodplains, downstream water bodies, tributaries, and fill areas, as well as the 21-square-mile Bunker Hill ‘Box’”); EPA, GOWANUS CANAL 1 (2011), available at <http://www.epa.gov/region02/superfund/npl/0206222c.pdf> (describing the Gowanus Canal Superfund site as a “100-foot wide, 1.8-mile long canal” polluted by runoff from “heavy industry including gas works (i.e., manufactured gas plants), coal yards, cement makers, soap makers, tanneries, paint and ink factories, machine shops, chemical plants, and oil refineries”).

²⁸ Cf. *United States v. Chem-Dyne Corp.*, 572 F. Supp. 802, 811 (S.D. Ohio 1983) (“The defendants have not carried their burden of demonstrating the divisibility of the harm and the degrees to which each defendant is responsible.”). The Supreme Court recently restricted joint and several liability under CERCLA, but affirmed that “defendants seeking to avoid joint and several liability bear the burden of proving that a reasonable basis for apportionment exists.” *Burlington N. & Santa Fe Ry. Co. v. United States*, 129 S. Ct. 1870, 1881 (2009).

²⁹ CERCLA § 107(a)(4)(A), 42 U.S.C. § 9607(a)(4)(A) (2006).

³⁰ See *United States v. Rohm & Haas Co.*, 939 F. Supp. 1142, 1150 (D.N.J. 1996) (noting that the defendant has the burden to prove EPA cost estimates are inconsistent with the enabling statute).

³¹ See *United States v. Ward*, 618 F. Supp. 884, 900 (E.D.N.C. 1985) (“If defendants wish the court to review the consistency of plaintiffs’ [cleanup] actions . . . then they are essentially alleging that the EPA did not carry out its statutory duties The statute . . . requires deference by this court to the judgment of agency professionals.”). The court further observed that “it would be an unreasonable waste of judicial time and government resources[,] not to mention an usurpation of agency authority, to require the EPA to justify its every action.” *Id.*; see also *United States v. Akzo Coatings of Am., Inc.*, 949 F.2d 1409, 1424 (6th Cir. 1991) (holding that “CERCLA has properly left the scientific decisions regarding toxic substance cleanup to the President’s delegatee, the EPA administrator and his staff” and the court can reject EPA’s estimate only when it finds “errors of procedure” or “glaring omissions or mistakes”); *United States v. Ne. Pharm. & Chem. Co.*, 810 F.2d 726, 748 (8th Cir. 1986) (“The applicable standard of review is whether the agency’s choice is arbitrary and capricious.”).

³² CERCLA § 107(c)(3), 42 U.S.C. § 9607(c)(3).

³³ CERCLA § 107(a)(4)(C), 42 U.S.C. § 9607(a)(4)(C).

the ultimate financial responsibility for cleanup on those responsible for hazardous wastes.”³⁴

Another feature of CERCLA that facilitates EPA’s recovery of cleanup costs is EPA’s ability to pursue the parents of subsidiary corporations that pollute. When engaging in especially toxic activities, corporations may spin off subsidiary entities so that only the subsidiary, a legally separate entity, will be liable for environmental damages.³⁵ However, CERCLA holds parent corporations responsible for the actions of their subsidiaries in two separate instances. First, the parent corporation is liable if it is possible to “pierce the corporate veil.”³⁶ Second, the parent corporation is liable when it operates the waste site.³⁷ These avenues of liability allow EPA to pursue a parent corporation when its subsidiaries are unable to pay cleanup costs if a parent managed the site.

Outside of bankruptcy, EPA has been successful in using CERCLA to force PRPs to pay for cleanup waste sites. EPA estimates that PRPs pay for seventy percent of cleanups.³⁸ The Agency uses its own funds only when it “cannot locate PRPs for these properties or the PRPs [are insolvent].”³⁹ That said, additional factors have slowed

³⁴ *United States v. Chapman*, 146 F.3d 1166, 1175 (9th Cir. 1998) (quoting *Wash. State Dep’t of Transp. v. Wash. Natural Gas Co.*, 59 F.3d 793, 799 (9th Cir. 1995) (internal quotation marks omitted)).

³⁵ *Cf. United States v. Bestfoods*, 524 U.S. 51, 61 (1998) (“It is a general principle of corporate law . . . that a parent corporation . . . is not liable for the acts of its subsidiaries.”) (internal quotation marks omitted).

³⁶ Piercing the corporate veil is a legal term for the ability of a creditor or tort victim to sue a parent corporation if the subsidiary was established to promote fraud or injustice. *See id.* at 61. Because recognition of a corporation as a separate legal person is “deeply ingrained in our economic and legal systems,” veil piercing is difficult to justify. *Id.* (internal quotation marks omitted). The legal standard required for veil piercing in the CERCLA context is unclear. *Compare Atchison, Topeka & Santa Fe Ry. Co. v. Brown & Bryant, Inc.*, 159 F.3d 358, 363 (9th Cir. 1998) (holding that there is “no real . . . need for uniformity” with regard to parent-subsidiary liability, “especially since state law will in many other instances determine whom the EPA may or may not look to for compensation”), *with United States v. Gen. Battery Corp.*, 423 F.3d 294, 302 (3d Cir. 2005) (applying federal common law because “[a] more uniform and predictable federal liability standard corresponds with specific CERCLA objectives”).

³⁷ “[N]othing in [CERCLA’s] terms bars a parent corporation from direct liability for its own actions in operating a facility owned by its subsidiary.” *Bestfoods*, 524 U.S. at 64.

³⁸ *See* Marianne L. Horminko, Assistant Adm’r, EPA, Remarks at the Baker Botts Annual Environmental Law Seminar 4 (Feb. 5, 2004), *available at* <http://www.scribd.com/doc/1774824/Environmental-Protection-Agency-2004-0205-mlh-baker-botts2> (“Over the life of the Superfund program, responsible parties have paid for about 70 percent of non-federal cleanups . . .”). This is a marked change from the first ten years of Superfund, during which the Agency’s budget covered more than half of all cleanup costs. *See* PROBST ET AL., *supra* note 16, at 33.

³⁹ JONATHAN L. RAMSEUR & MARK REISCH, CONG. RESEARCH SERV., SUPERFUND: OVERVIEW AND SELECTED ISSUES 12 (2006), *available at* <http://www.nationalaglawcenter.org/assets/crs/RL33426.pdf>.

Superfund cleanup. The presence of PRPs and their involvement in cleanup may reduce the level of cleanup at sites.⁴⁰ Political factors may also influence cleanup.⁴¹ These factors clearly play a role when PRPs are solvent, and, in Part IV, I argue that political factors prevent EPA from forcing PRPs to pay for cleanup when PRPs are bankrupt.

B. EPA's Enforcement of CERCLA in Bankruptcy Actions

A PRP's bankruptcy poses a significant challenge to EPA's enforcement actions. The purpose of Chapter 11 of the Bankruptcy Code is to give insolvent firms a "fresh start," allowing them to restructure their debts and create a new capital structure.⁴² In a Chapter 11 proceeding, a corporation reorganizes and discharges its debts⁴³ while continuing to exist as a viable entity. Creditors have the right to receive at least as much money as they would if the firm were liquidated under Chapter 7 and its assets sold.⁴⁴ The Code is premised on the idea that companies will reorganize better if they can eliminate excessive debt. Consistent with the goal of giving companies a fresh

⁴⁰ See, e.g., Shreekanth Gupta et al., *Do Benefits and Costs Matter in Environmental Regulation? An Analysis of EPA Decisions under Superfund*, in ANALYZING SUPERFUND: ECONOMICS, SCIENCE, AND LAW 83, 106 (Richard L. Revesz & Richard B. Stewart eds., 1995) (finding that sites at which PRPs were in charge of cleanup were more likely to be classified by EPA as more dangerous, "thus lending some support to the notion that PRPs can influence the cleanup"); Sigman, *supra* note 7, at 338 ("[R]esearch suggests that the EPA selects less costly remedies at sites with [PRPs] . . ."); see also PERRY BEIDER, CONG. BUDGET OFFICE, ANALYZING THE DURATION OF CLEANUP AT SITES ON SUPERFUND'S NATIONAL PRIORITIES LIST 2 (1994) (explaining that recalcitrance of PRPs delays cleanup).

⁴¹ See, e.g., Dorothy M. Daley & David F. Layton, *Policy Implementation and the Environmental Protection Agency: What Factors Influence Remediation at Superfund Sites?*, 32 POL'Y STUD. J. 375, 387 (2004) ("Sites are systematically more likely to reach construction completion when an elected official from the site's congressional district sits on a Superfund oversight committee."). Further, sites in higher income neighborhoods receive faster NPL listing than sites in poorer neighborhoods. See Sigman, *supra* note 7, at 333 (using statistical analysis to argue that increases in income reduce NPL listing time). Another study identifies a correlation between voter turnout and the amount spent by EPA in cleanup. Viscusi & Hamilton, *supra* note 8, at 1021–22 & 1022 tbl.2 (using statistical analysis to show that counties with higher voter turnout have increased EPA cleanup expenditures as defined by "cost per case of cancer avoided"). Viscusi and Hamilton also found that "states with more environmentalists[] and states with senators with stronger environmental voting records were . . . more likely to have stricter environmental cleanup targets." *Id.* at 1025.

⁴² See generally ADAM P. STROCHAK ET AL., ENVIRONMENTAL ISSUES IN BANKRUPTCY CASES: A COLLIER MONOGRAPH § 1 (Alan N. Resnick & Henry J. Sommer eds., 2009) (explaining the purpose of Chapter 11 bankruptcy).

⁴³ See generally HARLAN D. PLATT, THE PRINCIPLES OF CORPORATE RENEWAL 23–28 (2008) (discussing the structure and function of Chapter 11).

⁴⁴ See 11 U.S.C. § 1129(a)(7) (2006) (requiring all impaired claimholders or interestholders to either accept the plan or receive as much as they would under Chapter 7 liquidation before a court can confirm a plan).

start, CERCLA claims can be discharged in bankruptcy.⁴⁵ The discharge of CERCLA claims forces EPA to estimate decades of cleanup costs⁴⁶ for remedial plans that may change in the future based on factors beyond its control. However, the Bankruptcy Code gives EPA several advantages over most creditors by providing priority to cleanup actions EPA performs during bankruptcy and deferring to EPA's cleanup cost estimates.

The Bankruptcy Code assigns different levels of priority to the claims of different types of creditors, which allows debtors to repay some of their creditors in full while paying others nothing. While many creditors may settle their claims to speed the confirmation of a bankruptcy plan and be paid more quickly,⁴⁷ the priority rules established in the Bankruptcy Code for different types of creditors "[are], for the most part, respected."⁴⁸ Creditors rarely receive every dollar

⁴⁵ See, e.g., *In re Chateaugay Corp.*, 944 F.2d 997, 1008 (2d Cir. 1991) (classifying CERCLA claims that may be converted into a "monetary obligation" as a "claim" under the Bankruptcy Code, and thus dischargeable); *In re Jensen*, 127 B.R. 27, 33 (B.A.P. 9th Cir. 1991) (holding that a CERCLA claim arose prepetition and so it was dischargeable); *Signature Combs, Inc. v. United States*, 253 F. Supp. 2d 1028, 1033-38 (W.D. Tenn. 2003) (surveying four legal standards adopted by other circuits to determine when CERCLA claims may be dismissed in bankruptcy). The Code broadly defines claims as anything that gives rise to a "right to payment" or a "right to an equitable remedy for breach of performance if such breach gives rise to a right to payment." 11 U.S.C. § 101(5). The Supreme Court includes within the definition of a claim the liability for breaching a statute where the breach gives the government a right to payment. See *Ohio v. Kovacs*, 469 U.S. 274, 279 (1985) (holding that a court-ordered obligation to pay, created by a breach of state environmental laws, constitutes a bankruptcy claim). In addition, both the House and Senate reports for the Code indicate that claims are to be viewed broadly. See H.R. REP. NO. 95-595, at 309 (1977), reprinted in 1978 U.S.C.C.A.N. 5963, 6266 ("[T]he bill contemplates that all legal obligations of the debtor, no matter how remote or contingent, will be able to be dealt with in the bankruptcy case."); S. REP. NO. 95-989, at 22 (1978), reprinted in 1978 U.S.C.C.A.N. 5787, 5808 (same).

⁴⁶ Cf. EPA, COEUR D'ALENE BASIN RECORD OF DECISION, DECISION SUMMARY 12-1 to -4 (2002), available at <http://yosemite.epa.gov/r10/cleanup.nsf/9f3c21896330b4898825687b007a0f33/6ef7b1a4f47acc0388256c32005ac909> (outlining a cleanup plan anticipated to span thirty years).

⁴⁷ See, e.g., Lucian Arye Bebchuk & Jesse M. Fried, Commentary, *A New Approach to Valuing Secured Claims in Bankruptcy*, 114 HARV. L. REV. 2386, 2404-05 (2001) (arguing that potentially incorrect valuations of claims and increased costs associated with delay lead some parties to accept less than their statutory entitlements in bankruptcy to speed payment).

⁴⁸ Douglas Baird, Arturo Bris & Ning Zhu, *The Dynamics of Large and Small Chapter 11 Cases: An Empirical Study 5* (Yale Int'l Ctr. for Fin., Working Paper No. 05-29, 2007), available at <http://www.ssrn.com/abstract=866865>.

that they are owed,⁴⁹ but they often pursue their claims with every means at their disposal.⁵⁰

Secured creditors are frequently paid in full because part or all of their claims are guaranteed by the debtor's property.⁵¹ Unsecured creditors are not guaranteed repayment and only receive a pro rata share of the assets remaining after higher priority claims are repaid.⁵² Administrative claims, which encompass some of EPA's cleanup costs, fall in between secured and unsecured creditor claims in priority.

Under the Bankruptcy Code, debtors must pay administrative expenses before providing any compensation to unsecured creditors.⁵³ Administrative expenses are the "actual, necessary costs . . . of preserving the estate"⁵⁴ and encompass the costs that a company must incur to maintain its business during bankruptcy. For example, businesses must stay current on employee wages, contracts with suppliers, and contracts with other parties necessary to the debtor's business that "would not enter into dealings with . . . [the debtor] unless priority is allowed."⁵⁵ Without a statutory mandate, courts developed a doctrine that entitles EPA to administrative priority in a range of

⁴⁹ See, e.g., Arturo Bris, Ivo Welch & Ning Zhu, *The Costs of Bankruptcy: Chapter 7 Liquidation Versus Chapter 11 Reorganization*, 61 J. FIN. 1253, 1290 (2006) (finding that, among firms worth more than \$1 million, secured creditors receive over 90% of what they are owed in Chapter 11 reorganizations, while unsecured creditors receive 59–61% of their claims in Chapter 11 reorganizations).

⁵⁰ See Kenneth M. Ayotte & Edward R. Morrison, *Creditor Control and Conflict in Chapter 11*, 1 J. LEGAL ANALYSIS 511, 511–13 (2009) (summarizing the debate in the literature over the manner in which senior secured creditors, unsecured creditors, and equity try to gain control of Chapter 11 reorganizations).

⁵¹ See 11 U.S.C. § 506 (2006) (describing secured claims).

⁵² See NATHALIE MARTIN & OCEAN TAMA, *INSIDE BANKRUPTCY LAW: WHAT MATTERS AND WHY* 180 (2008) (describing the calculation of unsecured creditors' pro rata shares).

⁵³ See 11 U.S.C. § 507(a) (giving "administrative expenses" priority over all unsecured claims except those for "domestic support obligations"). Holders of administrative expenses may consent to receive a lesser amount, as may any other creditor. See *id.* § 1129(a)(9) (allowing a claimholder to "agree[] to a different treatment of [a] claim"). Because administrative expense claims have priority over general unsecured claims, parties with administrative expenses are in a more stable position. However, they may still face delays in payment due to a dispute over the size of their claim and, as for all creditors, "speed means, all other things being equal, lower legal costs and quicker collection on loans that are in default." Derek N. Pew, Comment, *The Need for Speed and Common Sense: Rewriting § 365(c)(2) To Recognize the Practice of Prepetition Agreements for § 364 Debtor-in-Possession Financing*, 140 U. PA. L. REV. 2471, 2473 (1992).

⁵⁴ 11 U.S.C. § 503(b)(1)(A). For a discussion of the justification for administrative priority, see *In re Hemingway Transp., Inc.*, 126 B.R. 656, 659 (Bankr. D. Mass. 1991), which observed that the purpose of administrative expense priority is the congressional recognition "that, if a business that has filed for bankruptcy is to continue operating . . . , third parties must be willing to provide necessary goods and services."

⁵⁵ *Reading Co. v. Brown*, 391 U.S. 471, 477 (1968).

circumstances.⁵⁶ EPA receives administrative priority for any cleanup costs it incurs between filing a bankruptcy petition and confirmation of the reorganization plan. These cleanup costs must be paid in full before unsecured creditors receive anything.⁵⁷ However, EPA does not receive priority for its future, postbankruptcy response costs. This limitation on administrative priority should, in theory, incentivize EPA to clean up sites quickly when PRPs are in bankruptcy.⁵⁸

To justify granting EPA administrative priority, courts relied on considerations of public policy, backed by Supreme Court precedent. The Supreme Court has held that bankrupt entities may not violate a “statute . . . that is reasonably designed to protect the public health or safety” in an effort to facilitate reorganization.⁵⁹ Thus, even if pollution of the debtor’s property occurred before bankruptcy, bankruptcy courts give EPA’s claims that are incurred during bankruptcy administrative priority because “those expenses . . . [are] actual and necessary, both to preserve the estate in required compliance with state law and to protect the health and safety of a potentially endangered public.”⁶⁰ The courts are split on whether EPA must provide

⁵⁶ In the debate over whether environmental cleanup costs should receive administrative priority, “Congress has sat silently on the sidelines,” allowing the issue to play out in the courts. Ingrid Michelson Hillinger & Michael G. Hillinger, *Environmental Affairs in Bankruptcy*: 2004, 12 AM. BANKR. INST. L. REV. 331, 390 (2004).

⁵⁷ See 2 ENVIRONMENTAL LAW PRACTICE GUIDE: STATE AND FEDERAL LAW § 10.09[4][a], at 10-30 (Michael B. Gerrard ed., 2011) (“[W]here the government or a third-party cleans up property owned by the bankruptcy estate . . . during the bankruptcy, most courts have afforded the cleanup administrative expenses priority.”).

⁵⁸ I identified no cases in which EPA or a state environmental agency filed a claim for administrative priority for cleanup activities that would take place after the bankruptcy proceeding ended. This finding is not surprising because section 503 of the Bankruptcy Code restricts administrative priority to expenses necessary to preserve the estate in bankruptcy. See 11 U.S.C. § 503(b) (explaining that one type of administrative expense is “the actual, necessary costs and expenses of preserving the estate”). Although complying with the law is a necessary expense for debtors, see *In re Wall Tube & Metal Prods. Co.*, 831 F.2d 118, 124 (6th Cir. 1987), preservation of the estate does not logically include liability for debtors’ breaches of the law after bankruptcy. Such a result would be difficult to square with allowing debtors to discharge environmental liability in bankruptcy. See *supra* note 45 (noting that CERCLA claims can become dischargeable bankruptcy claims).

⁵⁹ *Midlantic Nat’l Bank v. N.J. Dep’t of Env’tl. Prot.*, 474 U.S. 494, 507 (1986); see also *Ohio v. Kovacs*, 469 U.S. 274, 285 (1985) (holding that bankrupt parties in possession of Superfund sites “must comply with . . . environmental laws” designed to promote public safety).

⁶⁰ *In re Wall Tube & Metal Prods. Co.*, 831 F.2d at 124; see also *In re H.L.S. Energy Co.*, 151 F.3d 434, 438 (5th Cir. 1998) (noting that bankrupt parties must still comply with state law, which entitled Texas to administrative priority for its cleanup); *In re Chateaugay Corp.*, 944 F.2d 997, 1010 (2d Cir. 1991) (“If property on which toxic substances pose a significant hazard to public health cannot be abandoned, it must the [sic] follow . . . that expenses to remove the threat posed by such substances are necessary to preserve the estate.”). The costs of cleaning up toxic waste released postpetition receive administrative priority. See, e.g., *U.S. Dep’t of Interior v. Elliott*, 761 F.2d 168, 172 (4th Cir. 1985) (giving

evidence of a heightened danger from the pollution to justify administrative priority for postpetition cleanups of prepetition pollution, but in general EPA will receive priority for postpetition cleanup of hazardous waste on public policy grounds.⁶¹

EPA's cleanup costs under CERCLA receive favorable treatment in other ways. The Bankruptcy Code allows creditors with contingent claims, which involve some level of uncertainty as to when the claim will fully materialize, to file a claim in bankruptcy proceedings.⁶² Uncertainty surrounding future cleanup costs, one type of contingent claim, leads some polluters to dispute EPA's estimates. However, the courts give the Agency's estimates great deference. So long as EPA has carried out some of the administrative steps it follows for cleaning up waste sites, bankruptcy courts will defer to EPA's estimates in particular cases.⁶³

Although nearly all legal actions against a debtor are stayed during bankruptcy, courts often exempt EPA cleanups from that prohibition. The Bankruptcy Code stays all judicial and administrative collection efforts, including government actions, unless the government agency acts through its inherent "police and regulatory

claims for "postpetition environmental penalties" administrative priority); *In re Hemingway Transp., Inc.*, 126 B.R. 656, 661 (D. Mass. 1991) (holding that cleanup costs incurred by the claimant on land the debtor sold to the claimant postpetition receive administrative expense priority), *aff'd in part and vacated in part*, 993 F.2d 915 (1st Cir. 1993).

⁶¹ See *In re Chateaugay Corp.*, 944 F.2d at 1010 (giving administrative priority to those costs EPA incurred to "remedy the ongoing effects of a release of hazardous substances"); *In re Wall Tube & Metal Prods. Co.*, 831 F.2d at 122–24 (giving priority to EPA on public policy grounds).

⁶² 11 U.S.C. § 502(c) (2006). Thomas Salerno provides a helpful definition of a contingent claim: "Generally, a claim is contingent if something needs to occur (like a judgment rendered in a lawsuit, or a guaranteed debt to default, or a claim made against the debtor's deductible under an insurance policy) before the debt matures or become [sic] due." THOMAS J. SALERNO ET AL., *THE EXECUTIVE GUIDE TO CORPORATE BANKRUPTCY* 90 (2d ed. 2010).

⁶³ See, e.g., *In re FV Steel & Wire Co.*, 372 B.R. 446, 456 (Bankr. E.D. Wis. 2007) ("The arbitrary and capricious standard of review instructs a court to make the narrow determination of whether the EPA's decision is based upon consideration of relevant factors and is not a clear error of judgment."); *In re Eagle-Picher Indus., Inc.*, 197 B.R. 260, 269 (Bankr. S.D. Ohio 1996) (explaining that the bankruptcy court's role is to defer to EPA's cost estimates unless the Agency acted in an arbitrary and capricious manner); *In re Commonwealth Oil Refining Co.*, 58 B.R. 608, 615–16 (Bankr. W.D. Tex. 1985) (denying the debtor's motion to enjoin EPA from seeking administrative expense priority because the debtor did not assert EPA acted arbitrarily and capriciously); see also Francis E. Goodwyn, *Claims Estimation and the Use of the "Cleanup Trust" in Environmental Bankruptcy Cases*, 9 AM. BANKR. INST. L. REV. 769, 786–88 (2001) (discussing the deference EPA receives for its estimates so long as the Agency produces an administrative record).

power.”⁶⁴ When EPA issues an injunction to force a party to clean up a waste site instead of performing the cleanup itself, the Agency acts pursuant to its police power and is exempted from the stay.⁶⁵ The combination of administrative expense priority and the police power exception to the automatic stay puts EPA in a very favorable position.

Despite EPA’s favorable position compared to unsecured creditors, the fact that not all CERCLA claims receive priority has led to calls for statutory reform.⁶⁶ Many of these calls are based on the assumption that the Bankruptcy Code is unjust because it allows parties to discharge environmental liability and forces the government (and hence the taxpayers) to pay for pollution caused by insolvent companies. However, bankruptcy law presumes that not all creditors will be paid in full. The unpaid creditors may be EPA, commercial creditors with unsecured loans, or plaintiffs harmed by a mass tort.⁶⁷ EPA still retains significant power in bankruptcy relative to other

⁶⁴ See 11 U.S.C. § 362(a), 362(b)(4).

⁶⁵ See *Penn Terra Ltd. v. Dep’t of Env’tl. Res.*, 733 F.2d 267, 278–79 (3d Cir. 1984) (holding that an action “to remedy environmental hazards . . . did not constitute an action to enforce a money judgment,” and therefore “[t]he automatic stay provision . . . [was] inapplicable”); see also David Neiman, *International Insolvency and Environmental Obligations: A Prelude to Resolving the Conflicting Policies of a Clean Slate Versus a Clean Site in Transnational Bankruptcies*, 8 *FORDHAM J. CORP. & FIN. L.* 789, 817 (2003) (“[C]ourts routinely . . . conclude[] that environmental claims filed by the EPA or other federal and state governmental entities fall within the police or regulatory power exception and are thus exempt from the automatic stay.”). Some commentators wonder why EPA does not seek to force more debtors to clean up because injunctions “appear to give environmental agencies an easy way to skirt the impact of bankruptcy.” Hillinger & Hillinger, *supra* note 56, at 376. EPA’s failure to seek injunctions may suggest that it does not use all of the tools available to it during bankruptcy proceedings. Alternatively, the case law may reflect only cleanups at sites with limited amounts of waste, as opposed to sites involving tens of millions of dollars of environmental liability. Perhaps a concern with establishing bad precedent if a court were to reject an injunction for a high-cost cleanup underlies the Agency’s behavior.

⁶⁶ See, e.g., Matt Sieving, *Rising Phoenix-Like from the Ashes: An Argument for Expanded Corporate Successor Liability Under CERCLA*, 35 *ECOLOGY L.Q.* 427 (2008) (advocating the expansion of the successor liability doctrine to ensure compensation of EPA for CERCLA claims and to encourage voluntary cleanups); Karyn S. Bergmann, *Bankruptcy, Limited Liability and CERCLA: Closing the Loophole and Parting the Veil* 47–48 (Univ. of Md. Sch. of Law Pub. Law & Legal Theory, Accepted & Working Research Paper Series No. 2004-02, 2004), available at <http://ssrn.com/abstract=503143> (proposing reforms to the Bankruptcy Code and CERCLA to increase EPA’s ability to hold parent corporations liable for their subsidiaries’ pollution). Some proposals for statutory reform suggest restricting EPA’s reach in bankruptcy. See, e.g., Kathryn R. Heidt, *Products Liability, Mass Torts and Environmental Obligations in Bankruptcy: Suggestions for Reform*, 3 *AM. BANKR. INST. L. REV.* 117, 132–34 (1995) (arguing that courts have misread the Bankruptcy Code and that EPA should not be able to receive administrative expense priority for CERCLA claims).

⁶⁷ Congress has chosen to give certain unsecured claims, including claims for some domestic support obligations and employee benefits, priority for public policy reasons. Section 507(a) of the Bankruptcy Code specifies the prioritized claims and creates a

unsecured creditors, and its success in obtaining cleanup from insolvent PRPs depends on how the Agency exercises these powers. In Part II, I provide a model for how EPA would act if its sole focus were maximizing its payouts in bankruptcy. I then contrast the rational economic model with the Agency's actual behavior in Part III.

II A MODEL OF HOW EPA WOULD BEHAVE IN BANKRUPTCY IF IT WERE A RATIONAL ECONOMIC ACTOR

Because EPA settles most CERCLA claims regardless of PRP solvency, the method used for valuing EPA's claims is extremely important.⁶⁸ This Part lays out the factors that should influence a rational economic actor's behavior in bankruptcy and explains that EPA would have low variance between its claim estimates and settlements if it followed that model. Part III then demonstrates that EPA's actions do not conform to this model and that EPA pursues claims less aggressively than a typical creditor.

In most litigation, it is commonly understood that parties settle only when they believe a settlement "would leave them at least as well off as they would expect to be after trial."⁶⁹ Plaintiffs and defendants "estimate their chances of success in court, the level of damages likely to be awarded, the costs of trial, and the costs of settlement" to decide whether and at what price they should settle.⁷⁰ The stronger a

hierarchy for satisfying these claims. Unsecured claims not explicitly listed do not receive priority. 11 U.S.C. § 507(a).

⁶⁸ As of 2007, seventy-seven percent of all CERCLA cases filed by DOJ on behalf of EPA were filed contemporaneously with a negotiated settlement. GOV'T ACCOUNTABILITY OFFICE, SUPERFUND: LITIGATION HAS DECREASED AND EPA NEEDS BETTER INFORMATION ON SITE CLEANUP AND COST ISSUES TO ESTIMATE FUTURE PROGRAM FUNDING REQUIREMENTS 39 (2009), available at <http://www.gao.gov/new.items/d09656.pdf>; see also Kit R. Krickenberger & Pamela Rekar, *Superfund Settlements: Breaking the Logjam*, 19 ENV'T REP. 2384, 2386 (1989) (discussing the high transaction costs of CERCLA litigation and concluding that "settlement is a necessary component of a successful superfund [sic] program").

⁶⁹ Janet Cooper Alexander, *Do the Merits Matter? A Study of Settlements in Securities Class Actions*, 43 STAN. L. REV. 497, 502 (1991); see also Frank B. Cross, *In Praise of Irrational Plaintiffs*, 86 CORNELL L. REV. 1, 3-5 (2000) (summarizing the classic economic model of parties' incentives to settle or proceed with suit in litigation); Russell Korobkin & Chris Guthrie, *Psychological Barriers to Litigation Settlement: An Experimental Approach*, 93 MICH. L. REV. 107, 111-14 (1994) (same).

⁷⁰ Korobkin & Guthrie, *supra* note 69, at 112; see also Robert J. Rhee, *A Price Theory of Legal Bargaining: An Inquiry into the Selection of Settlement and Litigation Under Uncertainty*, 56 EMORY L.J. 619, 624 (2006) ("A risk-adjusted valuation must incorporate the concepts of weight of evidence, confidence in assessment, and variance of case disposition from expectation.").

plaintiff's case, the higher its settlement value should be. Because CERCLA gives EPA a strong position vis-à-vis PRPs, the Agency would settle for close to the value of its claims if it were behaving as a rational economic actor.

CERCLA places EPA in a strong settlement position in several ways. A major issue in Chapter 11 reorganizations is how to value claims. In ordinary valuation disputes, parties have different views of a claim's value based on their respective assumptions.⁷¹ The greater the uncertainty over claim value, the more likely risk-averse parties will be to settle their claim at a lower value.⁷²

This uncertainty is most notable for mass tort claimants in bankruptcy proceedings who allegedly settle for unreasonable values.⁷³ Uncertainty in the mass tort context derives from the difficulty of measuring the claim values, disputes about causation and the number of victims, as well as other factors, which collectively may cause parties to settle for values not clearly related to the claim's merits.⁷⁴ The complicated issues involved lead some courts to request that the parties come to a consensual resolution on their own.⁷⁵

By contrast, CERCLA cases lack most of the variables that cause uncertainty in the estimation of mass tort claims. As noted above,

⁷¹ See Douglas G. Baird & Donald S. Bernstein, *Absolute Priority, Valuation Uncertainty, and the Reorganization Bargain*, 115 YALE L.J. 930, 958 (2006) (arguing that if a party's options are receiving nothing or litigating, it may pursue litigation because the party's ability to delay may prompt parties with more invested in the proceeding to settle to avoid a greater loss); see also Bebhuk & Fried, *supra* note 47, at 2403–06 (observing that debtors and secured creditors “have the most at stake,” which facilitates compromise settlements in favor of unsecured creditors).

⁷² See Jonathan T. Molot, *Litigation Finance: A Market Solution to a Procedural Problem*, 99 GEO. L.J. 65, 84 (2010) (noting that divergent risk tolerances lead to differences in bargaining power and to settlements that are not based solely on a claim's merits).

⁷³ See Deborah R. Hensler, *Bringing Shutts into the Future: Rethinking Protection of Future Claimants in Mass Tort Class Actions*, 74 UMKC L. REV. 585, 599–600, 610 (2006) (noting that “[m]any mass tort settlements underestimate the number of claimants who will come forward to claim benefits” and that uncertainties about payment for plaintiff's attorneys in bankruptcies discourage them from “invest[ing] additional time and effort in . . . [providing services] to their clients”).

⁷⁴ Valuation is especially problematic in asbestos cases because it is unclear when the harm from asbestos exposure will manifest itself and how much treatment will cost. See Deborah R. Hensler, *As Time Goes By: Asbestos Litigation After Amchem and Ortiz*, 80 TEX. L. REV. 1899, 1923–24 (2002) (discussing the particular difficulty in valuing mass asbestos claims due to the variety and large number of plaintiffs and defendants); Byron G. Stier, *Jackpot Justice: Verdict Variability and the Mass Tort Class Action*, 80 TEMP. L. REV. 1013, 1015–17 (2007) (arguing that mass tort claim valuation is difficult in part because of jury verdict variability).

⁷⁵ See *In re Dow Corning Corp.*, 211 B.R. 545, 603 (Bankr. E.D. Mich. 1997) (“We again encourage the parties to try [to settle the case]. Commentators have proposed innovative approaches to the dilemma that, while perhaps not perfect, could prove to be a substantial improvement over existing models.”).

courts have interpreted CERCLA to defer to EPA's cleanup estimates.⁷⁶ For this reason alone, there should be little variance between the Agency's claim estimate and the settlement value. Further, unlike many mass torts, which involve issues of causation and other elements of negligence liability, CERCLA provides strict liability whenever there is a "release or threatened release" of hazardous substances.⁷⁷ The strict liability provision eliminates the negligence and causation issues that bedevil mass tort claims. In this way, EPA's claims in bankruptcy are not like mass torts because they lack significant valuation disputes.⁷⁸ Instead, CERCLA claim valuations are the product of statutory deference to EPA's comprehensive administrative record.

Moreover, the joint and several liability provision of CERCLA provides EPA with additional leverage in settlement negotiations. Joint and several liability should permit EPA to threaten recalcitrant PRPs with full liability for the cleanup if a settlement offer is not accepted.⁷⁹ In addition, a PRP that pays more than its proportionate share of cleanup costs—whether in settlement or as a result of litigation—may sue other polluters for contribution.⁸⁰ The contribution provision is strengthened by EPA's ability to immunize polluters from contribution actions if they settle, while still allowing those settling polluters to sue other PRPs for contribution: Settling PRPs' liability is capped while the liability of non-settling PRPs is not.⁸¹ Thus, in exchange for settlement, EPA may offer something that all defendants desire: freedom from future litigation.

Unlike most other bankruptcy claimants, EPA brings numerous CERCLA actions, which allows the Agency to benefit from being a repeat plaintiff.⁸² EPA has a great deal of experience planning waste cleanups, so it should be able to estimate cleanup costs accurately.⁸³

⁷⁶ For a discussion of deference to EPA inside and outside of bankruptcy proceedings, see *supra* Part I.A–B. I argue in Part III.A, *infra*, that despite judicial deference to its estimates, EPA may be underestimating its cleanup costs.

⁷⁷ CERCLA § 107(a)(4), 42 U.S.C. § 9607(a)(4) (2006). See *supra* Part I.A for a brief discussion of CERCLA's statutory scheme.

⁷⁸ See *supra* note 63 (discussing case law and articles that explain how EPA's estimates receive deference).

⁷⁹ See Chang & Sigman, *supra* note 25, at 4–6 (arguing that EPA's threat of joint and several liability increases the potential costs to defendants and induces defendants to settle to avoid full liability).

⁸⁰ 42 U.S.C. § 9613(f).

⁸¹ *Id.* § 9613(f)(2)–(3).

⁸² Cf. David Rosenberg, *Mass Tort Class Actions: What Defendants Have and Plaintiffs Don't*, 37 HARV. J. ON LEGIS. 393, 400–02 (2000) (discussing the benefit to defendants of being able to spread the costs of defense across all of the claims in a class).

⁸³ See *id.* at 397 (observing that repeat players benefit from "economies of scale by investing once-and-for-all in the common questions and spreading the cost of that investment across all claims").

Further, the Agency should be able to spread litigation costs, such as developing expert witnesses and planning legal strategies, across cases because the same facts may arise repeatedly.⁸⁴ In contrast, PRPs face difficulties coordinating their defense because each PRP worries about suing and being sued for contribution after other parties settle with EPA.⁸⁵ Defendants may spend less on their defense in particular cases than EPA because EPA can spread costs over multiple cases, while each defendant is concerned with developing a defense for each individual case.⁸⁶ This investment asymmetry means EPA's position should be stronger and debtors should therefore settle at an amount closer to EPA's claim estimation. Finally, EPA's status as a repeat player should induce it to settle for high values to maintain its bargaining position across cases. EPA's settlement with one PRP for a low amount might cause other PRPs to expect similar treatment.⁸⁷ CERCLA defendants are faced with a single case with potentially enormous damages with unfavorable law. These factors suggest that PRPs would settle CERCLA claims for a value close to EPA's estimate. However, I demonstrate in the next Part that EPA does not settle in this way.

⁸⁴ See *id.* at 401 (suggesting that repeat players could invest more in “discovery, expert witnesses, legal research, or any of numerous other investments of time, effort and money”).

⁸⁵ See *id.* at 400 (observing that free rider and collective action problems arise when different parties, such as the multitude of plaintiffs in mass tort cases, have different representation and divergent interests). The collective action problem worsens when liable parties may sue one another for contribution, as they may under CERCLA. See *supra* notes 79–80 and accompanying text (discussing joint and several liability and contribution under CERCLA).

⁸⁶ This issue arises more commonly for plaintiffs in litigation. See Note, *Locating Investment Asymmetries and Optimal Deterrence in the Mass Tort Class Action*, 117 HARV. L. REV. 2665, 2667–68 (2004) (explaining that defendants benefit from being able to spread litigation costs over multiple claims, whereas individual plaintiffs in the mass tort context lack a similar cost-spreading capacity).

⁸⁷ See, e.g., Ben Depoorter, *Law in the Shadow of Bargaining: The Feedback Effect of Civil Settlements*, 95 CORNELL L. REV. 957, 960 (2010) (“[P]rior settlements exert ‘peer pressure’ on similarly situated parties, effectively weakening their position in comparable disputes . . . [and] mak[e] plaintiffs in future disputes more demanding and thus more reluctant to accept settlements below those that parties in prior settlements received.”); Korobkin & Guthrie, *supra* note 69, at 114 (noting that repeat players, like defendant-insurance companies, have an incentive to pursue claims aggressively because of the impact on future cases); see also Cross, *supra* note 69, at 6–8 (discussing repeat players’ incentives to engage in strategic manipulation of claims to produce favorable precedent and thereby to improve their bargaining position).

III

EPA IS NOT ACTING LIKE A RATIONAL ECONOMIC
ACTOR IN BANKRUPTCY

In this Part, I explain that there are several ways in which EPA fails to completely pursue claims against bankrupt PRPs. Section III.A argues that EPA's settlements bear little relation to its initial claims and that EPA does not pursue other PRPs for the shortfall. Section III.B explains EPA's failure to pursue administrative priority for any of its claims and concludes by suggesting there is reason to believe that EPA underestimates its cleanup costs and does not act like a rational economic actor.

A. EPA Settles for Less than Each Polluter's Liability and Does Not Pursue All Polluters

When EPA files a claim in bankruptcy, it files an estimate of the cost to clean up the waste site.⁸⁸ The amount EPA receives after the distribution of the debtor's assets is likely less than the size of its claim because creditors in bankruptcy are usually only partially repaid. Because EPA fixes the value of its claim in a CERCLA proceeding, the presence of other creditors and claimants against the debtor should not affect EPA's behavior. This Section discusses ways in which EPA appears to seek less than it could maximally obtain in bankruptcy, leaving money to other creditors even though its claim is fixed.

1. EPA Settles Its Claims for Less than Its Initial Estimates

EPA's tendency to settle CERCLA claims for less than actual costs can be seen in the Agency's settlement with Asarco, a mining and refining company.⁸⁹ EPA's initial estimate of cleanup costs at

⁸⁸ See, e.g., Proof of Claim of the United States, on Behalf of the United States Environmental Protection Agency, the United States Department of the Interior, and the United States Department of Commerce at 5-17, *In re Smurfit-Stone Container Enters., Inc.*, No. 09-10235 (Bankr. D. Del. Aug. 28, 2009), Proof of Claim No. 11430 [hereinafter Proof of Claim No. 11430] (estimating liability at numerous sites).

⁸⁹ Asarco is a mining company that filed for bankruptcy because of environmental and asbestos liability. See Thomas Stauffer et al., *Asarco Seeks Bankruptcy Protection*, ARIZ. DAILY STAR, Aug. 11, 2005, at A1. Asarco's bankruptcy attracted outrage from environmentalists who cite it as an example of the need for bankruptcy reform. See Marilyn Berlin Snell, *Going for Broke: How a Copper Giant Plans To Make the Public Pay for Its Toxic Mess*, SIERRA CLUB (May/June 2006), <http://www.sierraclub.org/sierra/200605/goingforbroke/page1.asp> (complaining that polluters "are getting a free pass" because of EPA's lax performance in bankruptcy). While EPA alleges that this was a successful reorganization, see Steller, *supra* note 1, it is worth noting that the only objection to the settlement came from another PRP, rather than Asarco's other creditors, see Union Pacific Railroad Company's Objection to the Amended Settlement and Consent Decree

Asarco's Coeur d'Alene Basin site was approximately \$2.57 billion.⁹⁰ However, the Agency settled for an unsecured claim of \$468.14 million, or 18% of its initial estimate.⁹¹ Similar results are found at other Asarco sites, such as the Superfund site in Omaha, Nebraska, where EPA settled its estimated cleanup costs of \$406 million for an unsecured claim of \$186.5 million.⁹²

Since Asarco's reorganization paid creditors with administrative priority, such as EPA, in full,⁹³ EPA could have potentially received more money. The fact that unsecured creditors were paid in full indicates there was sufficient capital to pay off all parties' claims. Had EPA's claim been larger, it might not have received 100 cents on the dollar, but it could have taken some of the money given to other unsecured creditors. In this context, EPA's decision to forgo a larger claim is curious. Increasing the size of its claim would have harmed other creditors, but EPA has no statutory or policy interest in protecting insolvent PRPs' creditors.

Yet EPA settles low in other bankruptcy proceedings as well.⁹⁴ In the bankruptcy of the Chrysler Corporation (now known as "Old Carco LLC"),⁹⁵ EPA settled between \$200 and \$225 million in

Regarding Residual Environmental Claims for the Coeur d'Alene, Idaho, Omaha, Nebraska, and Tacoma, Washington Environmental Sites, *In re Asarco, LLC*, No. 05-21207 (Bankr. S.D. Tex. Apr. 6, 2009), ECF No. 10742.

⁹⁰ See Post-Hearing Brief of the United States of America with Respect to the Coeur d'Alene Basin Site in Idaho at 1 n.1, *In re Asarco, LLC*, No. 05-21207 (Bankr. S.D. Tex. Nov. 5, 2007), ECF No. 6219 [hereinafter Post-Hearing Brief] (estimating "United States' Total Claim" at \$2.57 billion).

⁹¹ See Amended Settlement Agreement and Consent Decree Regarding Residual Environmental Claims for the Coeur d'Alene, Idaho, Omaha, Nebraska, and Tacoma, Washington Environmental Sites at 11–12, *In re Asarco, LLC*, No. 05-21207 (Bankr. S.D. Tex. Mar. 13, 2009), ECF No. 10541 [hereinafter Coeur d'Alene Consent Decree] (showing that EPA would receive \$41.5 million, a trust that implements EPA actions would receive \$359.2 million, and the Department of Interior and the Department of Agriculture Forest Service would receive \$67.5 million). In addition to the general unsecured claim, the Trust received a \$14 million claim for administrative priority. *Id.* at 12.

⁹² See *id.* at 6, 14.

⁹³ See Asarco Incorporated and Americas Mining Corporation's Seventh Amended Plan of Reorganization for the Debtors Under Chapter 11 of the U.S. Bankruptcy Code at 5–6, *In re Asarco, LLC*, No. 05-21207 (Bankr. S.D. Tex. Aug. 17, 2009), ECF No. 12534 [hereinafter Asarco Plan of Reorganization] (repaying unsecured creditors in full).

⁹⁴ Appendix A demonstrates that this is a common feature in many of the Superfund cases. EPA's most notable success was in the Tronox reorganization, where EPA received \$270 million in cash in return for giving up between \$1.5 and \$10.5 billion in claims in a reorganization in which unsecured creditors received only equity. See Notice of Lodging of Proposed Consent Decree and Environmental Settlement Agreement at 30–39 & Exhibit 2, at 1, *In re Tronox Inc.*, 09-10156 (Bankr. S.D.N.Y. Nov. 23, 2010), ECF No. 2808 (settling EPA's claims for \$270 million and listing payments).

⁹⁵ During its bankruptcy, Chrysler sold its more profitable assets to Fiat, which established a new Chrysler Corporation. In court documents, the debtor referred to the old Chrysler Corporation, which possessed its remaining assets, as "Old Carco." Emily

unsecured claims for \$31 million in unsecured claims, \$500,000 in cash after confirmation of Old Carco's reorganization plan, and up to an additional \$1.5 million if the Superfund sites were sold at a profit.⁹⁶ In the Smurfit-Stone bankruptcy EPA settled approximately \$125 million in expected cleanup costs⁹⁷ for \$15 million in unsecured claims.⁹⁸ Similarly, EPA filed a claim against Marcal Paper Mills for \$946 million,⁹⁹ which Marcal settled for \$3 million.¹⁰⁰

2. *Apportionment of Liability Does Not Explain EPA's Settlement Behavior*

Although EPA might be negotiating low settlements with insolvent PRPs because it expects to get the remainder of the cleanup costs from solvent and joint and severably liable PRPs, my review of settlements suggests that this is not the case. In fact, EPA settles low even when there are no other PRPs from which to seek additional costs. For example, at the Omaha Lead Superfund Site addressed in Asarco's bankruptcy, an EPA expert estimated that Asarco's facility, which operated there for more than 125 years, was responsible for over 90% of the site's waste.¹⁰¹ EPA argued for joint and several liability to hold Asarco fully liable,¹⁰² and the Agency's arguments

Chasan, *Old Carco LLC: Meet the New Old Chrysler*, FRONT ROW WASHINGTON (June 18, 2009, 06:14 PM), <http://blogs.reuters.com/frontrow/2009/06/18/old-carco-llc-meet-the-new-old-chrysler/>. I follow this convention in my citations to court documents from the Chrysler bankruptcy.

⁹⁶ See Proof of Claim of the United States on Behalf of the United States Environmental Protection Agency and Department of the Interior against Old Carco LLC at 4-34, *In re Old Carco LLC*, No. 09-50002 (Bankr. S.D.N.Y. Oct. 27, 2009), Proof of Claim No. 28677 [hereinafter Proof of Claim No. 28677] (laying out EPA's claims against Old Carco); Settlement Agreement Between the Old Carco Liquidation Trust and the United States at 6, *In re Old Carco LLC*, No. 09-50002 (Bankr. S.D.N.Y. July 14, 2010), ECF No. 7270 (setting out the settlement agreement between EPA and Old Carco).

⁹⁷ Proof of Claim No. 11430, *supra* note 88, at 2-17.

⁹⁸ Settlement Agreement at 9-10, *In re Smurfit-Stone Container Corp.*, No. 09-10235 (Bankr. D. Del. Oct. 28, 2010) [hereinafter Smurfit Settlement Agreement].

⁹⁹ Proof of Claim of the United States at 6-8, *In re Marcal Paper Mills, Inc.*, No. 06-21886 (Bankr. D.N.J. June 14, 2007), Proof of Claim No. 61 [hereinafter Proof of Claim No. 61].

¹⁰⁰ See Notice of Lodging of Settlement Agreement Under the Comprehensive Environmental Response, Compensation, and Liability Act, 72 Fed. Reg. 44,858, 44,858 (Aug. 9, 2007) (noting that three U.S. agencies, including EPA, were to receive \$3 million total to settle CERCLA claims against Marcal).

¹⁰¹ United States' Opening Pre-Trial Brief Regarding Estimation of Environmental Claims at the Omaha Lead Superfund Site at 9, *In re Asarco, LLC*, No. 05-21207 (Bankr. S.D. Tex. July 26, 2007), ECF No. 5325.

¹⁰² See United States' Motion and Supporting Memorandum of Law for Determination that Environmental Claims of the Government Will Be Estimated in Accordance with Applicable Non-Bankruptcy Law on Joint and Several Liability and Divisibility at 8-11, *In re Asarco, LLC*, No. 05-21207 (Bankr. S.D. Tex. July 26, 2007), ECF No. 4855 (noting the

suggest that it was aware of the precedential effect of low settlements.¹⁰³ However, EPA and Asarco settled the Omaha Lead Site claim for \$186.5 million, less than half of EPA's initial cleanup cost estimate.¹⁰⁴ Similarly, during Chrysler's reorganization, EPA settled a claim to clean up the Behr Dayton Superfund Site, at which Chrysler was the sole PRP, for \$26 million and the possibility of an additional payment of between \$500,000 and \$2 million,¹⁰⁵ less than half of its initial claim.¹⁰⁶

Indeed, EPA's failure to maximize its take in bankruptcy settlements is evidenced by the objections of solvent PRPs at multiple-PRP sites. In Chemtura's bankruptcy, for instance, EPA filed a claim for the cleanup of the Gowanus Canal for \$1.6 billion.¹⁰⁷ As with the Asarco bankruptcy, Chemtura's reorganization paid unsecured creditors in full,¹⁰⁸ suggesting that EPA failed to maximize its claim.

importance of "joint and several liability . . . as an incentive to early settlement instead of litigation" because "[w]ithout the risk of the application of joint and several liability, . . . debtors would lack adequate incentive to settle valid CERCLA liabilities in bankruptcy").

¹⁰³ The United States warned that if apportionment were allowed, "the Government and taxpayers [would] bear the risk of numerous 'orphan shares' at [s]ites for which [the d]ebtor may be found jointly and several liable. The Government's rights and public health and safety would therefore suffer . . ." *Id.*

¹⁰⁴ Coeur d'Alene Consent Decree, *supra* note 91, at 6, 14.

¹⁰⁵ See Notice of Lodging of Settlement Agreement Under the Comprehensive Environmental Response, Compensation, and Liability Act, 75 Fed. Reg. 42,785, 42,785-86 (July 22, 2010) (announcing and explaining the settlement).

¹⁰⁶ See Proof of Claim No. 28677, *supra* note 96, at 6-11 (detailing claims of EPA against Asarco for the Behr Dayton site which exceeded \$59 million in total).

¹⁰⁷ See Proof of Claim of the United States of America, on Behalf of the United States Environmental Protection Agency and the United States Department of Commerce at 3-36, *In re Chemtura Corp.*, No. 09-11233 (Bankr. S.D.N.Y. Oct. 30, 2009), Proof of Claim No. 11672 [hereinafter Proof of Claim No. 11672] (calculating damages for several sites at \$1,545,958,478); Proof of Claim of the United States of America, on Behalf of the United States Environmental Protection Agency at 2-3, *In re Bio-Lab, Inc.*, No. 09-11233 (Bankr. S.D.N.Y. Oct. 30, 2009), Proof of Claim No. 11767 [hereinafter Proof of Claim No. 11767] (asserting claims for monetary penalties which would be determined at a later date); Proof of Claim of the United States of America, on Behalf of the United States Environmental Protection Agency at 2-7, *In re Monochem, Inc.*, No. 09-11233 (Bankr. S.D.N.Y. Oct. 30, 2009), Proof of Claim No. 11797 [hereinafter Proof of Claim No. 11797] (demanding \$409,000 for future response costs); Proof of Claim of the United States of America, on Behalf of the United States Environmental Protection Agency at 2-5, *In re Chemtura Corp.*, No. 09-11233 (Bankr. S.D.N.Y. Oct. 30, 2009), Proof of Claim No. 11854 [hereinafter Proof of Claim No. 11854] (demanding \$54,100,000 in cleanup costs); Proof of Claim of the United States of America, on Behalf of the United States Environmental Protection Agency at 2-5, *In re Chemtura Corp.*, No. 09-11233 (Bankr. S.D.N.Y. Oct. 30, 2009), Proof of Claim No. 11993 [hereinafter Proof of Claim No. 11993] (estimating cleanup claims for the Naugatuck Treatment Site to be approximately \$19,500,000).

¹⁰⁸ See Joint Chapter 11 Plan of Chemtura Corp. at 19, *In re Chemtura Corp.*, No. 09-11233 (Bankr. S.D.N.Y. Oct. 29, 2010), ECF No. 4387 (stating that all general unsecured creditors were to be repaid in full with a combination of cash and stock).

However, EPA settled for \$25 million,¹⁰⁹ a shockingly low amount that caused New York City, a PRP for the Gowanus Canal Site, to object. The City's objection to the settlement rested on its assertion that there was never "any analysis of Chemtura's actual responsibility for the contamination."¹¹⁰ The same type of objection occurred in the Lyondell bankruptcy when solvent PRPs argued that EPA "did not really settle its claims [with Lyondell] at all, but instead conceded the claims at the expense of other alleged PRPs and the taxpaying public."¹¹¹ These objections show that PRPs think that their litigation costs will be less than their proportionate share of the money that EPA should recover from insolvent PRPs.

Because many sites have a small number of PRPs, EPA may lack the option to make up the shortfall from an insolvent PRP.¹¹² In such cases, EPA's settlement with one PRP may be the full amount it receives to clean up a site, especially if other PRPs become insolvent. As a matter of policy, EPA does not pursue PRPs to pay these "orphan shares." To encourage settlement, EPA's policy since 1997 has been to incur some of the cleanup costs for which an insolvent polluter was responsible if other PRPs settle.¹¹³ EPA's decision to

¹⁰⁹ See Settlement Agreement Among the Debtors, the United States, and the Connecticut Commissioner of Environmental Protection at 17, *In re Chemtura Corp.*, No. 09-11233 (Bankr. S.D.N.Y. Aug. 24, 2010), ECF No. 3658 [hereinafter Settlement Agreement Among the Debtors] (announcing the settlement); Settlement Agreement Between the Debtors and the United States Relating to the Gowanus Canal Superfund Site, *In re Chemtura Corp.*, No. 09-11233 (Bankr. S.D.N.Y. Sept. 30, 2010), ECF No. 4165 [hereinafter ECF No. 4165] (detailing the terms of the \$25 million settlement).

¹¹⁰ Letter from City of New York & Brooklyn Union Gas Company, to Ignacia S. Moreno, Assistant Att'y Gen., Envtl. & Natural Res. Div., DOJ 8 (Nov. 12, 2010) (on file with the *New York University Law Review*).

¹¹¹ Letter from Gary P. Gengel, Partner, Latham & Watkins LLP, to Ignacia S. Moreno, Assistant Att'y Gen., Envtl. & Natural Res. Div., DOJ 8 (Apr. 20, 2010) (on file with the *New York University Law Review*); see also Letter from Duke K. McCall, Of Counsel, Bingham McCutchen, LLP, to Ignacia S. Moreno, Assistant Att'y Gen., Envtl. & Natural Res. Div., DOJ 3 (Dec. 29, 2010) (on file with the *New York University Law Review*) (criticizing the Tronox settlement's "fail[ure] to provide certain information that is essential to understand the [p]roposed [s]ettlement . . . [such as] the full nature and scope of the environmental liabilities at issue . . . or whether the consideration received will be adequate to address the environmental liabilities at issue").

¹¹² See Chang & Sigman, *supra* note 25, at 30. At sites with a large number of PRPs, it is possible that EPA can force solvent PRPs to clean up the waste of insolvent ones. However, this Note argues, based on Appendices A–C, *infra*, that EPA does not commonly follow this approach.

¹¹³ See STEVEN A. HERMAN, EPA, ADDENDUM TO THE "INTERIM CERCLA SETTLEMENT POLICY" ISSUED ON DEC. 5, 1984, at 2 (1997), available at <http://www.epa.gov/compliance/resources/policies/cleanup/superfund/adden-settle-mem.pdf> ("In resolving cost recovery claims, recognition of equitable considerations, including the existence of a significant orphan share, is for settlement purposes only. Where there is indivisible harm, EPA will continue to pursue non-settling parties jointly and severally for all response costs."); STEVEN A. HERMAN, EPA, INTERIM GUIDANCE ON ORPHAN SHARE

absolve parties from paying for cleanup of insolvent PRPs may reduce friction with solvent PRPs. However, a study of several waste sites also suggests that these other PRPs are not being pursued for the shortfall.

The four Superfund sites with an insolvent PRP examined in Appendix B provide anecdotal evidence that EPA does not make up cleanup cost shortfalls by suing other PRPs. The Coeur d'Alene Site, as detailed in Table 1 of Appendix B, had twenty-three PRPs.¹¹⁴ The total amount for which EPA settled with the PRPs was \$753 million,¹¹⁵ less than a third of the \$2.57 billion in total cleanup costs.¹¹⁶ The Coeur d'Alene Superfund Site is particularly noteworthy because Asarco and Hecla Mining Company were perceived to be most responsible for the pollution.¹¹⁷ EPA settled with Hecla for \$263.4 million in 2011,¹¹⁸ after it had settled with Asarco for \$470 million, which left a funding deficit of almost \$2 billion. The shortfall in EPA's settlement of Coeur d'Alene cleanup costs does not appear unique. At the Kalamazoo River Site, involved in the Lyondell bankruptcy, EPA did not bring enforcement actions against some non-Lyondell PRPs.¹¹⁹ EPA also apparently did not bring enforcement actions against other solvent PRPs at the Stauffer-LeMoyne Site in the Chemtura

COMPENSATION FOR SETTLORS OF REMEDIAL DESIGN/REMEDIAL ACTION AND NON-TIME CRITICAL REMOVALS 1 & n.1 (1996), available at <http://www.epa.gov/compliance/resources/policies/cleanup/superfund/orphan-share-rpt.pdf> (stating that EPA will consider orphan shares "in settlement" only).

¹¹⁴ See *Bunker Hill Mining Metallurgical*, SUPERFUND ENFORCEMENT TRACKING SYSTEM (SETS), available at <http://www.lexisnexis.com> (follow the "Find A Source" hyperlink; then search for "ENVIRN;PRP"; then follow the "Potentially Responsible Parties" hyperlink; then search "Bunker Hill Mining Metallurgical").

¹¹⁵ For the calculations used to reach these numbers, see *infra* Appendix B and accompanying footnotes.

¹¹⁶ Post-Hearing Brief, *supra* note 90, at 1 n.1 (estimating "United States' Total Claim" at \$2.57 billion).

¹¹⁷ See, e.g., Kevin Taylor, *Kellogg Clean Enough, Hecla Officials Insist*, SPOKESMAN-REVIEW, May 2, 2003, at A1 (noting that "Hecla and Asarco are the major players" in cleanup efforts because they were the main contributors to waste at the site).

¹¹⁸ See Notice of Lodging of Consent Decree Under the Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act, and the Clean Water Act, 76 Fed. Reg. 35,470, 35,471 (June 17, 2011) (noting that Hecla would pay the United States, the Coeur d'Alene Tribe, and Idaho \$253.4 million plus interest).

¹¹⁹ See Appendix B, tbl.3 (detailing EPA's enforcement actions against other PRPs at the Kalamazoo Site). No EPA settlement was found in the *Federal Register* or ECHO against one out of three PRPs. See *infra* note 228.

bankruptcy¹²⁰ and the Omaha Lead Superfund Site in the Asarco bankruptcy.¹²¹

B. EPA Fails To Use Every Statutory Tool at Its Disposal

In addition to its failure to hold all PRPs liable, there are several other indications that EPA does not aggressively pursue its claims. EPA rarely seeks administrative priority in bankruptcy proceedings, despite ongoing cleanup at some sites. Nor does EPA appear to pursue parent-subsidiary liabilities. Taken together, these trends suggest that EPA might not use all available tools to pursue its claims.

As previously explained,¹²² bankruptcy courts grant EPA's cleanup activities administrative priority, giving EPA an increased likelihood of 100% payment when its activities are conducted during the bankruptcy proceeding.¹²³ This potential to be repaid in full should encourage EPA to file claims for administrative priority, but in the cases examined, it rarely did this.

EPA reserves itself the option of pursuing administrative priority in many bankruptcies but rarely uses it. The Agency files claims with the caveat that it will file for priority "at the appropriate time,"¹²⁴ but,

¹²⁰ See Appendix B, tbl.4 (detailing EPA's claims to date at Stauffer-LeMoyne Site). No EPA settlement was found in the *Federal Register* or ECHO against two out of four PRPs. See *infra* notes 234–35.

¹²¹ See Appendix B, tbl.2 (listing EPA's enforcement efforts to date against polluters at the Omaha Lead Superfund Site). No EPA settlement was found in the *Federal Register* or ECHO against two out of four PRPs. See *infra* notes 220–21.

¹²² See *supra* notes 53–63 and accompanying text for a brief discussion of administrative priority.

¹²³ See, e.g., Proof of Claim No. 11672, *supra* note 107, at 13 (discussing EPA's cleanup expenditures during bankruptcy proceedings); Proof of Claim of the United States, on Behalf of the United States Environmental Protection Agency, the United States Department of the Interior, and the United States Department of Commerce at 6–7, *In re* MHC, Inc., No. 09-10073 (Bankr. S.D.N.Y. July 6, 2009), Proof of Claim No. 12973 [hereinafter Proof of Claim No. 12973] (explaining that the investigation into cleanup activities continued during bankruptcy proceedings); see also EPA, PROPOSED PLAN: UPPER BASIN OF THE COEUR D'ALENE RIVER, BUNKER HILL MINING AND METALLURGICAL COMPLEX SUPERFUND SITE 4-1 to -6 (2010), available at http://www.epa.gov/region10/pdf/sites/bunker_hill/upper_basin_final_pp_0710.pdf (discussing cleanup activities between 2006 and 2010, when Asarco was in bankruptcy); EPA, OMAHA LEAD SITE DESCRIPTION 2-3 (2010), available at http://www.epa.gov/region7/cleanup/npl_files/nesfn0703481.pdf (discussing cleanup activities between 2005 and 2009, when Asarco was in bankruptcy).

¹²⁴ See, e.g., Proof of Claim of the United States on Behalf of the United States Environmental Protection Agency Against Government Gulch Mining Company, Ltd at 9, *In re* Gov't Gulch Mining Co., No. 05-21887 (Bankr. S.D. Tex. Aug. 1, 2006), Proof of Claim No. 11010 (Government Gulch was an insolvent subsidiary of Asarco); Proof of Claim of the United States, on Behalf of the United States Environmental Protection Agency, the United States Department of the Interior, & the United States Department of Commerce at 14, *In re* Lyondell Chem. Co., No. 09-10023 (Bankr. S.D.N.Y. July 6, 2009), Proof of Claim No. 12972 [hereinafter Proof of Claim No. 12972]; Proof of Claim of the

among all settlements reviewed in this Note, there were only two administrative expense claims.¹²⁵ The absence of administrative priority claims is surprising because in several cases the debtor could not fully repay unsecured creditors' claims, but fully paid administrative creditors other than EPA.¹²⁶ EPA's failure to seek administrative priority is troubling because the remainder of the funds will come from the public fisc, and, until then, many Superfund sites continue to pose a public health threat.¹²⁷

The bankruptcy proceedings studied raise similar concerns about how aggressively EPA pursues parent corporations for the liability of their subsidiaries. In order to pursue parent corporations, there must be proof that a parent corporation was involved in managing its subsidiary's waste for liability to attach.¹²⁸ Another possible hurdle to parent liability is substantive consolidation. Normally, bankrupt parent and subsidiary corporations are separate legal entities, and their assets and debts are separate in bankruptcy proceedings. However, sometimes a parent corporation is considered to be the same entity as one of its subsidiaries. This process, known as substantive consolidation, occurs when creditors petition the bankruptcy court to pool the entities' assets in the interest of equity.¹²⁹ Creditors

United States, on Behalf of the United States Environmental Protection Agency at 10, *In re* Mark IV Indus., Inc., No. 09-12795 (Bankr. S.D.N.Y. Oct. 28, 2009), Proof of Claim No. 1639.

¹²⁵ Asarco paid a \$14 million administrative expense claim for EPA's cleanup costs. *See* Coeur d'Alene Consent Decree, *supra* note 91, at 12. W.R. Grace also paid an administrative expense claim to EPA, but I did not include W.R. Grace in Appendix A because I could not find EPA's initial proof of claims. *See* Settlement Agreement Resolving the United States' Proofs of Claim Regarding Certain Environmental Matters at 22–23, *In re* W.R. Grace & Co., No. 01-01139 (Bankr. D. Del. Dec. 19, 2007), ECF No. 17651 (paying an administrative expense claim to EPA).

¹²⁶ *See, e.g.*, Third Amended Joint Chapter 11 Plan of Reorganization for the LyondellBasell Debtors at 27, 114, *In re* Lyondell Chem. Co., No. 09-10023 (Bankr. S.D.N.Y. Mar. 12, 2010), ECF No. 3997 [hereinafter Lyondell Plan] (paying administrative expense claims against the subsidiary in full, but paying unsecured creditors like Millennium 0.36% of their claim values); Modified Joint Plan of Reorganization for Smurfit-Stone Container Corporation and Its Subsidiaries at 32, *In re* Smurfit-Stone Container Corp., No. 09-10235 (Bankr. D. Del. June 21, 2010), ECF No. 8177 (paying administrative expenses in full).

¹²⁷ *Cf. infra* notes 161–63 and accompanying text (discussing slower cleanup resulting from EPA budget shortfalls).

¹²⁸ *See supra* notes 35–37 and accompanying text for a discussion of parent-subsidiary liability. The Supreme Court recognizes that CERCLA renders liable anyone who “manage[s], direct[s], or conduct[s] operations specifically related to pollution, that is, operations having to do with the *leakage or disposal of hazardous waste.*” *United States v. Bestfoods*, 524 U.S. 51, 66–67 (1998) (emphasis added).

¹²⁹ As with corporate-veil piercing, substantive consolidation is difficult to achieve because corporations are allowed to have independent subsidiaries. For example, in the Third Circuit, substantive consolidation is permitted only when creditors “relied on the

and the parent-debtor may also agree to pool the insolvent parent's assets with its insolvent subsidiaries' assets to simplify the bankruptcy.¹³⁰ Such substantive consolidation obviates the issue of parent-subsidiary because the parent and its subsidiaries share their liabilities when consolidated. Lyondell, however, did not seek substantive consolidation, leaving parent-subsidiary liability open to EPA.

However, in the Lyondell bankruptcy, EPA did not pursue the parent corporation for its cleanup costs even though that strategy might have allowed it to be repaid in full. First, Lyondell's Director of Retained Liabilities and Remediation testified that she maintained "lead responsibility" for managing waste disposal for Lyondell and its subsidiaries.¹³¹ This admission shows that EPA had a colorable argument—at the least—that Lyondell was liable for its subsidiaries' pollution because it was responsible for managing the disposal of waste and thus liable as an operator. Second, Lyondell and its subsidiaries filed for bankruptcy in tandem, and EPA filed a \$2.6 billion claim against Lyondell's subsidiaries, Millennium Holdings LLC and Equistar, for the cleanup of the Kalamazoo River Superfund Site.¹³² Because substantive consolidation did not occur, the value of EPA's settlement depended on which entities would be liable for the Agency's claim.

However, EPA not only failed to raise a parent-liability claim,¹³³ but it also immunized Lyondell from suits for operator liability by other PRPs.¹³⁴ Lyondell's general unsecured creditors were paid in

breakdown of entity borders and treated [parents and subsidiaries] as one legal entity, or . . . postpetition their assets and liabilities are so scrambled that separating them is prohibitive and hurts all creditors." *In re Owens Corning*, 419 F.3d 195, 211 (3d Cir. 2005).

¹³⁰ A 2007 survey found that 157 of the 283 largest bankruptcies filed between 2000 and 2004 were deemed substantive consolidations. William H. Widen, *The Reality of Substantive Consolidation: Results from an ABI-Funded Empirical Study*, AM. BANKR. INST. J., Jul./Aug. 2007 at 14, 14.

¹³¹ Affidavit of Deborah W. Kryak at 1, *In re Lyondell Chem. Co.*, No. 09-10023 (Bankr. S.D.N.Y. Oct. 16, 2009), ECF No. 3071.

¹³² Proof of Claim No. 12972, *supra* note 124, at 9–10.

¹³³ Proof of Claim of the United States, on Behalf of the United States Environmental Protection Agency, the United States Department of the Interior, and the United States Department of Commerce, *In re Millennium Petrochemicals, Inc.*, No. 09-10069 (Bankr. S.D.N.Y. July 6, 2009), Proof of Claim No. 12971 [hereinafter Proof of Claim No. 12971]; Proof of Claim No. 12972, *supra* note 124; Proof of Claim No. 12973, *supra* note 123; Proof of Claim of the United States, on Behalf of the United States Environmental Protection Agency, *In re Lyondell Chem. Co.*, No. 09-10023 (Bankr. S.D.N.Y. July 6, 2009), Proof of Claim No. 12974 [hereinafter Proof of Claim No. 12974].

¹³⁴ See Letter from Gary P. Gengel to Ignacia S. Moreno, *supra* note 111, at 4–7 (noting that the agreement bars general unsecured claims against Lyondell and extinguishes rights of contribution held by other PRPs).

full, but its subsidiaries' creditors were not.¹³⁵ EPA settled on an unsecured basis for \$1 billion, but received approximately \$53 million in cash for that claim.¹³⁶ Had EPA pursued its claim against Lyondell, which paid all its unsecured creditors in full, it likely would have recovered significantly more.¹³⁷ Because the other bankruptcies I surveyed involved substantive consolidation or were deemed to be substantively consolidated, it is unclear whether EPA's approach in the Lyondell bankruptcy was illustrative of a common problem. However, the approach is nonetheless troublesome because future cleanup costs of the Kalamazoo River may cost the taxpayers hundreds of millions of dollars.¹³⁸

In this Part, I demonstrated that EPA does not consistently utilize every tool available to force insolvent PRPs to pay for cleanups. EPA settles for less than the full value of its claims, fails to hold other PRPs liable, and does not appear to utilize administrative priority or pursue potentially liable parents of insolvent PRPs. Such trends could lead to significant shortfalls in cleanup cost recovery and differ strikingly from the expected actions of a creditor acting like a rational economic actor. In the next Part, I try to explain why EPA fails to act like a rational creditor.

IV

POSSIBLE EXPLANATIONS FOR EPA'S UNDERVALUATION OF CLAIMS

Part III showed that EPA does not act like a typical creditor, and the justification for EPA's actions is unclear. However, there are several reasons why EPA may be acting differently than a typical creditor, and this Part explores possible explanations for the phenomenon after dismissing the argument that EPA overstates its claims. Two explanations seem promising. First, political factors and EPA as a governmental agency, not a private actor, may influence EPA's actions.

¹³⁵ Millennium's unsecured creditors received 0.36% of the value of their claims, while Equistar's creditors received nothing. Lyondell Plan, *supra* note 126, at Exhibit A-7 (listing the amount repaid to the creditors of each Lyondell affiliate).

¹³⁶ Settlement Agreement Among the Debtors, the Environmental Custodial Trust Trustee, the United States, and Certain State Environmental Agencies at 12–15, 19, *In re* Lyondell Chem. Co., No. 09-10023 (Bankr. S.D.N.Y. Mar. 30, 2010), ECF No. 4081 [hereinafter Lyondell Settlement Agreement] (listing the sum for the unsecured claims and breaking down claims).

¹³⁷ See Lyondell Plan, *supra* note 126, at 114 (providing repayment in full of all unsecured creditors).

¹³⁸ EPA estimated cleanup costs for the river to total \$2.6 billion in its initial claim. See Proof of Claim No. 12972, *supra* note 124, at 9–10.

Second, EPA's budget shortfalls may pressure it to accept early settlements of cleanup costs well below the Agency's estimates.

A. EPA Does Not Underestimate Cleanup Costs or Inflate Claims

One reason that EPA settles low may be because EPA may be filing inflated claims and settling for its actual costs, or the Agency may overestimate its actual costs because of uncertainties in the process. However, the manner in which EPA appears to estimate cleanup costs during bankruptcy makes this unlikely. EPA's cleanup cost estimates are based on EPA's cleanup plans and often developed during the Agency's RI/FS studies, which require years of development and research.¹³⁹ Additionally, EPA's estimates reflect a cleanup plan developed prior to the bankruptcy. Because EPA's cleanup plans are a matter of the public record, it would be difficult to inflate its costs in bankruptcy proceedings.¹⁴⁰

It seems more likely that EPA underestimates its cleanup costs. Studies of EPA cost estimates in the 1990s show underestimation,¹⁴¹ and there is some evidence that EPA continues to underestimate cleanup costs. Actual cleanup costs have exceeded estimates at some

¹³⁹ See, e.g., Supplemental Proof of Claim of the United States on Behalf of the United States Environmental Protection Agency, the Department of Agriculture, the Department of the Interior, and the United States Section of the International Boundary and Water Commission, Against Asarco, LLC at 4–5, *In re Asarco, LLC*, No. 05-21207 (Bankr. S.D. Tex. July 31, 2006), Proof of Claim No. 10746 [hereinafter Proof of Claim No. 10746] (noting that EPA initiated a remedial investigation study in 1998, evaluated six cleanup approaches, and issued a Record of Decision); Proof of Claim No. 12973, *supra* note 123, at 6–7 (explaining that the RI/FS process lasted more than a decade); Proof of Claim No. 11672, *supra* note 107, at 18–19 (noting that EPA estimated cleanup costs for the Delaware Sand and Gravel Site based on its Record of Decision). See *supra* Part I.A for a discussion of how CERCLA cleanups proceed.

¹⁴⁰ Although it is more difficult to estimate the cleanup costs for sites that have not undergone extensive planning and review, EPA still does so. See, e.g., Proof of Claim No. 11672, *supra* note 107, at 9–10 (estimating that cleanup costs for the Gowanus Canal will exceed \$1 billion, even though a response action was not slated to be chosen for several years). However, even in such cases EPA provides some justification for its estimates. See *id.* (basing its estimate on “environmental data . . . collected . . . by the U.S. Army Corps of Engineers . . . and . . . one of the major PRPs at the site”). For a brief discussion of the precision of these estimates, see CTR. OF EXPERTISE, U.S. ARMY CORPS OF ENG'RS & OFFICE OF EMERGENCY & REMEDIAL RESPONSE, EPA, A GUIDE TO DEVELOPING AND DOCUMENTING COST ESTIMATES DURING THE FEASIBILITY STUDY 2-3 to -4 & 2-4 Exhibit 2-3 (2000), available at <http://www.epa.gov/superfund/policy/remedy/pdfs/finaldoc.pdf>.

¹⁴¹ See R.F. Shangraw, Jr., *Contingency Estimating for Environmental Projects*, in HAZARDOUS WASTE COST CONTROL 139, 140–43 (Richard A. Selg ed., 1993) (discussing studies on cost overruns from the 1980s and a 1987 study's finding that EPA underestimated cleanup costs by an average of eighty-seven percent); see also GEN. ACCOUNTING OFFICE, SUPERFUND: EPA COST ESTIMATES ARE NOT RELIABLE OR TIMELY (1992), available at <http://archive.gao.gov/d33t10/146972.pdf> (discussing the reasons behind EPA's underestimates).

sites¹⁴² while EPA overestimations of cleanup costs appear to be rare.¹⁴³ Given the number of Superfund sites at which cleanup costs exceeded original estimates and the manner in which EPA calculates its estimates in bankruptcy, it seems unlikely that EPA inflates claims. It seems more likely that EPA underestimates cleanup costs.

B. The Influence of Political Factors on EPA's Settlement Strategy

Perhaps there are political reasons EPA spares insolvent PRPs and jointly and several liable solvent PRPs. Political pressure can increase or decrease the agency's budget, change its statutory authority, or even force agency leadership to resign.¹⁴⁴ Despite potential political pressure to clean up a hazardous waste site, EPA may face a stronger countervailing pressure when the PRP is insolvent. Bankruptcy is a prolonged and expensive process, and it provides no guarantee that a company will successfully reorganize.¹⁴⁵ If EPA were

¹⁴² “[T]he extent of contamination at a site may be greater than EPA expected when it developed the cost estimate, which can expand the scope of work and remedies needed and increase overall construction costs.” GOV’T ACCOUNTABILITY OFFICE, SUPERFUND: EPA’S ESTIMATED COSTS TO REMEDIATE EXISTING SITES EXCEED CURRENT FUNDING LEVELS, AND MORE SITES ARE EXPECTED TO BE ADDED TO THE NATIONAL PRIORITIES LIST 22 (2010), available at <http://www.gao.gov/new.items/d10380.pdf>. For instance, EPA initially estimated that the cleanup of the Coeur d’Alene site would cost \$126 million, but, by September 2000, the Agency had spent \$212 million. See Letter from David G. Wood, Dir., Natural Resources and Environment, General Accounting Office, to Congressional Requesters 2 (Mar. 28, 2001), available at <http://www.gao.gov/new.items/d01431r.pdf>; see also GOV’T ACCOUNTABILITY OFFICE, SUPERFUND: INFORMATION ON COST AND OTHER ISSUES RELATED TO THE CLEANUP OF THE FEDERAL CREOSOTE SITE (2010), available at <http://www.gao.gov/new.items/d10277.pdf> (discussing cost overruns at the Creosote Superfund Site in New Jersey, which totaled approximately \$233 million).

¹⁴³ Cleanup costs have been underestimated since the program’s conception. See OFFICE OF TECH. ASSESSMENT, U.S. CONG., COMING CLEAN: SUPERFUND PROBLEMS CAN BE SOLVED . . . 66 (1989) (finding that “costs are nearly always estimated at every stage of Superfund”); see e.g., Manu Raju, *Tallying Cleanup Costs Results in Corporate Mess*, CQ WEEKLY, Sept. 18, 2006, at 2441 (noting soaring cleanup costs in the case of Asarco’s waste sites as well as at mines run by Galactic Resources Limited). Part of the problem may be that engineers tend to be overoptimistic about site conditions and remediation technologies. See OFFICE OF TECH. ASSESSMENT, U.S. CONG., SUPERFUND STRATEGY 233–34 (2003) (noting the uncertainty in site assessment, that “[n]o proven technological solutions exist for many of the conditions” at sites, and that, as a result, the process does not move as smoothly as expected).

¹⁴⁴ Daryl Levinson asserts that “[g]overnment actors respond to political, not market, incentives.” Daryl J. Levinson, *Making Government Pay: Markets, Politics, and the Allocation of Constitutional Costs*, 67 U. CHI. L. REV. 345, 347 (2000) (emphases omitted); see also B. Dan Wood & Richard W. Waterman, *The Dynamics of Political Control of the Bureaucracy*, 85 AM. POL. SCI. REV. 801, 821–22 (1991) (finding that agencies respond to political stimuli, such as funding levels, political appointments, and congressional hearings).

¹⁴⁵ See Bebchuk & Fried, *supra* note 47, at 2406 (explaining how the indirect costs of bankruptcy, such as misaligned management incentives and concern among potential

to prolong bankruptcy proceedings by pursuing administrative priority and parent-subsidiary liability more aggressively and disputing the costs of future cleanup, it might delay the proceeding long enough to jeopardize the reorganization, forcing a PRP to liquidate.¹⁴⁶ Pressure not to prolong bankruptcy may come from employees of an insolvent company, the company itself, politicians who support the company, and industry groups. The Agency may not want to be perceived as responsible for the liquidation of a company that plays a major role in a regional economy.

Enforcement of CERCLA has been a more political issue: “Superfund was at the center of a political firestorm during the first two decades of its existence,”¹⁴⁷ and a major complaint related to its enforcement was EPA’s pursuit of claims without considering the financial state of PRPs.¹⁴⁸ In response to threatened congressional action to limit EPA power,¹⁴⁹ EPA instituted far-reaching administrative changes to make EPA’s cleanup efforts more equitable to PRPs.¹⁵⁰

Today, there is still reason to believe that enforcement actions against bankrupt companies become political issues, creating political blowback that could scare EPA. Residents of the Coeur d’Alene Basin, for example, are hostile to EPA’s cleanup plan and are

business partners about the debtor’s ability to reorganize successfully, can greatly diminish a firm’s value).

¹⁴⁶ The Bankruptcy Code allows debtors to convert a Chapter 11 plan into a Chapter 7 liquidation. 11 U.S.C. § 1112(a) (2006). Chapter 11 plans allow a debtor to “reorganiz[e]” and become “reanimat[ed]” while Chapter 7 liquidations are “typically the death knell of the corporate debtor.” Sean P. Gates, *Conversion of the Postconfirmation Chapter 11 Case: Selected Problems, Needed Reform, and Proposed Amendments*, 6 J. BANKR. L. & PRACTICE 219, 219 (1997); see also *supra* notes 43–44 and accompanying text (contrasting Chapter 11 and Chapter 7). One study found that, among its sample of bankruptcy cases, “the vast majority of . . . chapter 11 cases [are] ultimately converted to chapter 7.” Stephen J. Lubben, *Business Liquidation*, 81 AM. BANKR. L.J. 65, 73 (2007).

¹⁴⁷ NAKAMURA & CHURCH, *supra* note 6, at 10.

¹⁴⁸ See *id.* at 9–10. President Clinton also criticized CERCLA, and in his 1993 State of the Union Address, expressed a desire to “use . . . Superfund to clean up pollution for a change and not just pay lawyers.” President William J. Clinton, Address Before a Joint Session of Congress on Administration Goals, 1 PUB. PAPERS 113, 118 (Feb. 17, 1993).

¹⁴⁹ See NAKAMURA & CHURCH, *supra* note 6, at 61 (noting that the Republican committee chairmen in 1995 were “bent on major changes in [Superfund’s] liability structure and funding mechanisms”). EPA’s need for cost-effective enforcement of CERCLA increased in 1995 when the tax on chemical companies was repealed. See JONATHAN LEE RAMSEUR ET AL., CONG. RESEARCH SERV., SUPERFUND TAXES OR GENERAL REVENUES: FUTURE FUNDING ISSUES FOR THE SUPERFUND PROGRAM 10 (2008), available at http://assets.opencrs.com/rpts/RL31410_20080204.pdf (noting Superfund’s funding shortfall following the expiration of Superfund taxes).

¹⁵⁰ See NAKAMURA & CHURCH, *supra* note 6, at 61–70 (discussing EPA’s administrative reforms to CERCLA enforcement, including the Agency’s decision to pay for orphan share liability).

concerned that the cleanup will drive away potential mine operators, “further depress[ing] an economy already suffering severely from the loss of mining-related jobs.”¹⁵¹ Their hostility has been echoed by their elected representatives with the power to cut EPA funding or otherwise restrict EPA. For instance, Idaho Senator Michael Crapo expressed his view that Idaho communities question “the merit of the science used by the EPA.”¹⁵²

Studies agree with this anecdote, suggesting politics play a role in EPA’s enforcement actions.¹⁵³ One study found that “[s]ites are systematically more likely to reach construction completion when an elected official from the site’s congressional district sits on a Superfund oversight committee.”¹⁵⁴ Given the history of political involvement in CERCLA enforcement, including opposition to excessive cleanups and empirical evidence suggesting the effect of political pressure on EPA cleanups, it is possible that political reasons explain

¹⁵¹ COMM. ON SUPERFUND SITE ASSESSMENT & REMEDIATION IN THE COEUR D’ALENE RIVER BASIN, NAT’L RESEARCH COUNCIL, SUPERFUND AND MINING MEGASITES: LESSONS LEARNED FROM THE COEUR D’ALENE RIVER BASIN 17 (2005), available at http://www.nap.edu/openbook.php?record_id=11359&page=17. Similarly, EPA has been blamed for the region’s economic decline. See Karen Dorn Steele, *EPA Strikes Vein of Anger: Plans To Expand the Superfund Cleanup Beyond the Bunker Hill “Box” Stir Resentment from Those Who Blame the Feds for the Silver Valley’s Decline*, SPOKESMAN-REVIEW, July 21, 2002, at A1 (observing some individuals’ opinion that EPA exaggerated the contamination, which negatively impacted the economy).

¹⁵² Karen Dorn Steele, *Waste Cleanup Plan Gets Review: Silver Valley Superfund Project Is Dividing Senators and EPA*, SPOKESMAN-REVIEW, Jan. 23, 2004, at B3 (quoting Sen. Michael Crapo). Idaho’s governors have also opposed aggressive EPA action against Asarco. In the early 2000s, Idaho Governor Dirk Kempthorne lambasted EPA as a “nonresponsive bureaucracy,” calling on the Agency to adjust its plans to closer match the State’s cleanup proposals. Benjamin Shors, *Idaho Governor Denounces EPA’s Presence: Kempthorne Calls on Feds To Revise Blueprint for Mining Waste Cleanup*, SPOKESMAN-REVIEW, Nov. 14, 2001, at B1; see also Letter from Dirk Kempthorne, Gov., Idaho, to Christine Todd Whitman, Adm’r, EPA 4–6 (Sept. 9, 2002), available at [http://yosemite.epa.gov/R10/CLEANUP.NSF/74e73c4c720b643888256cdb006958af/cbc45a44fa1ede3988256ce9005623b1/\\$FILE/Letters%20of%20Concurrence.pdf](http://yosemite.epa.gov/R10/CLEANUP.NSF/74e73c4c720b643888256cdb006958af/cbc45a44fa1ede3988256ce9005623b1/$FILE/Letters%20of%20Concurrence.pdf) (expressing opposition to the expansion of Superfund sites in Idaho and outlining some conditions required for Idaho to support EPA’s plans). Kempthorne’s successor, Governor Butch Otter, also opposes stringent cleanup in the Coeur d’Alene Basin. See *Otter Letter Critical of EPA—Governor Says Upper Basin Plan Can’t Go Forward*, COEUR D’ALENE PRESS, Nov. 16, 2010, at A1 (calling for a smaller cleanup over a fixed period of time).

¹⁵³ See Mark Atlas, *Enforcement Principles and Environmental Agencies: Principal-Agent Relationships in a Delegated Environmental Program*, 41 LAW & SOC’Y REV. 939, 965 (2007) (finding a statistically significant difference in environmental penalties, depending on which party controls state governments); Evan J. Ringquist, *Political Control and Policy Impact in EPA’s Office of Water Quality*, 39 AM. J. POL. SCI. 336, 359–60 (1995) (finding that the stringency of EPA’s enforcement of the Clean Water Act from 1974 to 1987 varied with the party in political control of the executive branch and, to a lesser extent, the Senate).

¹⁵⁴ Daley & Layton, *supra* note 41, at 387.

EPA's failure to pursue CERCLA claims aggressively in bankruptcy proceedings.

C. Budget Shortfalls May Pressure EPA into Settlement

Another explanation for EPA's actions may be that an insufficient budget, unrelated to political animus surrounding Superfund, may pressure EPA to settle. It has generally been observed that parties with significant financial need are "induced to settle as a way of accelerating payment, even though [they] realize[they] would get less now than [they] might if [they] awaited judgment."¹⁵⁵ Significant budget restrictions to Superfund over the past decade may make EPA care more about immediate payment than full payment. In 2001, a report requested by Congress estimated that Superfund would require \$16.9 billion in funding between fiscal years 2000 and 2009.¹⁵⁶ However, at least in each of fiscal years 2000 through 2008, Congress consistently appropriated hundreds of millions of dollars less than was projected.¹⁵⁷ Such cuts decrease funding for CERCLA enforcement¹⁵⁸ and complicate EPA decision making about which hazardous waste sites to place on the National Priorities List.¹⁵⁹ The abolition of the Superfund tax also decreased EPA's funding to finance cleanups. Between fiscal years 1996 and 2002, the amount in the Superfund Trust Fund fell from a peak of \$4.2 billion to only \$564 million.¹⁶⁰

These budget cuts have hindered EPA's cleanup efforts at multiple sites.¹⁶¹ Even when EPA continues cleanup, budget shortfalls sometimes lead to a change in cleanup strategy: "for example, erecting a fence and/or enclosing leaking drums to control spread of the

¹⁵⁵ Owen M. Fiss, *Against Settlement*, 93 YALE L.J. 1073, 1076 (1984).

¹⁵⁶ PROBST ET AL., *supra* note 16, at 156 (adjusted for inflation).

¹⁵⁷ RAMSEUR ET AL., *supra* note 149, at 7 fig.2.

¹⁵⁸ Annual CERCLA enforcement expenditures declined from \$243 million to \$187 million in constant dollars between FY 1999 and 2007. Letter from John B. Stephenson, Dir., Natural Resources & Environment, Gov't Accountability Office, to Congressional Requesters 3 (July 18, 2008), *available at* <http://www.gao.gov/new.items/d08841r.pdf>.

¹⁵⁹ See GOV'T ACCOUNTABILITY OFFICE, SUPERFUND PROGRAM: CURRENT STATUS AND FUTURE FISCAL CHALLENGES 23–26 (2003) [hereinafter GAO, CURRENT STATUS], *available at* <http://www.gao.gov/new.items/d03850.pdf> (explaining that the sites that are likely to be the most expensive to clean up are the ones that state agencies are unlikely to address, leaving EPA to decide whether to place such sites on the National Priorities List). For the significance of being listed on the NPL, see *supra* notes 19–22 and accompanying text.

¹⁶⁰ See GAO, CURRENT STATUS, *supra* note 159, at 8. Both figures are in 2002 dollars. *Id.*

¹⁶¹ For example, an EPA report from 2004 indicated that the Agency could not begin remediation at eleven sites due to budget shortfalls. OFFICE OF INSPECTOR GEN., EPA, CONGRESSIONAL REQUEST ON FUNDING NEEDS FOR NON-FEDERAL SUPERFUND SITES 8 (2004), *available at* <http://www.epa.gov/oig/reports/2004/20040107-2004-p-00001.pdf>.

contaminant[] rather than . . . complet[ing] cleanups.”¹⁶² Budget cuts also have stalled cleanup at sites belonging to insolvent PRPs.¹⁶³ EPA may be seeking immediate—but less—payment from insolvent PRPs as bridge funding until Congress can provide sufficient funding.

Rapid settlement of EPA’s claims may speed confirmation of the reorganization plan, allowing EPA to be paid sooner. Since most creditor negotiations in bankruptcy are not on the record, it is hard to determine how important EPA’s settlement is in making the other creditors agree to the final plan. However, the potential size of EPA’s claims and the possibility that the Agency may receive administrative priority for some expenses should affect the amount other unsecured creditors receive. As a result, other unsecured creditors may be reluctant to negotiate details of the plan until they know the size and priority of EPA’s claim. Judge Schmidt, who presided over Asarco’s reorganization, acknowledged this problem by noting in his approval of EPA’s settlement that “the resolution of environmental claims is an important step in facilitating the Debtors’ emergence from bankruptcy.”¹⁶⁴ Further, at least in some cases, confirmation and approval of the reorganization plan quickly follow settlements with EPA.¹⁶⁵ Settling CERCLA claims may be analogous to fixing the value of mass tort claims in bankruptcy, which has been recognized as vital to plan confirmations.¹⁶⁶ Fixing and establishing a value for EPA’s claims

¹⁶² *Id.* at 5.

¹⁶³ For instance, EPA received only \$1 million of the \$2.5 million it requested to study lead levels at the Omaha Lead Superfund Site. *Id.* at 6. Similarly, EPA received only \$1.6 million of the \$8.3 million it requested to clean the Circle Smelting Site, and the Agency could spend only \$3.9 million on interim cleanup at the Coeur d’Alene Basin because of budget cuts. *Id.* at 5–6. The Tronox bankruptcy also stalled cleanup at waste sites for which Tronox was responsible, and before EPA settled, “[it was] not clear when money would be available” to finance cleanup of at least one such site. Steve Patterson, *Bankruptcy Stalls Cleanup of Pesticide Site: “Justice Delayed” for a Decades-Long Problem that Will Take Millions*, FLA. TIMES UNION, Feb. 16, 2009, at B1.

¹⁶⁴ *In re Asarco LLC*, No. 05-21207, 2009 WL 8176641, at *12 (Bankr. S.D. Tex. 2009).

¹⁶⁵ Appendix C provides a table for the cases I examined in which insolvent PRPs filed for Chapter 11, EPA settled its claims, and the debtor’s plan was confirmed. See *infra* Appendix C. The settlement of EPA’s claims in the Lyondell and Chemtura bankruptcies shortly predated the plan confirmations, though the Quebecor and G-I Holdings bankruptcies demonstrate that this was not always the case. In the latter two cases, EPA settled after the plan confirmation and only received a pro rata share of stock in the reorganized company, suggesting that less money may have been at stake.

¹⁶⁶ A significant scholarly literature suggests that fixing the value of contingent claims, notably mass torts, improves the debtor’s chance of successful reorganization. See, e.g., Mark J. Roe, *Bankruptcy and Mass Tort*, 84 COLUM. L. REV. 846, 855–56 (1984) (explaining that the early resolution of future tort claims helps ensure the debtor’s ability to reorganize successfully); Frederick Tung, *Taking Future Claims Seriously: Future Claims and Successor Liability in Bankruptcy*, 49 CASE W. RES. L. REV. 435, 463–65 (1999) (outlining the establishment of trust funds for future tort claimants to avoid potential “operational collapse” after emerging from bankruptcy). Improved chances of successful

is necessary to other creditors' approval of a plan because EPA's settlement affects the assets left for other creditors. In this way, a PRP's insolvency may influence the Agency's decision to settle, an effect increased by EPA's budget shortfalls.¹⁶⁷

CONCLUSION

Since its inception, some critics have complained that CERCLA liability is inequitable,¹⁶⁸ while others argue that a "tight relationship between the polluter police and the polluters" reduces EPA's effectiveness.¹⁶⁹ This Note furthers the debate by suggesting that EPA's behavior in bankruptcy demonstrates that the Agency does not act as a rational economic actor would in pursuing CERCLA cleanup cost claims against insolvent PRPs. My research suggests that, contrary to some critics' assertions, EPA does not aggressively pursue CERCLA claims against insolvent PRPs. Instead, the Agency settles its claims for well below its initial estimates for amounts that lack a clear relationship to the PRP's level of fault. This Note explores two explanations for EPA's economically irrational behavior. First, EPA is a political actor that responds to different pressures than ordinary creditors. Second, unique fiscal pressures may force early, low-value settlements. Although further research is needed to explore systematically the factors that govern EPA's behavior in bankruptcy proceedings, my research suggests EPA pursues claims less aggressively than typical creditors.

reorganization should make other creditors more willing to confirm the reorganization plan.

¹⁶⁷ One weakness in the argument that budget shortfalls induce EPA to settle bankruptcy claims quickly is that the Agency is fairly successful in forcing PRPs to clean up waste sites outside of bankruptcy. *See supra* note 39 and accompanying text (observing EPA's effectiveness outside of bankruptcy). However, budget shortfalls may pressure EPA to bring fewer actions and prioritize the use of its limited resources. *See* GOV'T ACCOUNTABILITY OFFICE, *supra* note 68, at 44 (observing a forty-four percent decrease in the completion of EPA enforcement actions between 1994 and 2007); *see also id.* at 50–51, 57–58 (noting a decline in the number of sites listed on the National Priorities List, the main focus of EPA enforcement actions, and an increase in the estimated costs to clean up listed sites). Perhaps budget cuts encourage EPA to pursue enforcement activities at fewer sites outside bankruptcy. Conclusions are difficult to draw because most studies on the factors that influence CERCLA enforcement are based on data from the 1990s, when EPA's funding was significantly greater. *See, e.g.,* BEIDER, *supra* note 40, at 3 (finding that delays in negotiations with PRPs are a main explanation of slow cleanups).

¹⁶⁸ *See, e.g.,* JOHN A. HIRD, SUPERFUND: THE POLITICAL ECONOMY OF ENVIRONMENTAL RISK 121 (1994) (arguing that Superfund may not force the actual polluters to pay, but instead shifts cleanup costs onto parties that did not cause or benefit from the pollution).

¹⁶⁹ CRAIG COLLINS, TOXIC LOOPHOLES: FAILURES AND FUTURE PROSPECTS FOR ENVIRONMENTAL LAW 97 (2010).

APPENDIX A: SUMMARY OF EPA'S SETTLEMENTS
IN BANKRUPTCY PROCEEDINGS

<i>Company in Bankruptcy</i>	<i>Bankruptcy Court</i>	<i>Amount of EPA's Initial Claim</i>	<i>Value of Settlement</i> ¹⁷⁰	<i>Percentage of Settlement as an Initial Claim</i>
Hercules Chemical Co., Inc.	D.N.J.	\$900,000,000 ¹⁷¹	\$169,420 ¹⁷²	0.18%
Marcal Paper Mills, Inc.	D.N.J.	\$943,180,000 ¹⁷³	\$3,000,000 ¹⁷⁴	0.32%
Shapes/Arch Holding L.L.C.	D.N.J.	\$18,800,000 ¹⁷⁵	\$375,000 ¹⁷⁶	1.99%
G-I Holdings, Inc. (Vermont Asbestos Mine Site)	D.N.J.	\$313,780,683.96 ¹⁷⁷	\$7,750,000 ¹⁷⁸	2.47%
Quebecor World (USA) Inc.	S.D.N.Y.	\$14,000,000 ¹⁷⁹	\$412,731.46 ¹⁸⁰	2.95%
Crucible Materials Corp.	D. Del.	\$492,153,616 ¹⁸¹	\$999,539 ¹⁸²	0.20%
Smurfit-Stone Container Corp.	D. Del.	\$1,117,785,008 ¹⁸³	\$12,358,174 ¹⁸⁴	1.11%
Erving Industries, Inc.	D. Mass.	\$21,705,000 to \$216,105,000 ¹⁸⁵	\$25,000 ¹⁸⁶	0.12% to 0.012%
Asarco LLC.	S.D. Tex.	\$3,600,000,000 ¹⁸⁷	\$764,571,390 ¹⁸⁸	21.24%
Lyondell Chemical Co.	S.D.N.Y.	\$4,804,696,224 ¹⁸⁹	\$53,628,150 ¹⁹⁰	1.12%
Chemtura Corp.	S.D.N.Y.	\$2,060,372,719.36 ¹⁹¹	\$19,655,888 ¹⁹²	0.95%

¹⁷⁰ To determine the settlement value, I looked to the amount at which EPA settled, before discounting if EPA settled as an unsecured creditor that was to receive a pro rata share. When part of the settlement included a PRP-led cleanup, and EPA estimated the value of the cleanup work, I included that figure in the settlement value. Because EPA lists multiple sites in each claim and sometimes files multiple claims per proceeding, I needed to add several claims together to determine the total amount of EPA's claim against a particular debtor. It should also be noted that EPA's claims and settlements are often filed jointly with other U.S. and state agencies; I included these settlements as part of EPA's claims or settlement values when I could not find Agency-specific information.

¹⁷¹ Proof of Claim of the United States at 5–7, *In re Hercules Chem. Co.*, No. 08-27822 (Bankr. D.N.J. Mar. 16, 2009), Proof of Claim No. 65.

¹⁷² Settlement Agreement at 3, *In re Hercules Chem. Co.*, No. 08-27822 (Bankr. D.N.J. Oct. 26, 2009), ECF No. 640.

¹⁷³ See Proof of Claim No. 61, *supra* note 99, at 5 (noting that EPA incurred \$6,180,000 in expenses through January 2007 and estimated an additional \$937,000,000).

¹⁷⁴ See Notice of Lodging of Settlement Agreement Under the Comprehensive Environmental Response, Compensation, and Liability Act, 72 Fed. Reg. 44,858, 44,858 (Aug. 9, 2007) (announcing proposed settlement).

¹⁷⁵ Proof of Claim of the United States on Behalf of the United States Environmental Protection Agency at 4, *In re Shapes/Arch Holdings L.L.C.*, No. 08-14631 (Bankr. D.N.J. May 15, 2008), Proof of Claim No. 644 (totaling claim at \$18.8 million). This was just a claim for the Swope Oil Site Superfund Site in Pennsauken, New Jersey. *Id.* at 1.

¹⁷⁶ See Notice of Lodging of Settlement Agreement Under the Comprehensive Environmental Response, Compensation and Liability Act and Chapter 11 of the United States Bankruptcy Code, 73 Fed. Reg. 54,856, 54,856 (Sept. 23, 2008) (announcing settlement).

¹⁷⁷ See Proof of Claim and Protective Proof of Claim of the United States, on Behalf of the United States Environmental Protection Agency, National Oceanic and Atmospheric Administration, and the United States Department of the Interior, Fish, and Wildlife Service at 6, 11, 15, 17–24, *In re G-I Holdings Inc.*, No. 01-30135 (Bankr. D.N.J. Oct. 13, 2008), Proof of Claim No. 1509 (asserting claims of \$241,420,314.90 on behalf of EPA at the Vermont Asbestos Group Mine Site, \$58,397,131 at the LCP Chemicals Inc. Superfund Site and GAF Chemicals Corporation Site, and \$13,983,238.06 at nine other sites); Supplemental Proof of Claim of the United States of America on Behalf of the United States Environmental Protection Agency; United States Department of Commerce, National Oceanic and Atmospheric Administration, and the United States Department of the Interior, Fish and Wildlife Service at 3, *In re G-I Holdings Inc.*, No. 01-30135 (Bankr. D.N.J. Nov. 25, 2008), Proof of Claim No. 6827 (reducing EPA's claim by \$20,000 at the 68th Street Dump Site). Although EPA filed claims for several other sites in this bankruptcy, I only considered these two claims in the calculation because the settlement agreement allowed for EPA to file claims at a later date, meaning that the value of those claims was not fixed at the time of plan confirmation.

¹⁷⁸ See Consent Decree and Settlement Agreement at 17, *In re G-I Holdings Inc.*, No. 01-30135 (Bankr. D.N.J. July 2, 2009), ECF No. 9282 (capping settlement costs at no more than \$7,750,000 over eight years).

¹⁷⁹ *Region 5 Refers the Filing of a Proof of Claim in the Quebecor Entities Bankruptcy Filing*, EPA (Jan. 19, 2009), <http://www.epa.gov/region5/enforcement/cases/cases200901.html#que> (last updated June 29, 2011).

¹⁸⁰ See Notice of Lodging of Settlement Agreement Under the Comprehensive Environmental Response, Compensation and Liability Act, the Clean Air Act, and Chapter 11 of the United States Bankruptcy Code, 75 Fed. Reg. 39,278, 39,278 (July 8, 2010) (explaining EPA's settlement terms with Quebecor World).

¹⁸¹ Proof of Claim of the United States on Behalf of the United States Environmental Protection Agency at 8, *In re Crucible Materials Corp.*, No. 09-11582 (Bankr. D. Del. Nov. 2, 2009), Proof of Claim No. 1326.

¹⁸² See Settlement Agreement at 6, *In re Crucible Materials Corp.*, No. 09-11582 (Bankr. D. Del. Jan. 7, 2011), ECF No. 1554 (enumerating EPA claims at five sites totaling \$999,539).

¹⁸³ See Proof of Claim No. 11430, *supra* note 88, at 5–12; Proof of Claim of the United States, on Behalf of the United States Environmental Protection Agency, the United States Department of the Interior, and the United States Department of Commerce at 5–10, *In re Smurfit-Stone Container Enters., Inc.*, No. 09-10236 (Bankr. D. Del. Aug. 28, 2009), Proof of Claim No. 11431; Amendment to Proof of Claim of the United States, on Behalf of the United States Environmental Protection Agency, the United States Department of the Interior, and the United States Department of Commerce at 1, *In re Smurfit-Stone Container Enters., Inc.*, No. 09-10236 (Bankr. D. Del. Jan. 27, 2010), Proof of Claim No. 13789 (amending the proof of claim to include \$1 billion against Smurfit-Stone Container at the Portland Harbor Site).

¹⁸⁴ See Smurfit Settlement Agreement, *supra* note 98, at 9.

¹⁸⁵ See Proof of Claim of the United States on Behalf of the United States Army Corps of Engineers and the United States Environmental Protection Agency at 4, *In re Erving Indus., Inc.*, No. 09-30624 (Bankr. D. Mass. June 15, 2010), Proof of Claim No. 36.

¹⁸⁶ See Notice of Lodging of Settlement Agreement Under the Comprehensive Environmental Response, Compensation and Liability Act and Chapter 11 of the United States Bankruptcy Code, 75 Fed. Reg. 81,311, 81,311 (Dec. 27, 2010) (announcing settlement).

¹⁸⁷ Findings of Fact and Conclusions of Law on Debtors' Motion for Order Approving Settlement of Environmental Claims at 6, *In re Asarco LLC*, No. 05-21207 (Bankr. S.D. Tex. June 05, 2009), ECF No. 11631 (noting that that United States asserted claims assessing environmental liabilities at \$3.6 million to \$4 million).

¹⁸⁸ EPA estimates the settlement's value as nearly a billion dollars, but this includes interest. See *Custodial Trust Settlement Information Sheet*, EPA, <http://www.epa.gov/compliance/resources/cases/cleanup/cercla/asarco/custodial-infosht.html> (last updated Sept. 30, 2011) (\$8,030,000); *Miscellaneous Federal and State Environmental Sites Settlement Information Sheet*, EPA, <http://www.epa.gov/compliance/resources/cases/cleanup/cercla/asarco/misc-infosht.html> (last updated Sept. 30, 2011) (\$55,402,390); *Montana Sites Settlement Information Sheet*, EPA, <http://www.epa.gov/compliance/resources/cases/cleanup/cercla/asarco/montana-infosht.html> (last updated Sept. 30, 2011) (\$100,000,000); *Residual Sites Settlement Information Sheet*, EPA, <http://www.epa.gov/compliance/resources/cases/cleanup/cercla/asarco/residual-infosht.html> (last updated Sept. 30, 2011) (\$414,639,000).

¹⁸⁹ See Proof of Claim No. 12971, *supra* note 133, at 4, 6–7 (estimating Malone Site costs at \$69 million and Diamond Alkali site costs at \$919,348,856); Proof of Claim No. 12972, *supra* note 124, at 5, 7, 10, (estimating 68th Street Site costs at \$102.4 million, Berks Site costs at \$447,368, and Millennium's liability at the Kalamazoo Site at \$2.6 billion); Proof of Claim No. 12973, *supra* note 123, at 5 (estimating Millenium's liability at the San Fernando Site to be \$1.1 billion); Proof of Claim No. 12974, *supra* note 133, at 4, 9 (estimating five-year French Limited Site costs at \$5.3 million, costs at the MDI Site to be at least \$4.9 million, and at Turtle Bayou to be \$3.3 million if a waiver is granted).

¹⁹⁰ This figure represents the total cash payments for EPA's general unsecured claims against Lyondell and its insolvent subsidiaries. See Settlement Agreement Among the Debtors, the Environmental Custodial Trust Trustee, the United States, and Certain Environmental Agencies at 19, *In re Lyondell Chem. Co.*, No. 09-10023 (Bankr. S.D.N.Y. Mar. 30, 2010), ECF No. 4081.

¹⁹¹ See Proof of Claim No. 11767, *supra* note 107, at 4–32 (outlining EPA claims for eighteen sites that total \$1,964,083,764.36); *id.* at 4–7 (asserting claims for penalties for environmental violations against Chemtura's wholly-owned subsidiary, Bio-Lab, Inc., totaling \$4,692,797); Proof of Claim No. 11797, *supra* note 107, at 3 (seeking \$409,341 for future response costs from a Chemtura subsidiary); Proof of Claim No. 11854, *supra* note 107, at 3–5 (seeking \$71,653,603 in cleanup costs from a Chemtura subsidiary); Proof of Claim No. 11993, *supra* note 107, at 4 (seeking \$19,578,214 from a Chemtura subsidiary).

¹⁹² See ECF No. 4165, *supra* note 109, at 6–7 (granting EPA a cash payment of \$3,900,000 for cleanup costs associated with the Gowanus Site); Settlement Agreement Among the Debtors, *supra* note 109, at 17 (allowing EPA total claims in the amount of \$15,755,888, equal to a cash payment of \$9,119,423, for cleanup costs associated with Chemtura waste sites other than the Gowanus Canal).

APPENDIX B: ENFORCEMENT ACTIVITIES AT FOUR SUPERFUND SITES WITH INSOLVENT PRPs

To analyze EPA's enforcement actions, I examined four Superfund sites with multiple PRPs that had one of three insolvent PRPs: Asarco, Chemtura, and Lyondell.¹⁹³ My information on these enforcement actions came from EPA's Enforcement and Compliance History Online database (ECHO),¹⁹⁴ which EPA's Office of Enforcement and Compliance Assurance maintains. ECHO contains information on the amount of money EPA receives through enforcement actions against the PRPs of particular sites. I cross-referenced this information with a list of PRPs for each site from EPA's Superfund Enforcement Tracking System (SETS).¹⁹⁵ To address criticisms of ECHO,¹⁹⁶ I also searched the *Federal Register* for settlement notices because EPA is required to publish notices of settlement in the *Federal Register*.¹⁹⁷

I chose these four sites for this comparison because these were the most prominent sites, and each had a relatively few number of PRPs. Moreover, the PRPs at these sites had all been well established by the time my study was conducted, and so I could be confident EPA had identified almost all of the PRPs. The sites in Tables 1 and 2 were from the Asarco bankruptcy. The site in Table 3 was from the Lyondell bankruptcy, and the site in Table 4 was from the Chemtura bankruptcy. Unlike Appendix A, which lists the size of EPA's settlements but does not address the amount ultimately received by EPA, Appendix B lists the amount EPA actually received.

¹⁹³ For the value of EPA's claims in the final bankruptcy plans, see Asarco Plan of Reorganization, *supra* note 93, at 5–6, which included the full repayment of general unsecured creditors in full; Joint Chapter 11 Plan of Chemtura Corp. at 19–20, *In re Chemtura Corp.*, No. 09-11233 (Bankr. S.D.N.Y. Oct. 29, 2010), ECF No. 4387; Lyondell Plan, *supra* note 126, at 114.

¹⁹⁴ EPA, ENFORCEMENT & COMPLIANCE HISTORY ONLINE (ECHO), *supra* note 12.

¹⁹⁵ POTENTIALLY RESPONSIBLE PARTIES (PRP) SUPERFUND ENFORCEMENT TRACKING SYSTEM, LEXISNEXIS, <http://www.lexisnexis.com> (follow the "Find A Source" hyperlink; then search for "ENVIRN;PRP"; then follow the "Potentially Responsible Parties" hyperlink); ENVIRONMENTAL DATA RESOURCES—SUPERFUND MATERIALS, WESTLAW, <http://www.westlaw.com> (enter "EDR-SFUND" in the "Search for a database" box).

¹⁹⁶ Although ECHO is EPA's best available source for site analysis to the public, at least one of its component sources has been criticized. ECHO gives access to multiple information sources, including EPA's Integrated Compliance Information System (ICIS). See *About the Data*, EPA, http://www.epa-echo.gov/echo/about_data.html (last updated Sept. 28, 2011) (listing data sources). For criticism of ICIS, see Chang & Sigman, *supra* note 25, at 16.

¹⁹⁷ See *supra* note 9 and accompanying text (discussing EPA's publication of settlements in the *Federal Register*).

TABLE 1: PRPs AT THE COEUR D'ALENE BASIN (ASARCO)¹⁹⁸

<i>Debtor-PRP</i>	<i>Settlement Value</i>
Asarco LLC	\$469,743,000 ¹⁹⁹
New Bunker Hill Mining Co., Placer Mining Corp., & Robert Hopper ²⁰⁰	\$0 ²⁰¹
Bunker Hill Ltd. Partnership	\$0 ²⁰²
Callahan Mining Corp. & Coeur d'Alene Mines Corp.	\$6,871,924 ²⁰³
Golconda Mining Corp.	\$0 ²⁰⁴
Gulf Resources	\$0 ²⁰⁵
Hecla Mining Corp.	\$263,400,000 ²⁰⁶
Highland Surprise Consolidated Mining Co.	\$0 ²⁰⁷
Minerals Corp. of Idaho	\$0 ²⁰⁸
Pintlar Corp.	\$0 ²⁰⁹
Rhone-Poulenc, Inc. & Stauffer Management Co. ²¹⁰	\$1,500,000 ²¹¹
Sunshine Mining Co. & Sunshine Precious Metals, Inc. ²¹²	\$0 ²¹³
Syringa Mineral Corp.	\$0 ²¹⁴
Union Pacific Railroad	\$6,509,964 ²¹⁵
De Minimis Parties ²¹⁶	\$5,269,850 ²¹⁷
<i>Total Settlements</i>	\$753,144,738
<i>Estimated Cleanup Cost</i>	\$2,569,199,968 ²¹⁸

¹⁹⁸ Search LexisNexis and Westlaw's SETS databases, *supra* note 11, for records containing "Bunker Hill." This search indicates those parties that have been informed of their status as a PRP at the Bunker Hill site.

¹⁹⁹ See *Enforcement Case Report: Asarco Bankruptcy*, EPA (Sept. 9, 2011), <http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?IDNumber=10-2006-0216&tool=eiciECHO>.

²⁰⁰ *Enforcement Case Report: Bunker Hill*, EPA (Sept. 9, 2011), <http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?IDNumber=10-2002-0171&tool=eici> [hereinafter EPA, *Bunker Hill*]. Robert Hopper was the president of the Placer Mining Corporation, which does business as New Bunker Hill Mining Company. Karen Dorn Steele, *Mine Owner Digs in Against EPA: Bunker Hill Boss Rejects Cleanup Claims*, SPOKESMAN-REVIEW, July 23, 2002, at B1 (identifying Hopper as the president of Placer Mining Corp.); Karen Dorn Steele, *EPA Wants Miner To Pay Major Fines*, SPOKESMAN-REVIEW, Apr. 6, 2004, at A1 (citing a complaint against "Placer Mining Corp., doing business as the New Bunker Hill Mining Co."). EPA filed this action in 2004, but Mr. Hopper died before EPA recovered any part of its claims. Becky Kramer, *Bunker Hill Mine Owner Dies at 71: EPA Critic Hopper Had Dream of Reviving Full-Scale Operation*, SPOKESMAN-REVIEW, Jan. 8, 2011, at B2.

²⁰¹ See EPA, *Bunker Hill*, *supra* note 200.

²⁰² The Bunker Hill Limited Partnership declared bankruptcy in July 1992 and was liquidated. See Troy Lambert, *The Closure of the Bunker Hill Mine, 1981*, SUITE 101 (Oct. 15, 2010), <http://www.suite101.com/content/the-closure-of-the-bunker-hill-mine-1981-a297473>. No record of any payments to EPA can be found in any database or site.

²⁰³ Notice of Lodging of Consent Decree Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act and Federal Water Pollution Control Act, 66 Fed. Reg. 20,476, 20,476 (Apr. 23, 2001). The \$6.87 million value was the maximum EPA could have received, while the actual settlement granted EPA \$3.87 million in cash and up to \$3 million in royalties on all gold and silver mining revenues above certain market thresholds, as well as up to fifty percent of any future insurance recovery above \$600,000. Although Callahan Mining and Coeur d'Alene Mining were listed as separate PRPs, the two parties settled with EPA together. *Id.*

²⁰⁴ Neither the ICIS database nor the *Federal Register* mentions a settlement with Golconda.

²⁰⁵ In 1968, Gulf Resources acquired the Bunker Hill Company, including its operation at the Coeur d'Alene Site. See KATHERINE G. AIKEN, *IDAHO'S BUNKER HILL: THE RISE AND FALL OF A GREAT MINING COMPANY: 1885–1981*, at 164–66 (2005) (describing Gulf Resources' hostile takeover of the Bunker Hill Company). The Bunker Hill Company closed all its operations in 1981. *Id.* at 168. Gulf Resources blamed environmental regulations for forcing its closure. See *id.* at 194–95 (explaining Gulf Resources officials' belief that government interference with the company's operations inflicted a huge cost with little apparent benefit). Gulf Resources performed some cleanup during its tenure as a mine operator, but EPA has not pursued additional cleanup funding from it. See EPA, *Bunker Hill*, *supra* note 200 (listing EPA's various actions at the Bunker Hill Site, a list from which Gulf Resources is absent); see also Katherine Aiken, *Western Smelters and the Problem of Smelter Smoke*, in *NORTHWEST LANDS, NORTHWEST PEOPLES: READINGS IN ENVIRONMENTAL HISTORY* 502, 513–18 (Dale D. Goble & Paul W. Hirt eds., 1999) (discussing Gulf Resources' confrontation with EPA and its decision to close the mine).

²⁰⁶ Hecla's settlement with EPA and DOJ was announced in February 2011, and it was published in the *Federal Register* in June 2011. See Notice of Lodging of Consent Decree Under the Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act, and the Clean Water Act, 76 Fed. Reg. 35,470, 35,470–71 (June 17, 2011).

²⁰⁷ EPA received notice of Highland's PRP status in the early 1990s, but, as of November 2010, EPA had taken no action against Highland. See EPA, 2010 FIVE YEAR REVIEW FOR THE BUNKER HILL MINING AND METALLURGICAL COMPLEX SUPERFUND SITE: OPERABLE UNITS 1, 2, AND 3 (IDAHO AND WASHINGTON) 1-9 (2010), available at http://www.epa.gov/region10/pdf/sites/bunker_hill/bunkerhill_final_2010five-yearreview_tagged.pdf.

²⁰⁸ EPA has taken no action against Idaho Minerals Corp., which dissolved in 2003. See *Registration Detail, Minerals Corp. of Idaho, Inc.*, WASH. SEC'Y OF STATE, http://www.sos.wa.gov/corps/search_detail.aspx?ubi=601040282 (last visited Oct. 25, 2011) (showing that the company's registration expired in August 2003).

²⁰⁹ In the early 1990s, EPA took efforts to pursue cleanup against Pintlar, a subsidiary of Gulf USA. See Steve Massey, *Gulf USA Pensioners To Lose Medical Benefits: Money for Cleanup Much Less than Needed*, SPOKESMAN-REVIEW, Aug. 12, 1994, at A1 (describing the proposed EPA settlement with Pintlar and Gulf USA). However, Pintlar was forced into bankruptcy in the early 1990s. See *In re Pintlar Corp.*, 124 F.3d 1310, 1311 (9th Cir. 1997) (discussing Pintlar's bankruptcy). In 2002, Idaho revoked its certificate of incorporation. *Pintlar Corporation*, IDAHO SEC'Y OF STATE, <http://www.accessidaho.org/public/sos/corp/C39575.html> (last accessed Sept. 19, 2011). No mention of an action against Pintlar was found in ECHO.

²¹⁰ Although Rhone-Poulenc, Inc., and Stauffer Management Company were listed as separate PRPs, they settled together, and I treated them as one entity. See Notice of Lodging of Consent Decree Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act and the Resource Conservation and Recovery Act, 60 Fed. Reg. 18,426, 18,426 (Apr. 11, 1995) (announcing a settlement with Rhone-Poulenc and Stauffer Management).

²¹¹ *Id.*

²¹² Although the Sunshine entities were listed as separate PRPs, they settled with EPA simultaneously and the terms were listed in the same settlement. *See* Notice of Lodging of Consent Decree Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act and Federal Water Pollution Control Act, 66 Fed. Reg. 387, 387 (Jan. 3, 2001).

²¹³ The settlement provided, among other things, royalties from mining revenues and a warrant convertible into stock in the reorganized Sunshine Mining. *See id.* However, I could find no record of the company engaging in economic activity during the past seven years, and the last mention of Sunshine Mining I found is from a 2002 newspaper article, which stated that “[w]ith no revenue and few assets, Sunshine is moving into an inactive stage.” Becky Kramer, *Board Members Desert Sinking Sunshine*, SPOKESMAN-REVIEW, Mar. 12, 2002, at A1.

²¹⁴ There is no mention in ECHO or the *Federal Register* of a settlement or litigation against Syringa.

²¹⁵ *Enforcement Case Report: Bunker Hill: Wallace Yard Removal*, EPA (Sept. 9, 2011), <http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?IDNumber=10-2009-0082&tool=eici>. DOJ stated that Union Pacific would pay \$655,094 for EPA’s past response costs and perform future cleanup actions. Notice of Lodging of Consent Decree Under the Comprehensive Environmental Response Compensation and Liability Act, 75 Fed. Reg. 1412, 1412 (Jan. 11, 2010).

²¹⁶ The “De Minimis Parties” were identified in the settlement as Douglas Mining Company, ARCO, Zanetti Bros., Sidney Mining Company, Nabob Silver Lead Company, Mascot Silver-Lead Mines, Inc., Lookout Mountain Mining & Milling Company, Silver Bowl, Inc., and United Resources Holdings Group, Inc. *See Enforcement Case Report: Coeur d’Alene De Minimis Parties*, EPA (Sept. 9, 2011), <http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?IDNumber=10-2008-0066&tool=eiciECHO>.

²¹⁷ *See id.*

²¹⁸ *See* Post-Hearing Brief, *supra* note 90, at 1 n.1.

TABLE 2: PRPs AT THE OMAHA LEAD SITE
(ASARCO BANKRUPTCY)

<i>Debtor-PRP</i>	<i>Settlement Value</i>
Asarco, LLC	\$186,500,000 ²¹⁹
Aaron Ferer & Sons Corp.	\$0 ²²⁰
Gould Electronics Inc.	\$0 ²²¹
Union Pacific R.R. Co.	\$60,000,000 ²²²
<i>Total Settlements To Date</i>	\$236,500,000
<i>Estimated Cleanup Cost</i>	\$405,991,980.73 ²²³

²¹⁹ Coeur d'Alene Consent Decree, *supra* note 91, at 14.

²²⁰ I found no actions filed against Aaron Ferer & Sons Corporation.

²²¹ I found no actions filed against Gould Electronics Inc.

²²² *Enforcement Case Report: Omaha Lead Site: Union Pacific Railroad Co.*, EPA (Sept. 9, 2011), <http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?IDNumber=%2207-2005-0193%22&tool=eici>. This represents the total compliance cost of the claims EPA settled with Union Pacific. However, this number may be inflated. Union Pacific claims that it is only completing some of the work to avoid legal penalties and may not perform all of the actions requested by EPA. Union Pac. Corp., Annual Report (Form 10-K) 18 (Feb. 17, 2010), available at http://www.up.com/investors/attachments/secfiling/2010/upc10k_021710.pdf. Union Pacific also stated that EPA demanded \$50 million, rather than the \$60 million figure found in EPA's Enforcement Case Report. *Id.*

²²³ United States' and State of Nebraska's Post-Hearing Submissions Regarding the Omaha Lead Superfund Site at 9-10, *In re Asarco, LLC*, No. 05-21207 (Bankr. S.D. Tex. Sept. 14, 2007), ECF No. 5808.

TABLE 3: PRPs AT THE KALAMAZOO RIVER SITE (LYONDELL)²²⁴

<i>PRP</i>	<i>Settlement Value</i>
Georgia Pacific Corp.	\$49,754,716 ²²⁵
Millennium Holdings, Inc. ²²⁶	\$49,549,370 ²²⁷
Simpson Plainwell Paper Co.	\$0 ²²⁸
<i>Total</i>	\$99,304,086 (Actual amount received: \$53,023,923)
<i>EPA's Estimated Cleanup Cost</i>	\$2,600,000 ²²⁹

²²⁴ The Kalamazoo Site was one of the major components of the Lyondell Bankruptcy. See *Allied Paper, Inc./Portage Creek/Kalamazoo River*, EPA, <http://www.epa.gov/R5Super/npl/michigan/MID006007306.htm> (last updated Apr. 21, 2011) (discussing the importance of the Lyondell Bankruptcy).

²²⁵ Several actions against Georgia Pacific have resulted in settlement. *Enforcement Case Report: Allied Paper, Inc.*, EPA (Sept. 9, 2011), <http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?IDNumber=%2205-2009-1007%22&tool=eici> (calculating the compliance action cost at \$11.5 million and cost recovery at \$225,509); *Enforcement Case Report*, EPA (Sept. 9, 2011), <http://www.epa-otis.gov/cgi-bin/get1cReport.cgi?IDNumber=%2205-2007-0810%22&tool=oici> (calculating the compliance action cost at \$21 million); *Enforcement Case Report*, EPA (Sept. 9, 2011), <http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?IDNumber=%2205-2007-0811%22&tool=eici> (calculating the compliance action cost at \$15 million); *Enforcement Case Report*, EPA (Sept. 9, 2011), <http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?IDNumber=%2205-2007-0803%22&tool=eici> (calculating the compliance action cost at \$2 million and cost recovery at \$29,207).

²²⁶ Millennium Holdings was known as H.M. Holdings, Inc., at the time it was notified of its PRP status. MICH. DEP'T OF ENVTL. QUALITY ET AL., STAGE I ASSESSMENT PLAN: KALAMAZOO RIVER ENVIRONMENT SITE 2-7 (2000), available at <http://www.fws.gov/midwest/KalamazooNRDA/documents/report.pdf>.

²²⁷ Lyondell Settlement Agreement, *supra* note 136, at 13, 16 (explaining that EPA has a general unsecured claim based on the Kalamazoo River Site against Millennium Holdings and giving EPA \$49,549,379 in cash to settle the claim).

²²⁸ I found no settlements or actions against Simpson Plainwell mentioned in the Federal Register or on ECHO.

²²⁹ Proof of Claim No. 12972, *supra* note 124, at 9–10.

TABLE 4: PRPs AT THE STAUFFER-LEMOYNE SITE
(CHEMTURA BANKRUPTCY)²³⁰

<i>PRP</i>	<i>Settlement Value</i>
Chemtura Corp. ²³¹	\$1,049,553 ²³²
Akzo Chemical Co.	\$35,000 ²³³
ICI Americas, C.A.	\$0 ²³⁴
Stauffer Chemical Co.	\$0 ²³⁵
<i>EPA's Total Settlements</i>	\$1,084,553
<i>EPA's Estimated Cleanup Cost</i>	\$3,000,000 ²³⁶

²³⁰ See *Chemtura Corporation Bankruptcy Settlements*, EPA, <http://www.epa.gov/compliance/resources/cases/cleanup/cercla/chemtura/index.html> (last updated Dec. 21, 2010) (noting that the Stauffer-LeMoyne Superfund Site was one of the sites affected by the Multi-Site Settlement with Chemtura).

²³¹ Chemtura was liable because one of the companies that merged to form Chemtura, Witco Chemical Co., owned part of the site. See LUBRICANT ADDITIVES: CHEMISTRY AND APPLICATIONS 238 (Leslie R. Rudnick ed., 2d ed. 2009) (noting that Witco merged into Crompton, which merged to create Chemtura). For a discussion of Witco's liability at the site, see EPA, EPA/ROD/R04-99/026, EPA SUPERFUND RECORD OF DECISION: STAUFFER CHEMICAL CO. (LEMOYNE PLANT) 1 (1999), <http://www.epa.gov/superfund/sites/rods/fulltext/r0499026.pdf>.

²³² Settlement Agreement Among the Debtors, *supra* note 109, at 14.

²³³ *Enforcement Case Report: Akzo Nobel Functional Chemicals*, EPA (Sept. 9, 2011), <http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?IDNumber=04-2010-1537&tool=eiciECHO> (listing \$5000 in total compliance action cost and penalty of \$18,200); *Enforcement Case Report: Stauffer Chemical Co. Superfund Sites*, EPA (Sept. 9, 2011), <http://www.epa-echo.gov/cgi-bin/get1cReport.cgi?IDNumber=04-2010-3757&tool=eiciECHO> (listing \$30,000 in compliance action cost).

²³⁴ I found no mention of any action against ICI Americas on ECHO or in the Federal Register.

²³⁵ I found no mention of any action against Stauffer Chemical Co. on ECHO or in the Federal Register.

²³⁶ Proof of Claim No. 11672, *supra* note 107, at 25.

**APPENDIX C: DATES OF PLAN PROPOSALS, EPA SETTLEMENTS,
AND PLAN CONFIRMATIONS FOR INSOLVENT PRPs**

<i>Company in Bankruptcy</i>	<i>Date Company Entered Bankruptcy</i>	<i>Date of EPA Settlement</i>	<i>Date EPA Received Money, if Before Date Plan Confirmed²³⁷</i>	<i>Date Plan Confirmed</i>
Asarco LLC	Aug. 9, 2005 ²³⁸	Mar. 13, 2009 ²³⁹	N/A	Nov. 13, 2009 ²⁴⁰
Chemtura Corp.	Mar. 18, 2009 ²⁴¹	Sept. 30, 2010 ²⁴²	N/A	Nov. 10, 2010 ²⁴³
Crucible Materials Corp.	May 6, 2009 ²⁴⁴	Jan. 7, 2011 ²⁴⁵	N/A	N/A
Erving Industries, Inc.	Apr. 20, 2009 ²⁴⁶	Dec. 20, 2010 ²⁴⁷	N/A	N/A
G-I Holdings, Inc. (Vermont Asbestos Mine Site)	Jan. 5, 2001 ²⁴⁸	July 2, 2009 ²⁴⁹	July 22, 2009 ²⁵⁰	Nov. 12, 2009 ²⁵¹
Hercules Chemical Co., Inc.	Aug. 22, 2008 ²⁵²	Oct. 26, 2009 ²⁵³	N/A	Feb. 9, 2010 ²⁵⁴
Lyondell Chemical Co.	Jan. 9, 2009 ²⁵⁵	Mar. 30, 2010 ²⁵⁶	N/A	Apr. 23, 2010 ²⁵⁷
Marcal Paper Mills, Inc.	Nov. 30, 2006 ²⁵⁸	July 26, 2007 ²⁵⁹	N/A	Jan. 18, 2008 ²⁶⁰
Quebecor World (USA) Inc.	Jan. 21, 2008 ²⁶¹	July 1, 2010 ²⁶²	N/A	July 2, 2009 ²⁶³
Shapes/Arch Holding L.L.C.	Mar. 16, 2008 ²⁶⁴	Sept. 10, 2008 ²⁶⁵	N/A	July 24, 2008 ²⁶⁶
Smurfit-Stone Container Corp.	Jan. 26, 2009 ²⁶⁷	Oct. 28, 2010 ²⁶⁸	N/A	June 21, 2010 ²⁶⁹

²³⁷ Empty cells indicate that, according to my research, EPA did not receive money before confirmation of the plan.

²³⁸ *Asarco Reorganization*, ALIXPARTNERS, LLC, <https://www.asarcorg.com/> (last visited Oct. 20, 2011).

²³⁹ Coeur d'Alene Consent Decree, *supra* note 91; Amended Consent Decree and Settlement Agreement Establishing a Custodial Trust for Certain Owned Sites in Alabama, Arizona, Arkansas, Colorado, Illinois, Indiana, New Mexico, Ohio, Oklahoma, Utah, and Washington, *In re Asarco LLC*, No. 05-21207 (Bankr. S.D. Tex. Mar. 13, 2009), ECF No. 10542; Amended Settlement Agreement Regarding Miscellaneous Federal and State Environmental Sites, *In re Asarco LLC*, No. 05-21207 (Bankr. S.D. Tex. Mar. 13, 2009), ECF No. 10540 (describing EPA's settled claim for the Coy Mine Site).

- ²⁴⁰ Memorandum Opinion, Order of Confirmation, and Injunction, *In re Asarco LLC*, No. 05-21207 (Bankr. S.D. Tex. Nov. 13, 2009), ECF No. 13203.
- ²⁴¹ *Chemtura Corporation*, *supra* note 10.
- ²⁴² ECF No. 4165, *supra* note 109, at 18.
- ²⁴³ *Chemtura Corporation*, *supra* note 10.
- ²⁴⁴ *Crucible Materials*, *supra* note 10.
- ²⁴⁵ Settlement Agreement, *In re Crucible Materials Corp.*, No. 09-11582 (Bankr. D. Del. Jan. 7, 2011), ECF No. 1498.
- ²⁴⁶ Jackie Noblett, *Paper Processor Files for Chapter 11*, Bos. Bus. J. (Apr. 20, 2009), <http://www.bizjournals.com/boston/stories/2009/04/20/daily11.html>.
- ²⁴⁷ See Notice of Lodging of Settlement Agreement Under the Comprehensive Environmental Response, Compensation and Liability Act and Chapter 11 of the United States Bankruptcy Code, 75 Fed. Reg. 81,311, 81,311 (Dec. 27, 2010).
- ²⁴⁸ *G-I Holdings: General Information*, EPIO BANKRUPTCY SOLUTIONS, LLC, <http://documents.epiq11.com/clientdefault.aspx?pk=91da9ab7-2742-4d2e-94e2-721221327518> (last visited Oct. 20, 2011).
- ²⁴⁹ Consent Decree and Settlement Agreement, *In re G-I Holdings Inc.*, No. 01-30135 (Bankr. D.N.J. July 2, 2009), ECF No. 9282.
- ²⁵⁰ The record is unclear, but the court approved the transfer of up to \$450,000 to EPA before the plan's confirmation. See Order Pursuant to Bankruptcy Rule 9019(a) Approving Settlement with the United States, on Behalf of the U.S. Environmental Protection Agency, the U.S. Department of the Interior Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration, and with the State of Vermont at 3, *In re G-I Holdings Inc.*, No. 01-30135 (Bankr. D.N.J. July 22, 2009) (authorizing \$450,000 in expenditures).
- ²⁵¹ See Order Confirming Eighth Amended Joint Plan of Reorganization of G-I Holdings Inc. and ACI Inc. Pursuant to Chapter 11 of the Bankruptcy Code, *In re G-I Holdings Inc.*, No. 01-30135 (Bankr. D.N.J. Nov. 12, 2009), ECF No. 9787.
- ²⁵² *Hercules Chemical Company Successfully Emerges from Bankruptcy*, SUPPLY HOUSE TIMES (Mar. 2, 2010) [hereinafter *Hercules Chemical Company*], available at [http://www.supplyht.com/Articles/Industry_News/BNP_GUID_9-5-2006_A_10000000000000769546](http://www.supplyht.com/Articles/Industry_News/BNP_GUID_9-5-2006_A_1000000000000769546).
- ²⁵³ Settlement Agreement at 1, *In re Hercules Chem. Co.*, No. 08-27822 (Bankr. D.N.J. Oct. 26, 2009), ECF No. 640.
- ²⁵⁴ *Hercules Chemical Company*, *supra* note 252.
- ²⁵⁵ *Lyondell Chemical Company Restructuring Information*, ALIXPARTNERS, LLP, <https://www.lyondellreorg.com/Page.aspx?Name=Home> (last visited Oct. 20, 2011) (stating that Lyondell and ninety-three of its affiliates entered bankruptcy on January 6, April 24, and May 8, 2009).
- ²⁵⁶ Settlement Agreement Among the Debtors, the Environmental Custodial Trust Trustee, the United States, and Certain State Environmental Agencies, *In re Lyondell Chem. Co.*, No. 09-10023 (Bankr. S.D.N.Y. Mar. 30, 2010), ECF No. 4081.
- ²⁵⁷ Notice of Confirmation of Plan and Effective Date at 2, *In re Lyondell Chem. Co.*, No. 09-10023 (Bankr. S.D.N.Y. Apr. 30, 2010), ECF No. 4468.
- ²⁵⁸ *Marcal Paper Mills, Inc.*, LOWENSTEIN SANDLER, <http://www.lowenstein.com/Bankruptcy/MarcalPaperMills/Content.aspx> (last visited Oct. 7, 2011).
- ²⁵⁹ Alex Nussbaum, *Marcal Settles Federal Pollution Claim*, RECORD (Bergen County), July 27, 2007, at L11.
- ²⁶⁰ See Hugh R. Morley, *Judge Allows Marcal Sale to Group of Texas Funds: \$164M Deal To End Family Ownership*, RECORD (Bergen County), Jan. 19, 2008, at A1.
- ²⁶¹ See David Robinson, *Quebecor Worlds Files for Bankruptcy Protection: Arranged \$1 Billion for Payroll, Expenses*, BUFFALO NEWS, Jan. 22, 2008, at B6.
- ²⁶² See Notice of Lodging of Settlement Agreement Under the Comprehensive Environmental Response, Compensation and Liability Act and Chapter 11 of the United States Bankruptcy Code, 75 Fed. Reg. 39,278, 39,278 (July 8, 2010).

²⁶³ See United States' Memorandum in Support of Debtors' Motion Pursuant to Federal Rule of Bankruptcy Procedure 9019 Seeking Approval of Settlement Agreement Among the Reorganized Debtors, the United States, the State of Illinois, the Keystone PRP Group, Lenz PRP Group & Ringier A.G. at 7, *In re Quebecor World (USA) Inc.*, No. 08-10152 (Bankr. S.D.N.Y. Sept. 15, 2010), ECF No. 4128.

²⁶⁴ Notice of Chapter 11 Bankruptcy at 1, *In re Shapes/Arch Holdings, L.L.C.*, No. 08-14631 (Bankr. D.N.J. Mar. 20, 2008).

²⁶⁵ See Notice of Lodging of Settlement Agreement Under the Comprehensive Environmental Response, Compensation and Liability Act and Chapter 11 of the United States Bankruptcy Code, 73 Fed. Reg. 54,856, 54,856 (Sept. 23, 2008). EPA and Shapes came to an agreement before the plan was finalized, and the terms of EPA's settlement are published in the reorganization plan. See Debtors' Third Amended Joint Chapter 11 Plan of Reorganization at 17, *In re Shapes/Arch Holdings L.L.C.*, No. 08-14631 (Bankr. D.N.J. May 27, 2008), ECF No. 338 (including EPA settlement terms in the final plan).

²⁶⁶ Finding of Fact, Conclusions of Law and Order Confirming Plan of Reorganization as Amended at 1, *In re Shapes/Arch Holding L.L.C.*, No. 08-14613 (Bankr. D.N.J. July 24, 2008), ECF No. 561.

²⁶⁷ *Smurfit-Stone Container Corp.: General Information*, EPIQ BANKRUPTCY SOLUTIONS, LLC, <http://dm.epiq11.com/SMU/project/Default.aspx> (last visited Oct. 20, 2011).

²⁶⁸ See Notice of Lodging of Settlement Agreement Under the Comprehensive Environmental Response, Compensation, and Liability Act, 75 Fed. Reg. 67,767, 67,767-68 (Nov. 3, 2010) (noting that EPA claims were being settled for \$12,358,175 in stock).

²⁶⁹ *Id.* at 2. EPA may have settled its claim after the plan confirmation because of the low stakes for the Agency. Unsecured creditors of Smurfit-Stone Container Enterprises, Inc., a wholly owned subsidiary of Smurfit-Stone Container Corporation merely received a pro rata share of stock in the Smurfit-Stone Container Corporation that emerged from bankruptcy. Modified Joint Plan of Reorganization for Smurfit-Stone Container Corporation and Its Debtor Subsidiaries and Plan of Compromise and Arrangement for Smurfit-Stone Container Canada Inc. and Affiliated Canadian Debtors at 45, *In re Smurfit-Stone Container Corp.*, No. 09-10235 (Bankr. D. Del. May 26, 2010).