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Superfund vs. Mega-Sites: The Coeur d'Alene River Basin Story

By Clifford J. Villa*

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I. INTRODUCTION

Those who say it cannot be done should not interrupt the person doing it.

- Chinese proverb

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Stretching across the "panhandle" of northern Idaho, the Coeur d'Alene River Basin evokes a mixed sense of wonder. Within this vast region of mountains and marshes, forests and farmland, creeks and canyons, a vibrant mining industry emerged more than a century ago. Along with the mining industry came the mining towns—and the mining pollution. Over time, the volume of mining wastes discharged into waters of the Coeur d'Alene Basin reached Brobdingnagian proportions: enough waste to fill a football field with a pile four *miles* high.

The environment of the Coeur d'Alene River Basin has certainly improved over the last few decades, with changes in mining practices and past cleanup efforts by parties including the State of Idaho, the Coeur d'Alene Indian Tribe, and U.S. Environmental Protection Agency, Region 10.⁴ Despite these past efforts, however, the greatest cleanup work for the Coeur d'Alene Basin likely remains ahead. On September 12, 2002, the EPA Regional

¹ See U.S. EPA RECORD OF DECISION: THE BUNKER HILL MINING AND METALLURGICAL COMPLEX OPERABLE UNIT 3, figs. 1, 2 [hereinafter COEUR D'ALENE BASIN ROD], available from EPA Region 10 on CD-ROM and on-line at http://yosemite.epa.gov/r10/cleanup.nsf/sites/cda.

For some of the rich mining history of the region, a number of notable published works are available. See, e.g., J. Anthony Lukas, Big Trouble: A Murder in a Small Western Town Sets Off a Struggle for the Soul of America (1997) (mine worker strife at turn of the century); Patricia Hart & Ivar Nelson, Mining Town (1993) (images of mining and social life through archives of local portrait photographers); John Fahey, Hecla: A Century of Western Mining (1990) (rise of local mining company to international metals producer); John V. Wood, Railroads Through the Coeur d'Alenes (1984) (symbiosis of mining and railroads).

³ U.S. EPA REGION 10, FINAL ECOLOGICAL RISK ASSESSMENT, COEUR D'ALENE BASIN REMEDIAL INVESTIGATION/FEASIBILITY STUDY, VOL. 1, at ES-4 (2001).

⁴ EPA Region 10 covers the states of Alaska, Washington, Oregon, and Idaho, plus regional Indian tribes. For information on EPA's activities in this region, see the Region 10 website at www.epa.gov/r10earth/.

Administrator signed a Record of Decision (ROD) to address mining contamination in the Basin through remedial actions projected over 30 years.⁵

EPA produced the Coeur d'Alene Basin ROD under authority of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA),⁶ better known as Superfund. The overall objective of the federal Superfund program, ⁷ like many similar state programs,⁸ is to protect human health and the environment through timely response to release of hazardous substances. To select appropriate remedial actions, Superfund provides a process known as a Remedial Investigation/Feasibility Study (RI/FS),⁹ followed by a public comment period on a Proposed Plan¹⁰ and a Record of Decision documenting the selected remedy.¹¹ Given the magnitude of

⁵ COEUR D'ALENE BASIN ROD, supra note 1.

^{6 42} U.S.C. § 9601 et seq. (2002).

⁷ See generally Frank Grad, A Legislative History of the Comprehensive Environmental Response, Compensation, and Liability Act, 8 COLUM. J. ENVTL. L. 1 (1982) (definitive account of Superfund origin).

[§] See, e.g., Inactive Hazardous Waste Disposal Site Act, N.Y. ENVTL. CONSERV. LAW §§27-1301-1321 (1997); Washington Model Toxics Control Act, WASH. REV. CODE §70.105D (1999); Hazardous Substance Account Act, CAL. HEALTH & SAFETY CODE §25300 (1992 & Supp. 1998). For a comprehensive review, see Linda K. Breggin et al., State Superfund Programs: An Overview of the Environmental Law Institute's (ELI's) 1998 Research, 4 ALB. L. ENVTL. OUTLOOK 1 (1999).

⁹ In general, the Remedial Investigation determines the nature and extent of contamination at a site, often through sampling, chemical analyses, and calculation of risks to human health or the environment. The Feasibility Study analyzes cleanup alternatives to address the calculated risks from site contamination. Requirements of the RI/FS process largely appear in the Superfund regulations at 40 C.F.R. § 300.430(d)&(e) (2002). See also EPA, GUIDANCE FOR CONDUCTING REMEDIAL INVESTIGATIONS AND FEASIBILITY STUDIES UNDER CERCLA, (Oct. 1988) (OSWER Dir. 9355.3-01).

¹⁰ 42 U.S.C. § 9617(a) (2002). The Proposed Plan identifies the range of cleanup alternatives evaluated in the RI/FS and further identifies a "preferred alternative," the specific remedy the government proposes to select. *See* U.S. EPA OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, A GUIDE TO PREPARING SUPERFUND PROPOSED PLANS, RECORDS OF DECISION, AND OTHER REMEDY SELECTION DECISION DOCUMENTS (July 1999) (OSWER # 9200.1-23.P) *available at* http://yosemite.epa.gov/R10/CLEANUP.NSF/webpage/Coeur+d'Alene+Proposed+plan [hereinafter SUPERFUND GUIDE].

¹¹ 42 U.S.C. § 9617(b) (2002). While a Superfund Record of Decision documents a selected remedy, it does not by itself provide for implementation. Cleanup actions selected in a ROD are typically implemented pursuant to a negotiated agreement or pursuant to an order issued under CERCLA Section 106(a). EPA may also carry out cleanup directly through use of the Superfund trust fund established by CERCLA Section 111. Reflecting Congressional intent to minimize cleanup delays, with certain exceptions, Superfund RODs are not subject to judicial review until after the selected cleanup is completed. § 9613(h). See Voluntary Purchasing Groups, Inc., v. Reilly, 889 F.2d 1380 (5th Cir. 1989) (citing legislative history for limiting judicial review); Reardon v. United States, 947 F.2d 1509 (1st Cir. 1991) (same); Farmers Against Irresponsible Remediation v. United States, 165 F.Supp.

mining wastes and diversity of interests, the RI/FS and ROD for the Coeur d'Alene Basin required grappling with mountains of sampling data, technical analyses, public comments, and other materials, resulting in perhaps the largest administrative record compiled by EPA in the electronic era.¹² Even so, EPA completed the Coeur d'Alene Basin ROD in just four years—a year faster than the average for Superfund "mega-sites" (where estimated cleanup costs exceed \$50 million), ¹³ and considerably faster than for other mega-sites.¹⁴

The timely completion of the Coeur d'Alene Basin ROD exposed a number of common misconceptions concerning Superfund.¹⁵ While critics often rail against Superfund's "endless studies,"¹⁶ community members actually urged EPA to slow down the Coeur d'Alene Basin cleanup planning,¹⁷ and called for more studies as the ROD neared completion.¹⁸ While critics complain about the draconian potential of Superfund's joint and several liability, decrying the danger of snaring "anyone who has contributed the

2d 253 ("almost every single circuit has concluded that section 9613(h) supplies a 'blunt withdrawal of federal jurisdiction'").

¹² An informal poll of the single largest administrative record collection produced on CD-ROM in each EPA Region showed the administrative record for the 2002 Coeur d'Alene River Basin ROD ahead of its counterpart for the 2002 Hudson River PCBs ROD by a score of 31 CDs to 27 CDs. No other collection reached even ten CDs. E-mail from Bob Phillips, U.S. EPA Region 10 (Oct. 10, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

is For so-called "mega-sites," having total cleanup costs exceeding \$50 million, the average time to complete a Remedial Investigation/Feasibility Study (RI/FS) has been estimated at five years. KATHERINE N. PROBST AND DAVID M. KONISKY, SUPERFUND'S FUTURE: WHAT WILL IT COST? 52 (2001) (report to Congress by Resources For the Future (RFF)) [hereinafter RFF REPORT].

"For comparison, the RI/FS culminating in the Hudson River PCBs ROD took twelve years to complete. U.S. EPA, HUDSON RIVER PCBs SITE RECORD OF DECISION ES-1 (2001). Along with the Coeur d'Alene Basin ROD, the Hudson River PCBs ROD represents one of the most contentious Superfund RODs signed recently by EPA. Addressing polychlorinated biphenyls (PCBs), the plan calls for dredging approximately 2.65 million cubic yards of contaminated sediment from a 40-mile stretch of the upper Hudson. Press Release, EPA Region 2, EPA Signs Final Cleanup Plan for Hudson River; Makes Public Involvement a Top Priority (Feb. 1, 2002).

¹⁵ For an articulated summary of CERCLA criticisms, see Michaela S. Moore, Thinking Outside the Box: A Negotiated Settlement Agreement for the Remediation of the General Electric/Housatonic River Site Ensures Environmental Health and Economic Prosperity for Pittsfield, Massachusetts, 26 B.C. ENVIL. AFF. L. REV. 577 Sec. III (1999).

¹⁶ See, e.g., infra note 139 (comments of Mayor Judy); Coeur d'Alene Hearing Tr., infra note 226, at 10 (Senator Crapo: "We have competing scientific studies ad nauseum").

"See infra note 168 (comments of Shoshone Natural Resources Coalition).

¹⁸ See infra note 325 and accompanying text (calls for study by National Academy of Sciences).

tiniest amount of waste to the site," ¹⁹ EPA demonstrated its usual discretion by declining to pursue dozens of potentially responsible parties in the Coeur d'Alene River Basin. ²⁰ While critics complain that Superfund imposes unrealistic cleanup standards, ²¹ they fail to recognize that such standards usually reflect requirements of the affected states, as by the states of Idaho and Washington for the Coeur d'Alene Basin cleanup. ²² And while critics project stereotypes of landfills and industrial wastelands, ²³ the story of the Coeur d'Alene Basin shows that Superfund sites may take many forms, some retaining tremendous natural beauty.

Amidst the natural beauty of northern Idaho, environmental degradation followed the first mining in the region. After a brief gold rush in the early 1880s, regional mining focused on lead and silver claims along the South Fork of the Coeur d'Alene River and its tributaries of Canyon Creek and Ninemile Creek.²⁴ In the search for ore, mining companies excavated millions of tons of rock from the underground mines, leaving heaps of waste rock on the surface to leach cadmium, lead, zinc, and other metals into the ground and adjacent surface water. Local mills crushed the ore to extract silver, lead, zinc and other valuable metals, and discharged the

¹⁹ See, e.g., Dave Kopel, Defunding Superfund, NAT'L REV. ONLINE (June 19, 2002) available at http://www.nationalreview.com/kopel/kope;061902.asp.

Reflecting the century of mining in the Silver Valley and Coeur d'Alene Basin, EPA investigated over 80 parties connected to mining activities in the region. After considering information obtained from these parties, EPA affirmatively eliminated 52 parties from further investigation early in the litigation. See Press Release, EPA (Aug. 21, 1997). Ultimately, no other parties would be added to the litigation beyond the defendants in the original complaint. See infra note 118 and accompanying text.

²¹ See, e.g., Kopel, supra note 19.

²² Site-specific standards for residential yard cleanups in Idaho derived from the results of the Human Health Risk Assessment led by the State of Idaho. See infra note 276 (state lead for HHRA). Cleanup standards for areas along the Spokane River in the State of Washington are set by rules promulgated under the Washington Model Toxics Control Act, Ch. 173-340 WAC. See COEUR D'ALENE BASIN ROD, supra note 1, at 13-15 (Washington regulation applicable to remediation of beach sites).

¹⁸ See, e.g., Kopel, supra note 19 (admitting the federal interest in interstate rivers, but implying Superfund only applies to "ground pollution at landfills"); Coeur d'Alene Hearing Tr., infra note 226, at 250 ("Frankly, I do real hazardous waste Superfund cases in places like New Jersey...") (comments of EPA National Ombudsman "principal investigator"). Contrary to the stereotyped views of Superfund application, legislative history clearly indicates that CERCLA was intended to reach a broad range of contamination. As Senate committee members noted, before Love Canal arrived in the national spotlight, there were concerns about such cases as PCBs in the Hudson River and kepone in the James River. Concerns were also observed related to the Cedar River, near Charles City, Iowa, where poisons from a nearby dumpsite were detected 60 miles downstream. S. REP. No. 96-848 at 7 (1980).

²⁴ See WOOD, supra note 2, at 4-9. Supra, note 1, fig. 1.

residual, known as mill tailings, directly into streams.²⁵ With the consistency of sand, the mill tailings still contained high levels of metals. Before the impoundment of mill tailings became standard practice by 1968, an estimated 62 million tons of tailings were discharged directly into the South Fork and its tributaries, containing some 880,000 tons of lead and more than 720,000 tons of zinc. 26 Carried by riverflows and floods, the mill tailings washed into adjoining lakes, marshes, and floodplains, while dissolved metals from waste rock and mine waters flowed into the streams.²⁷ Near the town of Kellogg, along the South Fork, the Bunker Hill smelter plant took the product of the mills and refined it into commercial metals including bars and ingots of silver, lead and zinc. Operating from 1917 to 1981, the smelters produced air emissions containing sulfur dioxide, lead particulates, and other contaminants,28 killing hillside vegetation and in the 1970s causing documented cases of lead poisoning in local children.²⁹

The passage of Superfund in 1980 marked a new chapter in the Coeur d'Alene River Basin's history. The first Superfund National Priorities List (NPL) included an area of the Coeur d'Alene Basin identified as the "Bunker Hill Mining and Metallurgical site." EPA later focused its attention on what became known as the "Bunker Hill Superfund Site" or simply "the Box," an area including the former Bunker Hill smelter complex and nearby communities including Kellogg and Smelterville. In 1986, EPA

²⁵ COEUR D'ALENE BASIN ROD, supra note 1 at 2-1.

²⁶ Id.

²⁷ Id.

²⁸ RAY CHAPMAN, "UNCLE BUNKER" at 72-73, 151-157 (1994).

^{**}See Non-Populated Areas ROD infra note 62, at 2-2. A fire at the lead smelter "baghouse" in 1973 damaged air pollution control equipment, dramatically increasing local lead emissions. Health surveys that followed in 1973 and 1974 showed that up to 75 percent of preschool children within several miles of the smelter complex had blood lead levels exceeding criteria then-established by the Centers for Disease Control. Id. At extreme lead levels, clinical lead poisoning may occur, which may be marked by anemia, colic, heart malfunction, or even death. Lower levels of lead exposure may impair neurological development in infants and children, leading to depressed IQs and altered behavior. Adult exposures may manifest in hypertension or miscarriages. U.S. EPA REGION X ET AL., FINAL HUMAN HEALTH RISK ASSESSMENT FOR THE COEUR D'ALENE BASIN EXTENDING FROM HARRISON TO MULLAN ON THE COEUR D'ALENE RIVER AND TRIBUTARIES 4-12, 4-13 (June 2001) [hereinafter COEUR D'ALENE HUMAN HEALTH RISK ASSESSMENT].

³⁰ 48 Fed. Reg. 40,658 (Sept. 8, 1983). The original name of "Bunker Hill Mining" was revised slightly to its final name a year later. 49 Fed. Reg. 37,086 (Sept. 21, 1984).

³¹ United States v. ASARCO Inc., Civil Action No. CIV94-0206-N-EJL (lodged May 10, 1994); United States v. Union Pacific R.R. Co., Case No. CV 95-0152-N-HLR (Sept. 12, 1995).

began removing lead-contaminated soils from residential lots in the Box. Throughout the 1990s, the Box remained the focus of remedial efforts by EPA and the State of Idaho, as well as certain mining companies and other private parties.³²

Review of the Superfund work inside the Box suggests it has done much good,³³ despite calls for reform³⁴ or outright condemnations³⁵ of the Superfund program.³⁶ While assailing Superfund on many accounts,³⁷ critics may fail to appreciate that Superfund has *changed*

³² See infra notes 118-124 (remedial action by EPA and State of Idaho, and by private parties pursuant to consent decrees).

"Among other accomplishments, the State of Idaho reported that the residential cleanup work reached objectives for children's blood lead levels within the Box and that the work in the industrial areas of the Box was "basically completed on time and within budget." "Progress and Status Report for Calendar Year 2001 on the Environmental Remediation (clean-up) and Human Health Activities at the Bunker Hill Superfund Site, Shoshone County," letter from the State of Idaho Bunker Hill Superfund Project Team to The Honorable Dirk Kempthorne and Members of the Idaho State Legislature (Jan. 10, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (emphasis in original) [hereinafter State of Idaho Progress Report].

⁵⁵ See, e.g., James T. Hamilton & W. Kip Viscusi, The Benefits and Costs of Regulatory Reforms for Superfund, 16 STANFORD ENVTL. L. J. 159 (1997); Scott C. Whitney, Superfund Reform: Clarification of Cleanup Standards to Rationalize the Remedy Selection Process, 20 COLUM. J. ENVTL. L. 183 (1995); David L. Markell, "Reinventing Government": A Conceptual Framework for Evaluating the Proposed Superfund Reform Act of 1994's Approach to Intergovernmental Relations, 24 ENVTL. L. 1055 (1994).

³⁵ As one U.S. Senator declared, "In my opinion, the Superfund statute is the most failed environmental statute that the United States has ever had on the books." Coeur d'Alene Hearing Tr., infra note 226, at 10 (comments of Senator Mike Crapo). See also Larry Craig, Seeking Cleanup, Not Retribution, IDAHO FALLS POST REGISTER, Feb. 19, 1998 (stating that "current Superfund law practically cries out for litigation and conflict"), Kopel, supra note 19 ("Superfund is a failure, perhaps the most ineffective of all federal environmental programs").

³⁶ Naturally, such negativity is not unanimous. *See, e.g.*, Margaret Kriz, *Superfund Slowdown*, 34 NAT'L J. 22 (June 1, 2002) ("Superfund appears to be the only available vehicle" for addressing "mega-sites"); Lois J. Schiffer, Editorial, *Superfund, Super Star*, WASH. POST, Aug. 10, 1999 ("Across America, Superfund is working well"); Charles de Saillan, *In Praise of Superfund*, 35 ENV'T 42 (1993) (While critics have "loudly and effectively portrayed Superfund as ineffective, wasteful, and unfair," most criticisms "are unfounded and based on faulty or exaggerated information and misleading statistics").

37 In addition to the counts cited previously, supra notes 15, 16, 19, and 21, and accompanying text, Superfund has been reviled over the years by courts and commentators for its legislative imprecision. See, e.g., Carson Harbor Vill., Ltd., v. Unocal Corp., 270 F.3d 863, 883 (9th Cir. 2001) ("Clearly, neither a logician nor a grammarian will find comfort in the world of CERCLA. It is not our task, however, to clean up the baffling language Congress gave us..."). As one commentator wryly commented, "Vagueness, contradiction, and dissembling are familiar features of environmental statutes, but CERCLA is secure in its reputation as the worst drafted of the lot. In CERCLA judicial opinions, denunciations of the text and origin have reached the level of compulsory ritual, more frequent than condemnations of the polluted landscapes that gave rise to the law in the first place." WILLIAM RODGERS, ENVIRONMENTAL LAW: HAZARDOUS WASTES AND SUBSTANCE 514 (1988).

over the years, through means including administrative reforms³⁸ as well as statutory amendments.³⁹ Critics and the general public may be similarly unaware of the remarkable cleanup efforts completed under Superfund across the country.⁴⁰ Still, with all its accomplishments so far, Superfund may face its greatest challenges ahead⁴¹ as the program evolves from problems of leaking drums and landfills⁴² to vast geographies like the Hudson River in New York,⁴³ the Fox River in Wisconsin,⁴⁴ the Clark Fork River in Montana,⁴⁵ New Bedford Harbor in Massachusetts,⁴⁶ the Palo Verde Shelf in the Pacific Ocean off-shore from Los Angeles,⁴⁷ and the Coeur d'Alene River Basin in Idaho.

ss See infra note 203 (Superfund administrative reforms).

³⁹ See infra Part II.D.

⁴⁰ In September 2002, EPA reported a total of 1,239 sites on the Superfund National Priorities List, with 818 of those sites designated as "Construction Complete." 67 Fed. Reg. 56,760-61 (Sept. 5, 2002). Among those 818 sites is the infamous Love Canal, principal inspiration for passage of the Superfund statute in 1980. See U.S. EPA, SUPERFUND 20TH ANNIVERSARY REPORT (2000) available at www.epa.gov/superfund/action/20years. Love Canal reached Construction Complete status in 1999, and more than 260 formerly-abandoned homes have been rehabilitated and sold to new residents. U.S. EPA Region 2 Fact Sheet: "Love Canal, New York" (March 2002).

[&]quot;See, e.g., Christine Todd Whitman, Editorial, Keep the Momentum for Superfund Cleanups, N.Y. TIMES, July 18, 2002, at A21 ("The easier jobs are all done; we still face some of the hardest ones.").

⁴² Perhaps the epitome of the public notion of "Superfund sites" is the Lipari Landfill in New Jersey, listed as No. 1 on the original National Priorities List. 48 Fed. Reg. 40,658 (Sept. 8, 1983). Prior to closing in 1971, the landfill was subject to fires and explosion, and contaminants leached into a nearby lake and marsh. A landfill cap and cutoff wall to stop contaminant migration were constructed in 1984; in 1985, contaminated soils in the marsh were excavated; and after years of closure, the lake has been reopened for recreational use. U.S. EPA Region 2 Fact Sheet: "Lipari Landfill, New Jersey" (April 2002).

⁴⁵ See supra note 14.

[&]quot;See U.S. EPA & WISCONSIN DEPT. OF NATURAL RESOURCES, PROPOSED PLAN SUMMARY FOR CLEANUP OF THE LOWER FOX RIVER AND GREEN BAY SITE (Oct. 2001) (proposed dredging to remove PCBs from segments of 39-mile stretch of Fox River connecting to Green Bay, with estimated cost of \$309 million).

⁴⁵ See U.S. EPA REGION 8, SUPERFUND PROGRAM CLEANUP PROPOSAL: CLARK FORK RIVER OPERABLE UNIT OF THE MILLTOWN RESERVOIR/CLARK FORK RIVER SUPERFUND SITE (Aug. 2002) (proposed plan for addressing 120 river miles contaminated with metals linked to mining operations, with estimated cost between \$90 and \$100 million).

⁴⁶ See U.S. EPA REGION 1, RECORD OF DECISION FOR THE UPPER AND LOWER HARBOR OPERABLE UNIT, NEW BEDFORD HARBOR SUPERFUND SITE, NEW BEDFORD, MASSACHUSETTS (Sept.1998) (selected dredging for sediments contaminated with PCBs from estuary and harbor, with estimated cost between \$120 and \$130 million).

⁴⁷ See U.S. EPA Region 9 Fact Sheet: "Cleaning Up the Palos Verdes Shelf" (Dec. 2000) (announcing settlements totaling approximately \$140 million to fund offshore cleanup and restoration of natural resources injured by DDT).

This Article is one story from the field. It is a story of extraordinary contamination and contention, but also of common fears and misconceptions of the Superfund program. By examining the application of Superfund to the Coeur d'Alene Basin, the Article demonstrates the flexibility and potential of Superfund today for meeting the daunting cleanups that remain across the country.

Part II of the Article identifies the factors that guided EPA's decision to apply Superfund authority beyond the Bunker Hill Box and into the surrounding Coeur d'Alene Basin. Part III discusses reactions to EPA's expanded Superfund efforts in the Basin, plus recent changes to the Superfund program responding to common concerns. Part IV examines the elements of the ROD's cleanup plan. Part V considers the prospects for implementing the Coeur d'Alene Basin ROD. The Article concludes that the Superfund statute, given adequate funding, is an appropriate tool for the cleanup of the Coeur d'Alene River Basin and other mega-sites.

II. THINKING (AND STEPPING) OUTSIDE "THE BOX"

For many years, work inside the Bunker Hill Box consumed the attention of EPA. In time, EPA became increasingly involved with efforts to improve the environment in the surrounding Coeur d'Alene Basin. EPA at first declined to apply CERCLA remedial authority anywhere in the Basin outside the Box. Instead, EPA advocated a "multi-media" approach using other regulatory authorities. 49 However, the limitations of such tools soon became apparent: CERCLA removals could not address widespread contamination; the Clean Water Act could not reliably address contaminants from floodplains, riverbanks, and other "nonpoint sources"; and the Natural Resource Damage Assessment process could not effectively protect human health. This Part examines each of these limitations to illustrate the bases for EPA's determination to step outside the Box with CERCLA remedial To establish the context for use of this remedial authority, this Part also describes the environmental setting and concerns of the Coeur d'Alene Basin.

⁶⁸ Of course, this same story could be told from many other perspectives, and could be joined by as many other stories of the Coeur d'Alene Basin as there are lives affected by it.
⁶⁹ See infra note 72 and accompanying text.

A. Environmental Setting

The Coeur d'Alene River Basin covers roughly 1,500 square miles of northern Idaho, between the states of Montana and Washington.⁵⁰ Passing through the Coeur d'Alene Basin, one might never suspect the gravity of environmental concerns. Through the towns of Mullan and Wallace in the Upper Basin, bicycles and baby strollers roll upon a freshly paved trail⁵¹ parallel to Interstate 90 and the South Fork of the Coeur d'Alene River. Along the main stem of the river in the Lower Basin winds the White Pine Scenic Highway. Down this way, the landscape opens into pastures and marshes, oxbow lakes with osprey nests. The road, the river, and the new bike trail converge on the eastern shore of Coeur d'Alene Lake. Surrounding the southern end of the Lake is the Coeur d'Alene Indian Reservation.⁵² On the north end lies the City of Coeur d'Alene with its resorts and bedroom communities, plus the outlet of the Lake into the Spokane River. Ten miles downstream, the Spokane River crosses into the State of Washington, then churns through the City of Spokane and the Spokane Indian Reservation on its way toward the Columbia River and ultimately the Pacific.

Within this picturesque landscape remain reminders of the mining industry. Most obvious is the billboard welcoming travelers to the "Silver Valley," and touting its proud mining heritage.⁵³

⁵⁰ U.S. EPA, FINAL FEASIBILITY REPORT, COEUR D'ALENE BASIN RI/FS 2-3 (Oct. 2001) (Basin encompasses approximately 1,475 square miles).

The trail was constructed as a Superfund removal action addressing 72 miles of the Union Pacific Railroad right-of-way across the Coeur d'Alene River Basin. For the complete story, see Clifford J. Villa, Cleaning Up at the Tracks: Superfund Meets Rails-To-Trails, 25 HARV. ENVIL. L. REV. 481 (2001).

⁵² See COEUR D'ALENE BASIN ROD, supra note 1, at fig. 1. Beyond the boundaries of the present reservation, the Coeur d'Alene Tribe historically inhabited a vast region of what is now northern Idaho and northeastern Washington. Under an 1873 agreement with the federal government, the reservation then encompassed a broader reach than today, to include most of the Coeur d'Alene River and Coeur d'Alene Lake. United States v. Idaho, 95 F.Supp.2d 1094, 1095-96 (D. Idaho 1998) (quiet title for "submerged lands" including part of Coeur d'Alene Lake), aff'd 210 F.3d 1067 (9th Cir. 2000), aff'd 533 U.S. 262 (2001). Reflecting continuing connection with its "homeland," the Tribe has maintained concern for mining contamination within both the Box and the broader Coeur d'Alene Basin. See, e.g., Coeur d'Alene Hearing Tr., infra note 226, at 22-25 (Tribal Chairman Stensgar: "The fact that some areas have been sold or taken from us over the years doesn't diminish the Tribe's obligation to our ancestors and the Creator to watch over the land.").

⁵⁵ The Silver Valley can justly claim distinction as one of the world's leading districts for silver, zinc, and lead, with an estimated 1.2 *billion* ounces of silver, 3.2 million tons of zinc, and 8 million tons of lead produced over its 100-year history. COEUR D'ALENE BASIN ROD, *supra* note 1, at 2-1.

Moreover, there are the ubiquitous physical structures in the mining district: mine portals sprinkled on the steep hillsides, mill buildings or foundations along the canyon floors.⁵⁴

Less visible reminders of the regional mining industry are the metal contaminants in the environment of the Coeur d'Alene Basin. Contaminants in surface waters leave some 33 river miles in the Basin too toxic for native fish to spawn.55 Contaminated sediments in lakes and marshes of the Basin have led to decades of waterfowl deaths due to lead poisoning.⁵⁶ An estimated 100 tundra swans in the Basin died from lead poisoning in 1948.⁵⁷ In 1982, an estimated 200 swans died from lead poisoning.58 After 20 more years, contaminated sediments in the Basin continue to take a toll on waterfowl, with an estimated 100 tundra swans found dead or dying during the spring migration of 2003.59 Human health hazards can also be found in the Basin. For example, risk assessments supporting the Coeur d'Alene Basin ROD indicate that numerous campgrounds and recreational areas in the Lower Basin are sources of elevated blood-lead levels in children.60

B. Remedial Actions Inside the Box

The earliest concerns for high blood-lead levels in the Basin arose within the Box, including Kellogg, Smelterville, and other communities impacted by fallout from the Bunker Hill smelters. Concerns including high blood-lead levels in the area of the Bunker Hill Box drove EPA and the State of Idaho to produce two RODs for the Box: one in 1991 for the "populated" areas⁶¹ and one in 1992 for the "non-populated" areas.⁶²

⁵⁴ The U.S. Bureau of Land Management estimated that there are nearly 900 mining or milling features in the region of the South Fork of the Coeur d'Alene River. COEUR D'ALENE BASIN ROD, supra note 1, at 2-1.

⁵⁵ Id. at 7-37. Tests of the South Fork and its Canyon Creek tributary indicate that concentrations of zinc and other toxins are ten times greater than levels regarded as minimally safe to aquatic life. Id.

⁵⁶ UNITED STATES DEPARTMENT OF THE INTERIOR, FISH AND WILDLIFE SERVICE, ET AL., REPORT OF INJURY ASSESSMENT AND INJURY DETERMINATION: COEUR D'ALENE BASIN NATURAL RESOURCE DAMAGE ASSESSMENT 6-16 (Sept. 2000).

⁵⁷ Id. ⁵⁸ Id.

⁵⁹ Karen Dorn Steele, Marshes Lure Birds to Death, SPOKESMAN-REVIEW, April 13, 2003.

⁶⁰ See COEUR D'ALENE HUMAN HEALTH RISK ASSESSMENT, supra note 29, at 6-15.

⁶¹ U.S. EPA, RECORD OF DECISION: BUNKER HILL MINING AND METALLURGICAL COMPLEX, POPULATED AREAS OPERABLE UNIT (1991) [hereinafter POPULATED AREAS ROD].

⁶² U.S. EPA, RECORD OF DECISION: BUNKER HILL MINING AND METALLURGICAL COMPLEX, NON-POPULATED AREAS OPERABLE UNIT (1992) [hereinafter NON-POPULATED AREAS ROD].

In 1994, EPA and Idaho signed a consent decree with major mining companies in the Coeur d'Alene Basin, including ASARCO, Hecla Mining Company, and Sunshine Mining Company, to provide for remediation of the populated areas of the Box. The consent decree essentially provided for complete cleanup of residential areas of the Box, at a cost to the mining companies of approximately \$40 million by 2001.

However, after certain potentially responsible parties (PRPs) sought bankruptcy protection, EPA and the State of Idaho were left to fund the majority of the cleanup inside the Box, principally in the non-populated areas. In what became one of the biggest Superfund construction projects in the country, EPA contractors excavated millions of tons of mine wastes from gulches and floodplains; demolished smelter stacks and an entire industrial complex; capped a 260-acre waste repository; and replanted a thousand acres of denuded hillsides. The total estimated cost—including the costs of remedial studies, contract management, emergency removal, and enforcement efforts – was estimated in 2001 to be \$212 million.

C. New Developments

While EPA continued its enormous cleanup efforts inside the Box, it became involved with diverse activities in the Basin outside the Box. By late 1997, EPA concluded that the best framework for the Coeur d'Alene Basin was CERCLA's Remedial

⁶⁸ United States v. ASARCO Inc., Civil Action No. CIV94-0206-N-EJL (lodged May 10, 1994). In 1995, EPA and Idaho further signed a consent decree with the Union Pacific Railroad and other parties to provide for remediation of the seven miles of railroad right-of-way and other discrete areas within the Box. United States v. Union Pacific R.R. Co., Case No. CV 95-0152-N-HLR (Sept. 12, 1995).

⁶⁴ United States v. ASARCO Inc., Civil Action No. CIV94-0206-N-EJL (transcript of hearing before the Honorable Edward J. Lodge, Hecla and ASARCO's Motion to Modify Consent Decree) at 20 (Aug. 22, 2001) (comments of counsel for ASARCO).

⁶⁵ The Bunker Hill Mining Company filed for Chapter 11 bankruptcy in 1991, the Bunker Hill Limited Partnership filed for Chapter 11 in 1992, and Gulf Resources filed for Chapter 11 in 1994. COEUR D'ALENE BASIN ROD *supra* note 1, at 2-2.

⁶⁶ U.S. EPA REGION 10, FIRST 5-YEAR REVIEW OF THE NON-POPULATED AREA OPERABLE UNIT, BUNKER HILL MINING AND METALLURGICAL COMPLEX, SHOSHONE COUNTY, IDAHO at ES-2 (Sept. 2000).

[&]quot; Id. passim.

⁶⁸ U.Ś. GEN. ACCOUNTING OFFICE, EPA'S EXPENDITURES TO CLEAN UP THE BUNKER HILL SUPERFUND SITE 4 (Mar. 28, 2001).

Investigation/Feasibility Study (RI/FS) process.⁶⁰ The decision to proceed with an RI/FS was not made lightly, but followed only after evaluating the strengths and weaknesses of other regulatory programs,⁷⁰ as the remainder of this Part examines.

D. Superfund Removal Actions

At the time of the 1992 Box ROD, EPA Region 10 understood the need for actions to address mining contamination in the broader Basin. To begin to address pollution problems in the broader Basin, EPA, the State of Idaho, and the Coeur d'Alene Tribe, in cooperation with other government agencies and with mining companies, developed the Coeur d'Alene Basin Restoration Project (CBRP). CBRP was intended to promote a "multi-media" approach to environmental quality in the Coeur d'Alene Basin. As such, it encouraged interested parties to consider all available "tools" such as funding and enforcement under the applicable environmental statutes. Unfortunately, the number of tools available proved limited, as did their collective usefulness in the Basin.

⁵⁰ See Declaration of Mary Jane Nearman at 5 (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (Feb. 9, 1999).

⁷¹ See, e.g., NON-POPULATED AREAS ROD, supra note 62, at 10-5 (1992) (recognizing that water quality within the Box "is substantially controlled by loadings from sources upstream").

⁷² COEUR D'ALENE BASIN RESTORATION PROJECT FRAMEWORK (June 1993) [hereinafter CBRP FRAMEWORK]. To oversee CBRP development and implementation, a "Steering Committee" comprised of policy representatives from the Coeur d'Alene Tribe, State of Idaho, and EPA was established consistent with a Memorandum of Agreement signed by the parties in 1992. Memorandum of Agreement for Coeur d'Alene Basin Restoration (Oct. 29, 1992) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

The "multi-media" or "integrated pollution control" strategies popular in the early 1990s emphasized the limitations or consequences of fragmented regulatory programs. For example, restrictions on air emissions under the Clean Air Act could encourage greater pollution to surface waters. The multi-media approach promoted by EPA and others would avoid such consequences and seek environmental gains through coordination among different programs and selective use of available "tools" provided by authorities such as the Clean Air Act, Clean Water Act, RCRA, Superfund, or state or local codes. For a discussion of EPA's developing multi-media program at that time, see Peter J. Fontaine, EPA's Multimedia Enforcement Strategy: The Struggle to Close the Environmental Compliance Circle, 18 COLUM. J. ENVIL. L. 31 (1993). For contemporaneous, theoretical perspectives, see Integrated Pollution Control: A Symposium, 22 ENVIL. L. 1 (1992).

⁶⁰ See Declaration of Randall F. Smith (Feb. 9, 1999) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) [hereinafter Randy Smith Declaration].

The Resource Conservation and Recovery Act (RCRA),⁷⁴ for example, regulating the treatment, storage, or disposal of hazardous waste, had little legal applicability to the Coeur d'Alene Basin because RCRA's regulation of mining waste is largely excluded by the "Bevill Amendment." The Clean Air Act similarly had little application in the Basin, particularly after the smelter complex shut down in 1981. Of the major federal pollution control statutes besides CERCLA, that mainly left the Clean Water Act. Since enactment in its current form 30 years ago, the Clean Water Act has been widely credited for cleaning up water bodies across the country. Most of this success has been achieved by controlling discharges from point sources. In the Basin, however, the vast majority of the metals released into the river come do not come from point sources but instead come from contaminated soils and sediments and other nonpoint sources.

With RCRA, the Clean Air Act, and the Clean Water Act limited in their respective or collective abilities to address mining

⁷⁴ 42 U.S.C. §§ 6901-6992 (2001). For a thorough treatment on RCRA, *see* JEFFERY G. MILLER & CRAIG N. JOHNSTON, THE LAW OF HAZARDOUS WASTE DISPOSAL AND REMEDIATION at ch. IV (1996).

[&]quot;§ 6921(b)(3)(A). Specifically, the Bevill Amendment provides that solid wastes from the "extraction, beneficiation," and some processing of ores and minerals are excluded from RCRA requirements for the management of hazardous wastes. RCRA regulations define "beneficiation" of ores and minerals to include "crushing," "grinding," "gravity concentration," and "flotation." 40 C.F.R. § 261.4(b)(7)(i) (2002). For a judicial analysis of the Bevill Amendment, including legislative history, see Envtl. Def. Fund v. EPA, 852 F.2d 1316 (D.C. Cir. 1988).

⁷⁶ 42 U.S.C. §§ 7401-7671 (2002). For an updated discussion on the Clean Air Act, see ARNOLD W. REITZE, JR. AIR POLLUTION CONTROL LAW: COMPLIANCE AND ENFORCEMENT (2001).

[&]quot;In the 1970s and early 1980s, before the Bunker Hill lead and zinc smelters shut down, the Clean Air Act played a major role in the region. In order to meet the Clean Air Act national ambient air quality standards for sulfur dioxide emissions, EPA rejected Idaho's State Implementation Plan for the smelters and developed a Federal Implementation Plan. Bunker Hill Co. v. EPA, 572 F.2d 1286 (9th Cir. 1977) (remanding to EPA to establish technical feasibility of emission control standard); 50 Fed. Reg. 5237 (Feb. 7, 1985) (final Federal Implementation Plan for Shoshone County, Idaho, including Bunker Hill lead smelter). EPA also exercised its authority under the Clean Air Act to conduct inspections of the Bunker Hill plant, even to the extent of obtaining and defending a warrant for access. Bunker Hill Lead & Zinc Smelter v. EPA, 658 F.2d 1280 (9th Cir. 1981).

⁷⁸ 33 U.S.C. §§ 1251-1387 (2002).

⁷⁹ See, e.g., OLIVER A. HOUCK, THE CLEAN WATER ACT TMDL PROGRAM: LAW, POLICY, AND IMPLEMENTATION 3-4 (1999).

⁸⁰ The Clean Water Act defines "point source" to mean "any discernible, confined, and discrete conveyance," including any "pipe, ditch, channel, tunnel, [or] conduit." 33 U.S.C. § 1362(14) (2002).

⁸¹ It was estimated that point sources account for only eight percent of dissolved metals in the South Fork of the Coeur d'Alene River. COEUR D'ALENE BASIN ROD, supra note 1, at 5-7.

contamination in the Coeur d'Alene Basin, Superfund authorities assumed a primary role in the Basin. Superfund establishes two major categories for cleanup: "removal" actions and "remedial" actions. Remedial actions typically provide for long-term, final response to releases of hazardous substances, while removal actions are typically limited efforts providing for faster response. Unlike removal actions, remedial actions are usually restricted to sites included on the National Priorities List (NPL), with only the remedial actions at NPL sites eligible to receive funding from the Superfund trust fund. Basin Superfund trust fund.

Throughout the 1990s, the extent of NPL listing for the Coeur d'Alene Basin remained subject to debate and ultimately became the subject of litigation. Mining companies argued that the NPL listing for the Basin should be limited to the 21-square-mile Bunker Hill Box. The United States maintained that the NPL facility extended beyond the Box to all areas of the Basin where mining contaminants had come to be located. Effectively, the matter was decided in June 2000 by the U.S. Ninth Circuit Court of Appeals, with a ruling that left standing the position of the United States.

With its remedial authority for the Basin preserved, EPA had chosen in the early 1990s to exercise its remedial authority only within the Box. For mining pollution in the surrounding Basin, EPA relied upon the CBRP multi-media approach. Given the limitations of other "tools," environmental improvements in the

⁸² See 42 U.S.C. § 9601(23)-(24) (2002), for definitions of "removal" and "remedial action." The line between removal and remedial action can, however, appear hazy at times. See Jerry L. Anderson, Removal or Remedial? The Myth of CERCLA's Two-Response System, 18 COLUM. J. ENVIL. L. 103 (1993).

⁸³ "Only those releases included on the NPL shall be considered eligible for Fund-financed remedial action." 40 C.F.R. § 300.425(b)(1) (2002).

⁸⁴ United States v. ASARCO Inc., 28 F.Supp. 2d 1170 (D. Idaho 1998).

⁸⁵ The mining companies raised this argument as an affirmative defense to claims by the United States for natural resource damages (NRD). If successful, the mining companies' argument could have constrained the United States from applying a broader statute of limitations for NRD claims "with respect to a facility listed on the [NPL]." See 42 U.S.C. § 9613(g)(1) (2002) (statute of limitations for NRD actions).

⁸⁶ The argument of the United States relied on the statutory definition of "facility," defined to include any building, pipe, pit, impoundment, ditch, landfill, or any other site or area where a hazardous substance has been disposed or placed "or otherwise come to be located." § 9601(9).

⁸⁷ United States v. ASARCO Inc., 214 F.3d 1104 (9th Cir. 2000). On jurisdictional grounds, the Ninth Circuit vacated the decision by the U.S. District Court of Idaho, which for purposes of discerning the statute of limitations for NRD claims, had previously concluded that the NPL facility was limited to the "Box."

Basin depended largely on Superfund removals, conducted by EPA and others.

For example, removal efforts were conducted by the Silver Valley Natural Resource Trustees (SVNRTs), a body founded by the State of Idaho and funded by the State's settlement of natural resource damage claims in 1986. Much of the removal work by the SVNRTs addressed tailings from the floodplain of Canyon Creek, a major tributary of the South Fork of the Coeur d'Alene River. Also for Canyon Creek, EPA negotiated an agreement with one of the mining companies in the Basin to construct a demonstration project for using wetlands to treat mine drainage. Along the South Fork tributaries of Ninemile Creek and Pine Creek, EPA funded removal actions directly. Along the South Fork itself, EPA assisted removals by state and federal agencies, providing technical advice and helping to secure access for disposal of excavated wastes.

While these removal actions may have made discrete improvements, provisions of the CERCLA removal program limited its effectiveness in the Basin. With exceptions, the statute ordinarily limits individual removal actions funded by EPA to \$2,000,000 in cost or 12 months in duration. As a result, there

⁸⁸ See infra, note 120 and accompanying text (State NRD settlement).

⁸⁹ See U.S. EPA Region 10, "Action Memorandum for a Response Action at the Canyon Creek Site, Wallace, Shoshone County, Idaho" (July 28, 1995) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (estimating cost of removal action at \$2.3 million, approximately \$1.8 million funded by state entities, \$340,000 funded by Hecla Mining Company). See also In the Matter of: Canyon Creek, Idaho, Administrative Order on Consent, U.S. EPA, Region 10 Docket No. 10-95-0105-CERCLA (Aug. 15, 1995) (consent agreement with Hecla Mining Company).

⁹⁰ In the Matter of: Gem Mine Portal, Canyon Creek, Idaho, Gem Portal Administrative Order on Consent, U.S. EPA Docket No. 10-97-0172-CERCLA (Sept. 30, 1997).

⁹¹ See, U.S. EPA Region 10, "Action Memorandum for a Removal Action at the Success Mine site, Wallace, Shoshone County Idaho" (Sept. 21, 1993) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (selecting time-critical removal action to be funded by EPA with estimated cost of \$905,000); U.S. EPA Region 10, "Action Memorandum for a Removal Action at the Douglas Mine Site, Shoshone County, Idaho" (July 25, 1996) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

⁹² See, e.g., U.S. EPA Region 10, "Decision Memorandum for Removal Actions in the South Fork Coeur d'Alene River System" (Sept. 30, 1997) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington). For a comprehensive tally of removal actions for ecological protection in the Basin conducted between 1987 and 2002, involving EPA, the U.S. Bureau of Land Management, U.S. Forest Service, Coeur d'Alene Tribe, Idaho Department of Environmental Quality, the Silver Valley Natural Resource Trustees, mining companies, and others, see COEUR D'ALENE BASIN ROD, supra note 1, at tbl. 2.3-2.

⁹⁹ 42 U.S.C. § 9604(c)(1) (2002) ("Unless... the President has determined the appropriate remedial actions... obligations from the Fund ... shall not continue after

were multiple removal actions conducted throughout the Basin with no single unifying effort. Moreover, the scope of these individual removal actions was limited. For example, the wetlands treatment system in Canyon Creek was designed to collect perhaps only ten percent of the drainage from a single mine adit. The largest of the tailings removals, near the mouth of Canyon Creek, excavated over 472,000 cubic yards of materials, but this remained only a fraction of one percent of the tailings discharged into the Basin. And even after completion of the removal actions in both Ninemile Creek and Canyon Creek, these drainage systems remained "essentially devoid of fish and other aquatic life in the area of mining impacts."

The Basin removals program, like the multi-media approach generally, achieved all it could. However, it was inadequate to deal with the profound environmental degradation that affected the Basin. Such a project would require much broader remediation and it would require an initial comprehensive examination of the nature and extent of mining contamination in the Basin, together with thorough analyses of the associated risks to human health and the environment. Through the RI/FS process, EPA, other federal, state, and tribal agencies, and the public, could finally understand the contamination and associated risks in the Basin, and prepare to address these risks with Superfund remedial authority.

E. Total Maximum Daily Loads

While the regulation of point sources under the Clean Water Act could have limited impacts on extant mining contamination, other Clean Water Act programs that consider nonpoint sources could have potentially broader effect in the Basin. One such program is

^{\$2,000,000} has been obligated for response actions or 12 months has elapsed from the date of initial response to a release or threatened release of hazardous substances."). Exceptions include situations where there is "an immediate risk to public health or welfare or the environment," or where "continued response action is otherwise appropriate and consistent with the remedial action to be taken...." Id.

⁹⁴ The pilot treatment system was designed to receive 10 to 20 gallons per minute (gpm) mine drainage, compared to an average flow rate from the mine adit of 100 to 120 gpm and a peak flow of approximately 540 gpm. ASARCO INCORPORATED, GEM PORTAL DRAINAGE FINAL WETLAND PILOT PROJECT WORK PLAN 5-6 (June 12, 1997) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

⁹⁵ COEUR D'ALENE BASIN ROD, supra note 1, at 2-11.

⁹⁶ Id. at 7-37.

known as Total Maximum Daily Loads (TMDLs).⁹⁷ Consistent with Section 303(d) of the Clean Water Act, TMDLs are, in essence, a calculation of the total amount of pollutants a particular water body can receive in a day and still meet water quality standards, with a margin of safety.⁹⁸ The total "load" of pollutants that a water body can receive and still meet water quality standards is then allocated among point sources and nonpoint sources. The TMDL "waste load" allocation for point sources may become enforceable through incorporation into discharge permits issued under the National Pollutant Discharge Elimination System (NPDES).⁹⁹ The TMDL load allocation for nonpoint sources, however, is not directly enforceable under the Clean Water Act.

Nonetheless, EPA guidance states that TMDLs should provide "reasonable assurance" that nonpoint source control measures will meet load allocations. The measures needed to demonstrate "reasonable assurance" remain at this time unclear. Within the ambit of the Clean Water Act, a number of measures could be taken to encourage states and NPDES permit holders to address load allocation. Such measures may chiefly include denying new permits and ratcheting down discharge limits in existing permits. 102

⁹⁷ See 33 U.S.C. § 1313(d) (2002). For implementing regulations, see 40 C.F.R. pt. 130. Volumes have been written of late about TMDLs, much by one individual. See, e.g., Oliver A. Houck, TMDLs: The Resurrection of Water Quality Standards-Based Regulation Under the Clean Water Act, 27 ENVTL. L. REP. 10,329 (July 1997); Oliver A. Houck, TMDLs, Are We There Yet?: The Long Road Toward Water Quality-Based Regulation Under the Clean Water Act, 27 ENVTL. L. REP. 10,391 (Aug. 1997). The series of articles were subsequently compiled into book form. HOUCK, supra note 79. For a recent piece on TMDLs not by Professor Houck, see Linda A. Malone, The Myths and Truths That Threaten the TMDL Program, 32 ENVTL. L. REP. 11,133 (Sept. 2002).

^{98 33} U.S.C. § 1313(d)(1)(C) (2002).

³⁹ § 1342. See 40 C.F.R. § 122.44(d)(1)(vii)(B) (2002) (effluent limits in permits must be consistent with wasteload allocation in an approved TMDL).

¹⁰⁰ Memorandum from Charles H. Sutfin, U.S. EPA, Director, Assessment and Watershed Protection Division, to Water Quality Branch Chiefs, *et al.* (May 20, 2002) (transmitting "Guidelines for Reviewing TMDLs under Existing Regulations Issued in 1992"). The TMDL rule promulgated in 2000 would have made such "reasonable assurance" a mandatory element for TMDL approval. 65 Fed. Reg. 43,591 (July 13, 2000). However, the rule has been withdrawn while a new rule is being considered. 68 Fed. Reg. 13,608 (Mar. 19, 2003).

¹⁰¹ The 2000 TMDL rule would have defined "reasonable assurance" for meeting load allocation by way of applying a four-part test: the control measure must be (1) specific to a pollutant and water body for which a TMDL is being established; (2) implemented as soon as practicable; (3) accomplished through reliable mechanisms; and (4) supported by adequate funding. 65 Fed. Reg. 43,599 (July 13, 2000).

HOUCK, supra note 79, at 81-82. Other measures within the Clean Water Act may include diverting state grants and revoking a state-delegated program under the Clean Water Act. The State of Idaho, however, is not delegated authority to implement the NPDES program in its state.

In theory, this could mean shutting down the industrial operations giving rise to an existing point source. However, the reality of the Coeur d'Alene River Basin, perhaps like most other watersheds, is that eliminating all point source discharges would not return the South Fork and connecting water bodies to water quality standards. To meet water quality standards in most water bodies, or even to make significant gains in the Coeur d'Alene Basin, there must be a way to deal seriously with load allocation for nonpoint sources. 104

Direct means to address nonpoint sources, such as the contaminated sediments in the Coeur d'Alene Basin, may be found in the Superfund authorities for removals and remedial actions. ¹⁰⁵ Through CERCLA RODs for remedial actions and "Action Memoranda" for removals, and through enforceable agreements or orders requiring implementation, nonpoint source load reduction may finally be achieved with "reasonable assurance."

The trigger for CERCLA jurisdiction, removal or remedial, is not, as some may suppose, inclusion on the National Priorities List or designation of a "Superfund site." While NPL listing may enable access to the Superfund trust fund for remedial actions, ¹⁰⁸ CERCLA generally authorizes EPA to act whenever there is a release of a hazardous substance into the environment. ¹⁰⁹ CERCLA defines "hazardous substance" to include a long list of designated

¹⁰⁵ See supra note 80 (point sources in the Basin account for only eight percent of dissolved metals in surface water).

¹⁰⁴ See HOUCK, supra note 79, at 63.

¹⁰⁵ See infra notes 367-372 and accompanying text (remedies selected in Coeur d'Alene Basin ROD).

¹⁰⁶ Analogous to a ROD in the CERCLA remedial context, the Action Memorandum serves to document the rationale and selection of a CERCLA removal action. It may also reserve EPA funding for carrying out the removal. EPA, SUPERFUND REMOVAL PROCEDURES: ACTION MEMORANDUM GUIDANCE, OSWER Dir. 9360.3-01 (Dec. 1990). *See, e.g., supra* notes 89, 91 (action memoranda for removals at Canyon Creek site, Success Mine site and Douglas Mine site).

site).

107 NPL listing has no bearing, for example, on liability for cleanup costs, or on EPA's authority to conduct investigations. 42 U.S.C. § 9604(b)-(c) (2002) (Whenever authorized to act under CERCLA Section 104(a), EPA "may undertake such . . . studies or investigations as [it] may deem necessary or appropriate to plan and direct response action, to recover the costs thereof, and to enforce the provisions of this chapter"). See also 40 C.F.R. § 300.425(b)(1) (2002) ("Removal actions (including remedial planning activities, RI/FSs, and other actions taken pursuant to CERCLA section 104(b)) are not limited to NPL sites"); accord Montrose Chem. Corp. v. EPA, 132 F.3d 90, 92 (D.C. Cir. 1998) ("section 104 of CERCLA makes clear that EPA may take response actions at hazardous waste sites regardless of whether they are listed on the NPL").

¹⁰⁸ See supra note 83 and accompanying text (eligibility for access to Superfund trust fund). ¹⁰⁹ 42 U.S.C. § 9604(a)(1) (2002).

substances. 110 A CERCLA "hazardous substance" also includes by reference certain substances regulated under other statutes including the Clean Water Act. 1111

Substances regulated under both CERCLA and the Clean Water Act include metals such as cadmium, lead and zinc dissolved in surface waters of the Coeur d'Alene River Basin. dissolved cadmium, lead, and zinc in surface waters of the South Fork and main stem of the Coeur d'Alene River exceed water quality standards under the Clean Water Act, sometimes by orders of magnitude. 112 In 1994, the South Fork and main stem of the Coeur d'Alene River were included among Idaho's list of 962 "Water Quality Limited Segments" (WQLSs), for which the Clean Water Act requires TMDLs to be developed. 113 Dismayed at a perceived delay by the State of Idaho in developing its TMDLs, the Idaho Sportsmen's Coalition and other interested parties filed a citizen suit to compel EPA to develop TMDLs for the State. 114 To develop TMDLs for the 962 WQLSs in Idaho, EPA and the State proposed a 25-year schedule. In September 1996, a federal court rejected the proposed schedule as arbitrary, requiring submission of a new schedule within six months.115

So it was then, in late 1996 and early 1997 that TMDLs for the State of Idaho, including TMDLs for the Coeur d'Alene River Basin, had to be rapidly developed. EPA was already busy in the Basin with its CERCLA removals program, and it seemed that CERCLA authority could be used to address the same concerns for nonpoint source pollution that gave rise to the need for TMDLs.¹¹⁶

¹¹⁰ § 9602(2). See 40 C.F.R. § 302.4 (1996), tbl. 302.4, "List of Hazardous Substances and Reportable Quantities." Notable exceptions may include sediment and thermal discharge, neither of which are defined as hazardous substances under CERCLA.

^{111 42} U.S.C. § 9601(14) (2002).

COEUR D'ALENE BASIN ROD, supra note 1, at § 5.3.

¹¹⁵ 33 U.S.C. § 1313(d)(1)(A), (C) (2002).

¹¹⁴ Idaho Sportsmen's Coalition v. Browner, 951 F.Supp. 962 (W.D. Wash. 1996). Congress intended TMDLs to be developed by the individual states, with approval by EPA. If it disapproves a state's TMDL, EPA must develop its own within 30 days. 33 U.S.C. § 1313(d)(2) (2002).

¹¹⁵ Idaho Sportsmen's Coalition 951 F.Supp. 962. Consistent with the court's admonition, the parties to the litigation subsequently negotiated an eight-year schedule for TMDL development. Order on Motions Re: Entry of Judgment, Idaho Sportsmen's Coalition v. Browner, No. C93-943WD (June 24, 1997).

¹¹⁶ See Randy Smith Declaration, supra note 69. See also COEUR D'ALENE BASIN ROD, supra note 1, at 44 ("It has long been recognized that non-discrete sources are the primary sources of metals in surface water in the Basin. The CERCLA remedial process was identified as the most effective tool to address these non-discrete sources.").

As such, EPA was drawn toward use of its CERCLA remedial authority beyond the Bunker Hill Box, leading toward initiation of an RI/FS for the Basin.

F. Natural Resource Damage Assessment

The TMDL litigation was not the only litigation concerning the Coeur d'Alene River Basin in 1996. In March 1996, the U.S. Department of Justice, on behalf of EPA and federal natural resource trustees,¹¹⁷ the U.S. Department of Agriculture and the U.S. Department of the Interior, filed a civil complaint in the U.S. District Court of Idaho.¹¹⁸ The complaint alleged that mining companies including ASARCO Incorporated, Hecla Mining Company, Coeur d'Alene Mines Corporation, and Sunshine Mining Company were the owners and/or operators of numerous mining operations in the area of the Coeur d'Alene Basin. These operations, the complaint alleged, released hazardous substances, which caused the incurrence of response costs and injuries to natural resources. The complaint therefore alleged that the defendants were liable, pursuant to CERCLA Section 107(a), for the payment of response costs and natural resource damages.¹¹⁹

117 CERCLA Section 107(f) specifically contemplates that natural resource trustees may include federal, state, or tribal officials. 42 U.S.C. § 9607(f)(1) (2002). Federal trustees are defined by the NCP to include the Secretary of Commerce, principally for marine resources; Secretary of the Interior, for resources including migratory birds and endangered species; Secretaries for land management agencies, including the U.S. Department of Agriculture; and the "head of authorized agencies" for natural resources "not otherwise described" and for which such agencies are "authorized to manage or control." 40 C.F.R. § 600(b) (2002). For the Coeur d'Alene Basin, federal trustees were identified by the complaint, *infra* note 118, as the Secretary of the Interior, represented by the Regional Director of the U.S. Fish and Wildlife Service, and the Secretary of Agriculture, represented by the Chief of the U.S. Forest Service. In theory, the NCP's trustee designation for "head of authorized agencies" could include the EPA Administrator for resources such as groundwater not otherwise managed or controlled by other federal agencies. However, EPA has not traditionally assumed the role of a natural resources trustee.

¹¹⁸ United States v. ASARCO Inc., CIV No. 96-0122-N-EJL (Mar. 22, 1996) [hereinafter USA Complaint].

119 Under CERCLA Section 107(a), the present owner or operator of a facility as well as the owner/operator of the facility at the time of disposal may be jointly and severally liable for "all costs of removal or remedial action" incurred by the United States, states, and tribes, not inconsistent with CERCLA regulations. 42 U.S.C. § 9607(a) (2002). Such persons may also be liable to the natural resource trustees for damages for injury or loss of natural resources such as land, air, water, fish, and wildlife. See § 9607(f)(1) (natural resources liability); § 9601(16) (definition of "natural resources"). Sums recovered by federal and state trustees must be used only to "restore, replace, or acquire the equivalent of" the injured natural resources. § 9607(f)(1). See generally MILLER & JOHNSTON, supra note 74. In addition to the NRD claims under CERCLA, the complaint also asserted NRD claims pursuant to Section 311 of the Clean Water Act, 33 U.S.C. § 1321 (2002). USA Complaint, supra note 118, at 20.

The complaint followed years of concern among the natural resource trustees for natural resource damages (NRD) in the Coeur d'Alene River Basin. In 1986, the State of Idaho settled its NRD claims against ASARCO and others for \$4.5 million. 120 In 1991, the Coeur d'Alene Tribe filed an NRD claim against the mining companies plus the Union Pacific Railroad. 121 In 1993, the tribal and federal trustees completed a plan for conducting a Natural Resource Damage Assessment (NRDA) for the Coeur d'Alene Basin. 122 While not a party to these NRD actions, EPA attempted to coordinate with them. 123 Still, EPA saw a significant limitation with the NRDA process: the inability to assess and address risks to human health. 124

Beginning with the first removal actions in 1986, and continuing with the remedial actions selected in 1991 and 1992, EPA committed substantial resources to protect human health in the Box. 125 However, concerns about human health eventually arose for areas outside the Box. In 1996, the Idaho Department of Health and Welfare and local health district conducted a study of blood-lead levels in the population of the Basin beyond the Box. 126 The results indicated significant numbers of children with elevated blood-lead levels in the Basin. 127 For children under six years of age,

COEUR D'ALENE BASIN ROD, supra note 1, at 2-2. Proceeds from this settlement provided the foundation for removal actions conducted by the Silver Valley Natural Resource Trustees throughout the 1990s. See id. tbl. 2.3-2 (identifying removal actions conducted in the Basin by parties including SVNRTs).

Coeur d'Alene Tribe v. ASARCO Inc., Civ. No. CV91-0342-N-EJL (civil complaint against mining companies and Union Pacific Railroad Company). The Tribe's lawsuit was tolled for a number of years, and later consolidated with the litigation filed in 1996 by the United States.

¹²² USA Complaint, supra note 118 at 12.

¹²³ See, e.g., CBRP FRAMEWORK, supra at note 72, at 19 ("similar data requirements" between Coeur d'Alene Basin Restoration Project and the NRDA process suggested value of sharing data where possible).

¹²⁴ Randy Smith Declaration, supra note 69.

See, e.g., supra note 68 and accompanying text (\$212 million by 2001).

¹²⁶ IDAHO DEP'T. OF HEALTH & WELFARE, DIV. OF HEALTH, COEUR D'ALENE RIVER BASIN ENVIRONMENTAL HEALTH EXPOSURE ASSESSMENT, INTERIM REPORT 1 (Mar. 14, 1997) [hereinafter, IDHW Report]. Of 1,513 households identified in the study area, 843 households participated in the study, including a total of 1,818 individuals. A total of 765 blood samples and 752 urine samples were collected, along with 825 soil samples and 798 floor mat dust samples. Id. at 2.

¹²⁷ Id. at 3. According to guidelines of the Centers for Disease Control (CDC), blood-lead levels are currently considered elevated at or above 10 µg/dl. Recent literature, however, suggests the possibility of subtle effects even below this level. COEUR D'ALENE BASIN ROD, supra note 1, at 7-6.

the percentage in the Basin with elevated blood-lead levels appeared almost the same as that within the Box. 128

The results of this study raised public concerns¹²⁹ and convinced EPA of the need to respond. The immediate or long-term response to human health risks is not a matter for the NRDA program, but is a fundamental purpose of Superfund. Using its Superfund authority, EPA initiated a program of time-critical removal actions to protect human health in the Coeur d'Alene Basin, cleaning up seven residential yards in the fall of 1997. EPA eventually continued this removal program over the next four years, so that by 2001, six recreational areas, seven schools or daycare facilities, and 91 residential yards in the Basin beyond the Box had been cleaned up. 132

Despite these accomplishments of the removal program, EPA concluded that full protection of human health in the Basin would require Superfund remedial authority, entailing need for a Remedial Investigation/Feasibility Study. This conclusion came only after careful consideration of a wide range of factors. Any removal action carried out by EPA and others could make localized improvements, but it remained a limited and piecemeal approach to Basin contamination. The TMDL program could quantify the need for reducing pollutants into surface waters, but offered no assurances for reaching its goals. The NRDA program could comprehensively determine the injuries to natural resources and the actions needed to restore them, but provided no protection for human health. In short, Superfund remedial authority could transcend the limitations of the other environmental programs in

¹²⁸ In children under six years of age, the Basin study found elevated blood-lead levels in 14.9%. IDHW Report, *supra* note 126, at 3. In 1997, the percentage of two-year-old children in the Box with elevated blood-lead levels was 15.0%. For one- and three-year-olds, it was 16.7%. For four-year-olds, it was 10.0%. U.S. EPA REGION 10, BUNKER HILL POPULATED AREAS OPERABLE UNIT, FIRST FIVE-YEAR REVIEW REPORT 15 (Sept. 2000).

¹²⁹ See, e.g., Susan Drumheller, Lead in Kids Outside Silver Valley, IDAHO SPOKESMAN-REVIEW, Mar. 20, 1997, at A1.

¹⁵⁰ Letter from MJ Nearman, EPA Region 10 Environmental Engineer, to Mr. Richard H. Schultz, Idaho Department of Health and Welfare (July 28, 1997) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (discussing EPA proposal to conduct removal actions at households with children between ages 0 to 9 years and yard soils with lead concentrations above 1000 parts per million).

¹⁵¹ See 42 U.S.C. § 9604(a)(1) (2002) ("The President shall give primary attention to those releases which the President deems may present a public health threat"). The remedial authority conferred by the statute upon the President has been delegated principally to the EPA Administrator. Exec. Order No. 12,580, 52 Fed. Reg. 2923 (Jan. 29, 1987).

¹³² COEUR D'ALENE BASIN ROD, supra note 1, at 2-5 & tbl. 2.3-1.

the Basin, offering the best chance for protecting human health and the environment from exposure to mining pollution.

III. OUT OF THE BOX, INTO THE FIRE

EPA's announcement of the RI/FS for the Coeur d'Alene Basin in February 1998 sparked a firestorm of controversy, with heated headlines, political inquiries, even legislative proposals. EPA may have believed that the fire would burn out in time, but it did not. Instead, the flames only grew as EPA struggled forward with the technical work of the RI/FS. This Part will discuss the initial public and political reactions to EPA's RI/FS for the Coeur d'Alene Basin, recent Superfund amendments to mitigate liability fears and promote economic redevelopment, and informal avenues provided for review and comment on EPA actions in the Basin.

A. Public Reactions

After engaging in discussions with state officials, natural resource trustees, mining companies, and others, ¹³⁸ EPA publicly announced the initiation of an RI/FS for the Coeur d'Alene Basin on February 25, 1998. ¹³⁴ The next day, news of the decision dominated the front pages of area newspapers. ¹³⁵ The mining companies sounded surprised. ¹³⁶ Idaho's senate delegation indicated dismay. ¹³⁷ County commissioners reacted with suspicion. ¹³⁸ The mayor of Coeur d'Alene quickly emerged as a leader of the local opposition, railing against "the stigma of a Superfund site" ¹³⁹ and expressing outrage

¹⁸³ See Randy Smith Declaration, supra note 69, at 3-4.

¹⁵⁴ Press Release, EPA Region 10 (Feb. 25, 1998).

Susan Drumheller, EPA to Investigate Entire CdA Basin, IDAHO SPOKESMAN-REVIEW, Feb. 26, 1998, at A1; Mike McLean, Superfund Site Expands, COEUR D'ALENE PRESS, Feb. 26, 1998 at A1.

A1.

136 Drumheller, supra note 135 (reporting that "EPA has been talking with the state, mining companies and others for months about stepping up its involvement in basin cleanup, but mining interests still expressed shock at the news").

¹³⁷ Id. (Senator Larry Craig objecting to the need for "more study"); State Officials Press EPA, COEUR D'ALENE PRESS, Mar. 6, 1998 at A1 (Senator Dirk Kempthorne urging the "need to bring people together to solve these problems rather than divide them with litigation").

¹⁵⁸ Mike McLean, Superopposition, COEUR D'ALENE PRESS, Feb. 27, 1998 at A3 (Commissioner Dick Panabaker suggesting that EPA "probably won't pay any attention" to solicited input).

Drumheller, supra note 135 (Coeur d'Alene Mayor Steve Judy was quoted, "Lake Coeur d'Alene is not a Love Canal."); see also McLean, supra note 138 (Mayor Judy: "We can accomplish cleanup quicker—without endless studies and we can do it without a federal bureaucratic process"); Ken Olsen, Mayor Opposes EPA Pollution Study, IDAHO SPOKESMAN-REVIEW, Mar. 4, 1998 at A1.

that the local community had been left out of EPA's decision on the RI/FS. 140

To allay fears, the EPA Regional Administrator met directly with the Governor of Idaho. Unfortunately, accounts of the meeting appeared confused: the press trumpeted that EPA had "backed away" from "expand[ing] the Superfund 'box'," while noting that EPA would continue with the RI/FS for the Basin. 142 After a brief respite, however, controversy erupted again with reports that the RI/FS for the Basin was indeed continuing, with sampling planned along beaches of Coeur d'Alene Lake and the Spokane River. 143 From the confused accounts in the local press, the precise concerns with such sampling were not apparent, but seemed to arise from a misapplied link to NPL listing. 144 Under Superfund regulations, the NPL listing process and RI/FS process follow separate administrative tracks, 145 and EPA labored to decouple the popular connection between the two.146 EPA's Regional Administrator issued an open letter to members of the Coeur d'Alene Basin community, attempting to set the record straight that the RI/FS did not in effect designate the entire Coeur d'Alene Basin as a new Superfund site.¹⁴⁷ Unfortunately again, the letter

¹⁴⁰ State Officials Press EPA, COEUR D'ALENE PRESS, Mar. 6, 1998 at A1 (Mayor Judy "appalled that the affected community has been excluded from the decision process"). EPA's Regional Administrator soon agreed that "we could have done a better job working with community leaders." Dan Gallagher, EPA Official Promises Batt Agency Will Limit North Idaho Cleanup, IDAHO STATESMAN, Mar. 12, 1998 at 5B.

Mike McLean, EPA Backs Off Expansion, COEUR D'ALENE PRESS, Mar. 12, 1998 at A1.

¹⁶² Mike McLean, EPA-State Plan a First, COEUR D'ALENE PRESS, Mar. 13, 1998, at A1 ("the agency is employing Superfund authority to continue a Remedial Investigation Feasibility Study to look for contamination outside of the box and throughout the Coeur d'Alene basin").

¹⁴⁵ Charles Fernandes, EPA Study Proceeds, COEUR D'ALENE PRESS, Apr. 24, 1998, at A1.

See, e.g., McLean, supra note 135 (reporting EPA "extending Superfund status throughout the 1,500 square-mile Coeur d'Alene River Basin" and identifying the RI/FS as a "precursor to the Superfund designation").

¹⁴⁵ Inclusion of new releases on the NPL typically follows a rulemaking procedure including published notice in the *Federal Register* and an opportunity for public comments. *See* 40 C.F.R. § 300.425(d) (2002). The RI/FS process does not follow a rulemaking procedure or involve *Federal Register* notice, although it does similarly require an opportunity for public comments. *See generally* 40 C.F.R. § 300.430 (2002).

¹⁴⁶ Fernandes, supra note 143 (the present author explaining that EPA's authority to conduct an RI/FS "is not limited to Superfund sites. If there are releases into the environment, we have the authority to investigate.").

¹⁶⁷ Letter from Chuck Clarke, Regional Administrator, U.S. EPA Region 10, "To the Citizens of the Coeur d'Alene Basin" (May 5, 1998) ("when Bunker Hill was declared a Superfund site in 1983, EPA made clear that the 'site' would include areas both upstream and downstream that are contaminated with mining wastes") (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

served only to fuel more controversy.¹⁴⁸ Of course, a few headlines did admit that opposition to EPA's work in the Basin was not unanimous, particularly—and prophetically—across the state line in Washington.¹⁴⁹

B. Political Responses

Just a few days after the local headlines erupted, letters from elected officials began to arrive at the EPA regional office in Seattle and at EPA headquarters in Washington, D.C. In response to letters from the two Idaho senators, EPA plainly clarified that performance of an RI/FS "does not make the entire Coeur d'Alene River Basin a Superfund site." In response to questions from former Representative Helen Chenoweth, EPA provided detailed responses. As with the newspaper headlines, not all of the letters to EPA opposed the Agency's efforts in the Basin. In particular,

¹⁴⁸ See Keith Erickson, Superfund Rift Widens, COEUR D'ALENE PRESS, May 7, 1998, at A1.

¹⁴⁹ See Laura Shireman, Not All River Residents Opposed to EPA Study, IDAHO SPOKESMAN-REVIEW, June 2, 1998, at A1; Ken Olsen, Washington Welcomes Superfund Probe, IDAHO SPOKESMAN-REVIEW, June 10, 1998, at B1.

¹⁵⁰ Letter from Dirk Kempthorne, United States Senator, to The Honorable Carol Browner, Administrator, EPA (Mar. 2, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington); letter from Larry E. Craig, United Sates [sic] Senator, to Chuck Clarke, Regional Administrator and Carol Browner, Administrator, U.S. Environmental Protection Agency (Mar. 9, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

Letter from Carol M. Browner, U.S. Environmental Protection Agency, to Honorable Dirk Kempthrone [sic] (Mar. 16, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington). See also letter from Chuck Clarke, Regional Administrator, to Honorable Larry Craig, United States Senate (Mar. 27, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

Letter from Helen Chenoweth, Member of Congress, to Carol M. Browner, Administrator, U.S. Environmental Protection Agency 2 (May 21, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington). Among other detailed queries, the letter asked whether and how often "laboratory spike samples" will be used to insure laboratory accuracy and "How, precisely, is chain of custody being preserved?"

¹⁵³ Letter from Chuck Clarke, Regional Administrator, to Honorable Helen Chenoweth, United States House of Representatives (June 19, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (providing attachment with detailed answers to interrogatories).

¹⁵⁴ See, e.g., letter from Michelle Nanni, Inland Empire Public Lands Council, to The Honorable Dirk Kempthorne, United States Senate (Mar. 9, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (expressing "support for the recent EPA decision to initiate a comprehensive assessment and cleanup of the heavy metals mining pollution in the Coeur d'Alene basin"); letter from Mary Lou Reed to Ms. Carol Browner, Administrator, Environmental Protection Agency (Mar. 9, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) ("Thank God for EPA!"); letter from Richard A. Shaffer, Best Western Wallace Inn, to Mr. Chuck Clarke, Regional Director, Environmental Protection Agency (Mar. 18, 1998) (on file with EPA Region 10 Superfund

Senator Patty Murray from the State of Washington wrote to "applaud" EPA's decision to undertake the RI/FS for the Basin, noting that "Many of my constituents have asked me to help ensure we have a voice in ensuring the Spokane river is restored. . . ."¹⁵⁵

Beyond the letter-writing campaign, the political responses to EPA's activities in the Coeur d'Alene Basin also included legislative proposals. Within a month of EPA's announcement of the RI/FS for the Basin, Section 705 was attached to the Superfund Cleanup Acceleration Act of 1998, the principal Superfund reauthorization bill moving through the Senate. 156 Essentially, Section 705 would have empowered the Idaho Governor to make decisions concerning remedy and liability for mining contamination within or from the Coeur d'Alene Basin. On the remedy side, Section 705 would charge a Coeur d'Alene Basin Commission to develop a plan to "restore, manage and enhance the natural recovery of the Coeur d'Alene basin . . . in a cost-effective manner. . . . "157 On the liability side, after submission of the plan to the Idaho Governor, the Governor had two years to enter into "enforceable agreements" requiring contribution of a "fair share" of costs for the plan. 158 Persons entering such "enforceable agreements" would not be liable under CERCLA, RCRA, or the Clean Water Act for contamination from any past mining activity. 159

C. Superfund Program Administration

One need not speculate on the full potential impact of Section 705 because the Superfund Cleanup Acceleration Act of 1998 never made it into law. However, the premises underlying this

Records Center, Seattle, Washington) (recognizing business potential of EPA activities in the Silver Valley).

¹⁵⁵ Letter from Patty Murray, United States Senator, to The Honorable Larry Craig and The Honorable Dirk Kempthorne (Mar. 12, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

¹⁵⁶ Superfund Cleanup Acceleration Act of 1998, S. REP. NO. 105-192, at § 705 (1998). See Susan Drumheller, Basin Bill Revived to Give the State Cleanup Control, IDAHO SPOKESMAN-REVIEW, Mar. 27, 1998, at A1; Superfund Amendment Ok'd, COEUR D'ALENE PRESS, Mar. 27, 1998, at A1.

¹⁵⁷ Superfund Cleanup Acceleration Act of 1998, supra note 156, at § 705(b)(1).

¹⁵⁸ Id. at § 705(c)(2)(a)(i).

 $^{^{159}}$ Id. at § 705(c)(2)(c)(i) ("A person that enters into an enforceable agreement shall not be subject to any Basin Action"); id. at § 705(a)(1) (definition of "Basin Action"). The liability release would create specific exceptions for enforcing permits issued under RCRA or the Clean Water Act and for enforcing the terms of an existing consent decree.

¹⁶⁰ Commenting on the 1997 version of the legislation, one regional environmental group noted that "Washington's right to seek justice in the courts would be suspended by Craig's

legislation illustrated some of the common concerns about Superfund and misconceptions about the way EPA administers the Superfund program. On the national level, the Superfund program has evolved through development of EPA policies and administrative reforms. On the regional level, the Superfund program has responded to the concerns of specific sites including the Coeur d'Alene Basin, as discussed in this section.

One of the concerns with Superfund activity in the Coeur d'Alene Basin appeared to be the "gridlock" associated with litigation. For the purpose of avoiding gridlock associated with litigation, it might be hard to hypothesize a better example than the story of the Coeur d'Alene Basin. The epitome of Superfund litigation may be the lawsuit filed by the United States and the Coeur d'Alene Tribe seeking response costs and natural resource damages for mining pollution in the Coeur d'Alene Basin. Beginning in 1996, the litigation proceeded through lengthy and voluminous discovery, motions practice, interlocutory appeal, and eventually a full trial stretching over six months in 2001. Even so, this massive litigation did not delay cleanup. Throughout the years of litigation, remedial work continued within the Box as a vigorous removal program proceeded in the Basin, addressing areas

bill." Press Release, Inland Empire Public Lands Council, Craig Bill Pollutes Washington State (May 21, 1997). Commenting specifically on Section 705 of S.8, Senators Baucus and Lautenberg observed that "the provision allows the Governor of Idaho to determine the rights of other parties who have important interests, under Federal law, concerning the Basin. Federal trustees, EPA, the Coeur d'Alene Tribe, and the State of Washington all have interests in the cleanup and restoration of the Basin." S. REP. NO. 105-192 at 195 (1998).

¹⁶¹ In 1993, EPA announced the first of three rounds of "Superfund Reforms" to improve the fairness and efficiency of the Superfund program within the existing statutory framework. From over three dozen "reform" initiatives would come new guidance on "orphan share" settlements (June 1996); creation of a National Remedy Review Board (January 1996); and establishment of a Superfund Ombudsman in every Region. See U.S. EPA Superfund Reforms website at www.epa.gov/superfund/programs/reforms.

Supporting Section 705 of the Superfund Cleanup Acceleration Act of 1998, then-Senator (now Governor) Kempthorne stated before the Senate Environment and Public Works Committee, "It's vital that we get away from the litigation and gridlock that have plagued this process far too long." Susan Drumheller, Basin Bill Revived to Give the State Cleanup Control, Spokesman-Review, Mar. 27, 1998, at A1.

¹⁶⁵ See supra notes 118, 121 and accompanying text (1996 U.S.A. complaint; 1991 complaint of Tribe).

¹⁶⁴ See supra note 87 and accompanying text (U.S. appeal of NPL facility issue).

By some accounts, the Bunker Hill/Coeur d'Alene Basin litigation was the largest Superfund case ever to go to trial. Seeking perhaps over a billion dollars in response costs and natural resource damages, the U.S. Department of Justice reportedly spent nearly \$21 million litigating the case, including travel, expert witnesses, and the time of dozens of DOJ attorneys and paralegals. See Karen Dorn Steele, \$21 Million and Rising, IDAHO SPOKESMAN-REVIEW, Dec. 15, 2002, at A1.

including residential communities¹⁶⁶ and 72 miles of railroad right-of-way.¹⁶⁷ In cooperation with its partners, EPA also completed the RI/FS process with celerity, even incurring complaints that it was moving too fast.¹⁶⁸

Another concern expressed with Superfund activity in the Coeur d'Alene Basin was the potential economic impact on the local mining industry. There is no question about the value of ensuring a viable local economy. While unable to protect individual companies or industries from market forces, Superfund settlements can and do resolve Superfund liability based on an individual party's ability to pay. Consistent with "ability-to-pay" guidance, and recent Superfund amendments, EPA analysts determine an amount that a party can pay over time while presently avoiding undue hardship or jeopardy to the business. Where a party's present resources are limited, government negotiators can also craft creative terms for settlements. For example, two of the

Poverty and lead poisoning interact in several ways. Children may have lowered nutritional status and live in poorer quality housing.... Home and child hygiene and behavioral risk co-factors can lead to increased ingestion rates of soils and dusts. Yard soils and house dust can be more contaminated due to deteriorating lead paint, proximity to industrial sources, and lesser quality maintenance of the home, yard, and local infrastructure.... As a result, poor children ingest more soil and dust that has a higher lead content.

¹⁶⁶ See supra note 132 and accompanying text (residential removal program initiated in 1997).

¹⁶⁷ See supra note 51 (railroad right-of-way removal).

Requesting extension of the comment period for the draft Feasibility Study, one local community organization wrote, "In order to educate themselves on the subject, and then to offer substantive comment, time is necessary. They do not get paid to create these documents nor to analyze them. They must fit their reading around their jobs, families and other community commitments. The EPA is soliciting public input into these documents. The EPA MUST allow time." Letter from Kathy Zanetti, Facilitator, Shoshone Natural Resources Coalition, to Ms. Mary Jane Nearman, EPA Region 10 (Feb. 1, 2001) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

¹⁶⁹ Promoting legislation introduced in 1997, Senator Craig (R-Idaho) wrote, "My bill doesn't let mining companies in the Silver Valley off the hook. But it's hard to see how Idaho would benefit by driving those companies into bankruptcy." Larry Craig, Editorial, Seeking Cleanup, Not Retribution, IDAHO FALLS POST REGISTER, Feb. 19, 1998.

¹⁷⁰ As the Human Health Risk Assessment for the Coeur d'Alene Basin explained:

COEUR D'ALENE HUMAN HEALTH RISK ASSESSMENT, supra note 29, at 8-9.

¹⁷¹ U.S. EPA OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE, GENERAL POLICY ON SUPERFUND ABILITY TO PAY DETERMINATIONS (Sept. 30, 1997).

¹⁷² See infra notes 210-13 and accompanying text (Inability to Pay consideration of 2002 amendments).

¹⁷³ This is again consistent with recent amendments to CERCLA. *See infra* note 213 and accompanying text, and 42 U.S.C. § 9622(g)(7)(D) (2002) ("Alternative payment methods").

settlements concerning Coeur d'Alene required mining companies to make future payments if depressed metals prices later rise.¹⁷⁴ One of these settlements, approved by EPA and the federal trustees, also provides for transferring a 74-acre parcel of property for potential use as a mine waste repository.¹⁷⁵ The other settlement, joined by the Coeur d'Alene Tribe as natural resource trustee, requires provision of "warrants" for purchase of common stock and conveyance of certain properties to preserve ecological value.¹⁷⁶

A third fear with Superfund activity in the Coeur d'Alene Basin seemed to be potential impacts on local recreation and tourism, particularly in the area of Coeur d'Alene Lake.¹⁷⁷ Hearing similar concerns from the local community, EPA regional staff responded rapidly in the summer of 1998 with a program of sampling along beaches of Coeur d'Alene Lake and the Spokane River to determine whether any mining wastes there posed any risks to human health. Expedited analysis of soil and water samples confirmed the common belief that such areas did not contain mine wastes at levels of concern to human health.¹⁷⁸ Publicizing these results, Region 10 provided the public with timely assurance that recreation in these areas remained safe from threats of

¹⁷⁴ Partial Consent Decree with Coeur d'Alene Mines Corporation and Callahan Mining Corporation, No. 96-0122-N-EJL (entered May 14, 2001) [hereinafter Coeur Settlement] (requirements including conduct of removal action, payment of \$3,871,924, plus possible payments up to \$3,000,000 over 20 years if the price of silver and gold rise above specified levels); Partial Consent Decree with Sunshine Defendants, No. 96-0122-N-EJL (entered Jan. 22, 2001) [hereinafter Sunshine Settlement] (requirements including conduct of removal action and possible payments triggered by specified silver prices).

¹⁷⁵ Coeur Settlement, supra note 174, at ¶ 26, app.3.

Sunshine Settlement, supra note 174, at ¶¶ 12-13, 21-23.

¹⁷⁷ See, e.g., 144 CONG. REC. S8445-8446 daily ed. (July 17, 1998) (comments of Senator Craig concerning "beautiful Lake Coeur d'Alene and the city of Coeur d'Alene, one of the No. 1 destination sites in the Nation for tourism and recreation").

¹⁷⁸ EPA's analysis compared sampling data on seven metals, including arsenic and lead, to concentration levels protective of children. Based on this analysis, 22 out of the 24 areas sampled showed no metals concentrations above levels of concern. Only two areas were retained for further study. EPA Region 10 Briefing Sheet: "Coeur d'Alene Lake Expedited Human Health Sampling Results" (Nov. 30, 1998).

contamination, ¹⁷⁹ and the feared impacts of Superfund on local tourism did not appear to materialize. ¹⁸⁰

D. Superfund Amendments

While Superfund reauthorization bills failed throughout the 1990s, major amendments to Superfund did finally pass in 2002, bringing the most substantial changes to the statute since 1986. In 1986, Congress passed the Superfund Amendments and Reauthorization Act. In 1996, Congress enacted the Lender Liability Amendments. Then came the Small Business Liability Relief and Brownfields Revitalization Act of 2002. This section will outline relevant provisions of these three major Superfund amendments, whose collective thrust has been to limit liabilities and promote economic redevelopment. Through these amendments, fears of Superfund liability in places like the Coeur d'Alene Basin, whether or not based on any actual assertion of liability, can be dispelled to encourage property transactions and business opportunities.

1. SARA

Congress passed the Superfund Amendments and Reauthorization Act (SARA) in 1986 with a general purpose described as to "confirm, expand, and refine the cleanup aims" of

¹⁷⁹ In addition to issuing the "Briefing Sheet," EPA publicized the results through a press release and a public meeting. Press Release, EPA, No Risk to Human Health Detected at 22 Coeur d'Alene Lake Area Beaches (Nov. 30, 1998). EPA's publicity efforts evidently succeeded in spreading the word. See, e.g., Ken Olsen, EPA Finds Lake CdA Beaches Safe, IDAHO SPOKESMAN-REVIEW, Dec. 1, 1998, at A1.

¹⁸⁰ Consistent experiences have been reported around the country. See John Hughes, Superfund Stigma Eroding – And Tourists Still Visit, Cities Find, SEATTLE TIMES, Nov. 28, 1999, at A10 (tourism rising in towns with Superfund sites in Montana, Colorado, and Virginia).

¹⁸¹ Superfund Amendments and Reauthorization Act (SARA), Pub. L. No. 99-499, 100 Stat. 1613 (1986) (codified at scattered sections of 42 U.S.C. § 9601 et seq. (2002)).

¹⁸⁷ Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1996 ("Lender Liability Amendments"), Pub. L. No. 104-208, Title IV, Subtitle E § 2501, 110 Stat. 3009 (1996) (codified at 42 U.S.C. § 9601(20)(E)-(F) (2002)).

¹⁸⁵ Small Business Liability Relief and Brownfields Revitalization Act ("Brownfields Revitalization Act"), Pub. L. No. 107-118, 115 Stat. 2356 (Jan. 11, 2002) (codified at scattered sections of 42 U.S.C. §§ 9601 et seq. (2002)).

¹⁸⁴ In addition to these three major amendments, the 1992 Community Environmental Response Facilitation Act (CERFA) amended CERCLA Section 120 primarily to encourage reuse of closing military bases through transfer of parcels determined to be uncontaminated or subject to all necessary response actions. Pub. L. No. 102-426, 106 Stat. 2175 (1992).

the original Act. 185 SARA also initiated the series of Superfund amendments to mitigate liability for certain constituencies, including state and local governments, ¹⁸⁶ cleanup contractors, ¹⁸⁷ "de minimis" parties, 188 and "innocent landowners." 189 "De minimis" parties are those that either (1) contributed a "minimal" amount of hazardous substances, posing minimal toxic effects at a site or (2) own contaminated property but did not conduct or permit the contamination or know or have reason to know of it at the time of purchase.¹⁹⁰ For de minimis parties, SARA encouraged entry of "expedited settlements" to protect them from further liability including from contribution suits by major potentially responsible parties (PRPs). 191 In the Coeur d'Alene Basin, for example, de minimis settlements might allow protection for minor mining companies against contributions claims by major mining companies, if such "Mom & Pops" could establish they contributed little to the millions of tons of tailings released in the Basin.

"Innocent landowners" are parties otherwise liable under CERCLA who can establish that the release of hazardous substances resulted "solely" by "an act or omission of a third party other than an employee or agent of the defendant, or than one whose act or omission occurs in connection with a contractual relationship" with the defendant. 192 SARA defined "contractual relationship" to include deeds unless the contaminated property was acquired after disposal and the defendant establishes one of the following conditions: (1) the defendant at the time of property acquisition

¹⁸⁵ For a normative review of SARA, see RODGERS, supra note 37, at § 8.2 ("SARA is simultaneously unusual, provocative, and disappointing"). Among the 168 pages of legislation comprising SARA, Congress authorized citizen suits (CERCLA § 310); provided for federal liens on properties subject to Fund expenditures (§ 107(f)); required revisions to the Hazard Ranking System (§ 105(b)); added the special statute of limitations for NRD claims with respect to a facility on the NPL (§ 113(g)(1)); and provided that Superfund would apply fully to federal facilities (§ 120)).

^{186 42} U.S.C. § 9601 (20) (D) (2002) ("owner or operator" for purposes of CERCLA liability does not include a "unit of State or local government" acquiring a facility "due to bankruptcy, foreclosure, tax delinquency, abandonment, or similar means").

^{187 § 9619.} 188 § 9622(g). 189 § 9601(35).

^{190 § 9622(}g)(1).

^{191 § 9622(}g) (5) ("Expedited agreement"); § 9622(g) (3) ("Effect of agreement").

^{§ 9607(}d)(3) (emphasis added). To qualify for this affirmative defense, a defendant must also establish by a preponderance of the evidence that he "exercised due care with respect to the hazardous substance concerned" and "took precautions against foreseeable acts or omissions of any such third party. ... " Id.

did not know or have reason to know¹⁹³ of the contamination; (2) the defendant is a government entity acquiring the contaminated property by "involuntary transfer" or exercise of eminent domain; or (3) the defendant acquired the property through inheritance or bequest.¹⁹⁴

2. Lender Liability Amendments

In 1996, Congress amended CERCLA to address concerns that banks and other credit companies holding title to collateral might be held liable under CERCLA as "owners or operators" of contaminated properties. 195 Fear of such liability could discourage approval of home mortgages or business loans, or could discourage properties foreclosure contaminated on abandonment.¹⁹⁶ To remedy this situation, the Lender Liability Amendments explicitly excluded from the owner/operator without participating in definition lender that. management" of a secured property, "holds indicia of ownership primarily to protect [its] security interests." Moreover, the 1996 amendments specifically excluded from the owner/operator

The 2002 Brownfields Revitalization Act, *supra* note 183, substantially expanded the former CERCLA definition of "reason to know." *See* 42 U.S.C. § 9601(35)(B) (2002). The new definition requires that the defendant "took all reasonable steps" to stop continuing releases and prevent future releases. It further calls for EPA to promulgate rules establishing "standards and practices" for carrying out "all appropriate inquiries" into previous ownership and uses of a property. For purposes of residential properties, such standards and practices will be satisfied by a site inspection and title search. § 9601(35)(B)(ii) – (v).

¹⁹⁸ See, e.g., United States v. Maryland Bank & Trust Co., 632 F.Supp. 573 (D. Md. 1986) (lender taking property at foreclosure liable as CERCLA owner); United States v. Mirable, 23 Env't Rep. Cas. (BNA) 1511 (E.D. Pa. 1985) (lender exercising managerial control over secured property may be liable under CERCLA). Much of such concern for lender liability derived from the case of United States v. Fleet Factors Corp., 901 F.2d 1550 (11th Cir. 1990) (CERCLA liability may apply to secured creditor where its activities could have influenced the facility's waste decisions). See generally John W. Ames et al., How Deep in Toxic Waste Are Secured Lenders Under CERCLA: A Review of the Last Five Years, 1995 AM. BANKR. INST. J. 8 (Nov. 1995) (noting the "widespread effect" of Fleet Factors on the credit industry).

¹⁹⁶ See generally Paul Stanton Kibel, The Urban Nexus: Open Space, Brownfields, and Justice, 25 B.C. ENVIL. AFF. L. REV. 589, 598-99 (1998) ("One of the most significant factors" in the process of urban abandonment, decay, and disinvestment, "is the liability associated with properties that are perceived to be, or are in fact, contaminated with hazardous materials").

¹⁹⁷ 42 U.S.C. § 9601(20)(E)(i) (2002) ("Exclusion of lenders not participants in management").

definition a lender who forecloses on a secured property, if such lender did not "participate in management" prior to foreclosure. 198

3. Small Business Liability Relief and Brownfields Revitalization Act

In 2002, after years of wrangling over Superfund reauthorization, ¹⁹⁰ Congress enacted the Small Business Liability Relief and Brownfields Revitalization Act ("Brownfields Revitalization Act"). Concerning sites not listed or proposed for the NPL, the Brownfields Revitalization Act created a new program for funding redevelopment of "brownfield sites," ²⁰⁰ limited federal responses at "eligible response sites" managed by state cleanup programs, ²⁰¹ and established conditions for deferral of sites from the NPL. ²⁰² For NPL sites such as the Bunker Hill NPL facility in

¹⁹⁸ § 9601(20)(E)(ii). The 1996 amendments defined "participate in management" to exclude "merely having capacity to influence" operations on the secured property, and authorizing lenders to provide for certain response actions. § 9601(20)(F).

¹⁹⁹ Bills for reauthorizing Superfund to promote brownfields redevelopment floated for at least eight years before the 2002 amendments. For a summary of early legislative proposals, see Julia A. Solo, *Urban Decay and the Role of Superfund: Legal Barriers to Redevelopment and Prospects for Change*, 43 BUFF. L. REV. 285, pt. V (1995).

²⁰⁰ See Brownfields Revitalization Act, supra note 183, at Title II, Subtitle A—Brownfields Revitalization Funding. The Brownfields Revitalization Act defines the term "brownfield site" to mean "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." 42 U.S.C. § 9601(39) (A) (2002). In addition to sites listed on or proposed for the NPL, the definition generally excludes sites subject to an administrative or judicial order or agreement. § 9601(39) (B).

Concern for the cleanup and reuse of brownfields sites has occupied EPA, states, and local governments for many years. See, e.g., Glen M. Vogel, An Examination of Two of New York State's Brownfields Remediation Initiatives: Title V of the 1996 Bond Act and the Voluntary Remediation Program, 17 PACE ENVTL. L. REV. 83 (1999); Faith R. Dylewski, Comment, Ohio's Brownfield Problem and Possible Solutions: What Is Required for a Successful Brownfield Initiative? 35 AKRON L. REV. 81 (2001); Kibel, supra note 196, at 611 (discussing brownfields initiatives in the San Francisco Bay Area). See generally U.S. EPA OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, BROWNFIELDS ECON. REDEVELOPMENT INITIATIVE (Oct. 2000). For a wealth of information on EPA's brownfields programs, including policies, regulations, and links to the Brownfields Revitalization Act legislation and history, see the EPA Brownfields website available at www.epa.gov/brownfields.

²⁰¹ Brownfields Revitalization Act, *supra* note 183, Title II, Subtitle C—State Response Programs. "Eligible response sites" for state programs are generally those meeting the definition of "brownfield sites." 42 U.S.C. § 9601(41) (2002). For an "eligible response site" where a person is conducting or has completed a response action in compliance with a qualified state response program, the federal government is barred from further administrative or judicial enforcement action, with exceptions including interstate migration of pollution and releases on federal properties. § 9628(b).

⁵⁰² § 9605(h). The 2002 amendments generally provide that final NPL listing for "eligible response sites" will be deferred if the President determines that (1) a state, or party under order or agreement with a state, is conducting a response action at the site "that will provide

the Coeur d'Alene Basin, the Brownfields Revitalization Act preserves the general liability scheme of Superfund while significantly clarifying and expanding a host of liability protections. The 2002 amendments codified a new category of PRPs as "de micromis" parties, formalized consideration of inability to pay, and extended liability protection to owners of "contiguous properties" and to "bona fide prospective purchasers." While a complete analysis of the 2002 amendments exceeds the scope of this Article, particular liability changes will be discussed briefly below.

- "De micromis" Parties. Codifying the concept of one of EPA's Superfund administrative reforms, 203 and with certain exceptions, 204 the Brownfields Revitalization Act established an exemption from CERCLA liability for parties contributing miniscule amounts of contamination to a facility.205 Such "de micromis" parties are defined as persons who can demonstrate that "the total amount of material containing hazardous substances" fell below 110 gallons of liquids or 200 pounds of solids, and all or part of the contamination occurred before April 1, 2001.206
- <u>Municipal Solid Waste.</u> With exceptions similar to those for de micromis parties, ²⁰⁷ the Brownfields Revitalization Act

long-term protection of human health and the environment" or (2) the state is "actively pursuing an agreement to perform" such response action. If a year after a deferred site is proposed for the NPL the President determines there is no "reasonable progress toward completing a response action" or an agreement to perform such response action has not been reached, the President may proceed with final NPL listing for the site. § 9605(h) (1) -

See EPA Superfund Reforms website, supra note 161, at Round 3-14: "Revised De Micromis Guidance." The revised EPA guidance identified de micromis contributions as 110 gallons of liquids (i.e., two 55-gallon drums) or 200 pounds of solids. For de micromis parties threatened with litigation, EPA could enter settlements, providing contribution protection, with no exchange of money. "Revised Guidance on CERCLA Settlements with De Micromis Waste Contributors," Memorandum from Jerry Clifford, Director, Office of Site Remediation Enforcement, and Bruce S. Gelber, Deputy Chief, DOJ Environmental Enforcement Section, to distribution list (June 3, 1996).

Among other exceptions, the liability exemption does not apply to situations where a person failed to comply with an information request or has impeded the performance of a response action with respect to the facility. 42 U.S.C. § 9607(o) (2002).

²⁰⁶ § 9607(o)(1).

Similar to the exceptions to the de micromis exemption, the municipal solid waste exemption does not apply to situations where a person failed to comply with an information request or has impeded the performance of a response action with respect to the facility. § 9607(p).

provided an exemption from CERCLA liability for contribution of municipal solid waste by residential owners, small businesses, and tax-exempt organizations. The amendments define "municipal solid waste" to mean waste material "generated by a household" or waste from a business entity that "is essentially the same as waste normally generated by a household." 209

- Inability to Pay. Consistent with pre-existing EPA guidance, ²¹⁰ the Brownfields Revitalization Act encourages expedited Superfund settlements with persons who demonstrate "an inability or limited ability to pay response costs." The President must "take into consideration the ability of the person to pay response costs and still maintain its basic business operations. . . ." If the President "determines that a person is unable to pay its total settlement amount at the time of settlement," then "alternative payment methods" shall be considered. ²¹³
- Contiguous Properties. The Brownfields Revitalization Act provides that owners of real property "contiguous to" properties from which hazardous substances may migrate "shall not be considered to be an owner or operator" for purposes of CERCLA liability. In order to qualify for this exemption from liability, owners of contiguous properties must demonstrate a long list of conditions, including that they "did not cause, contribute, or consent to the release,"

²⁰⁸ Id. Small businesses are defined as employing no more than 100 employees on average and meeting other statutory criteria. $\S 9607(p)(1)(B)$.

²⁰⁹ § 9607(p)(4). Examples of "municipal solid waste" provided by the 2002 amendments include "food and yard waste," "disposable diapers," "office supplies," and even "elementary or secondary school science laboratory waste." § 9607(p)(4)(B).

²¹⁰ See supra note 171 (ability-to-pay guidance).

^{*11 § 9622(}g)(7).

^{§ 9622(}g)(7)(B). To allow a determination of ability to pay, persons requesting settlements under this subsection must promptly provide "all relevant information." § 9622(g)(7)(C).

²¹⁵ § 9622(g)(7)(D). The President may, however, decline to offer settlement based on inability to pay where a person fails to comply with requests for access or information or impedes the performance of a response action. § 9622(g)(8)(B). The President's determination whether or not to offer such settlement shall not be subject to judicial review. § 9622(g)(11).

^{214 § 9607(}q).

take "reasonable steps" to stop any continuing release, provide "full cooperation, assistance, and access" needed to conduct response actions, and, like "innocent landowners," did not "know or have reason to know" that the property was contaminated at the time it was acquired.²¹⁵

Bona Fide Prospective Purchasers. In perhaps the most significant change to encourage economic redevelopment of contaminated properties, the Brownfields Revitalization Act creates a new liability exemption for "bona fide prospective purchasers. "216 Unlike "innocent landowners" and owners of contiguous properties, bona fide prospective purchasers do not need to demonstrate that they did not know or have reason to know of the contamination at the time of property acquisition.217 In order to qualify for this exemption, a bona fide prospective purchaser must satisfy a list of conditions²¹⁸ that include the following: the disposal on the property occurred before its acquisition; the prospective purchaser made all appropriate inquiry into previous ownership and uses prior to purchase; ²¹⁹ the purchaser takes "all reasonable steps" to stop continuing releases; the purchaser provides "full cooperation, assistance, and access" needed to perform response actions; the purchaser complies with any request for information; the purchaser complies with any land use restriction; and the person is not "affiliated" by family, contract, corporate relation, or reorganization with any other PRP for the site.

The legal impact of the Brownfields Revitalization Act on megasites such as the Coeur d'Alene Basin may be limited because many of the new provisions, including brownfields funding, state lead for "eligible response sites," and NPL deferral do not apply to sites already on the NPL. Moreover, the liability protections of SARA, the Lender Liability Amendments, and the Brownfields Revitalization Act may not see much actual application because, as

²¹⁵ § 9607(q)(1)(A).

²¹⁶ § 9607(r).

²¹⁷ See § 9607(q)(1)(C).

^{218 § 9601 (40) (}A) - (H).

²¹⁹ As with the "innocent landowner" defense, "all appropriate inquiry" for purposes of the bona fide prospective purchaser exemption, in the context of residential property, means only a facility inspection and title search. § 9601(40)(B)(iii).

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with the Coeur d'Alene Basin, EPA typically would not pursue liability cases against innocent landowners, de micromis parties, lenders, or others similarly situated. However, if more widely understood, the liability protections of the collective Superfund amendments could go far in assuring community members and business leaders that the economic impacts of Superfund need not be feared. For example, farmers in the lower Coeur d'Alene Basin whose lands have been polluted by upstream mining activities should understand the protections of the "innocent landowner" defense and new "contiguous properties" exemption. Mom & Pop mining outfits should understand the opportunities for settlements based on de minimis status. Before suggesting that CERCLA liability will lead to bankruptcy, bigger mining concerns (and their employees and political supporters) should understand the opportunity for settlements based on inability to pay. Local banks should understand the protections of the Lender Liability Amendments. Homeowners should understand that they can still And with the 2002 amendments, business sell their house. developers should understand the protection for bona fide prospective purchasers, providing protection from CERCLA liability even with knowledge of contamination on a property to be acquired.

EPA has made some efforts to help assuage concerns about Superfund by informing the public about CERCLA liability, its protections, and amendments. However, more could certainly be done. Superfund was obviously not well understood in the spring of 1998 when EPA's announcement of the RI/FS for the Coeur d'Alene Basin triggered the hailstorm of newspaper headlines, Congressional inquiries, and proposed legislation. Over the next few years, as the RI/FS progressed and misunderstandings proliferated, the tempest would only swell with waves of review and scrutiny.

E. Review of EPA Actions

Before reaching the Record of Decision in September 2002, EPA's Superfund efforts in the Coeur d'Alene Basin would become subject to a number of informal reviews. Such scrutiny would take

²²⁰ See, e.g., infra notes 270-271 and accompanying text (fact sheets, public remarks). This Article may also assist in that regard.

many forms,²²¹ including the National Superfund Ombudsman, the State of Idaho Consensus Process, the National Remedy Review Board, and the community involvement opportunities offered directly by EPA.

1. National Superfund Ombudsman

In May 2000, the Idaho Congressional delegation requested the EPA's National Superfund Ombudsman to investigate EPA's Superfund activity in the Coeur d'Alene Basin. The request was apparently prompted by fears of an "imminent" new NPL listing for the Basin. Legally, no new NPL listing for the Basin ever came near because such listing had not even been proposed in the *Federal Register*. Nor was any new NPL listing for the Basin needed after the Ninth Circuit's ruling in June 2000 preserved EPA's authority to address contaminated areas within the Basin under the original 1983 NPL listing for Bunker Hill. 224

Nevertheless, and without specific legal authority,²²⁵ the National Ombudsman held public hearings on the issue in Spokane,

Among the other forms of scrutiny, the U.S. General Accounting Office (GAO) conducted an audit of EPA's expenditures for remedial action within the Bunker Hill Box. In submitting the request to the GAO, the Idaho Congressional delegation complained of costs that "end up multiplying by three" before completion. Jeff Selle, GAO Audit Sought on Superfund, COEUR D'ALENE PRESS, April 24, 2000, at A1 (comments of Representative Helen Chenoweth-Hage). On the contrary, however, the GAO found that EPA's overall expenditures for remedial action within the Box fell within ten percent of estimates, and in some cases the costs for individual cleanup projects came in below estimates. U.S. GEN. ACCOUNTING OFFICE, EPA'S EXPENDITURES TO CLEAN UP THE BUNKER HILL SUPERFUND SITE (Mar. 28, 2001). In the same month, a separate study by the GAO concluded that EPA had improved its Superfund cost-estimating procedures nationally. U.S. GEN. ACCOUNTING OFFICE, EPA'S CONTRACT COST-ESTIMATING INITIATIVES SHOW PROMISE AND SHOULD BE MONITORED (Mar. 2, 2001).

²²² Jeff Selle, *EPA Ombudsman Probe Sought*, COEUR D'ALENE PRESS, May 17, 2000; see also letter from Senator Mike D. Crapo, Senator Larry E. Craig, Representative Helen Chenoweth-Hage, and Representative Mike Simpson to The Honorable Carol Browner, Administrator, Environmental Protection Agency (May 22, 2000) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (notice of request made to EPA National Ombudsman).

²²³ See supra note 145 (proposal for new sites on National Priorities List requires notice published in Federal Register, along with opportunity for public comment).

²²⁴ See supra note 87 and accompanying text (NPL facility litigation).

Federal law created the National Superfund Ombudsman in 1984, with its authority expiring four years later. Hazardous and Solid Waste Amendments of 1984, Pub. L. No. 98-616, § 103, 98 Stat. 3221, 3225 (1984). While EPA continued to maintain the Superfund Ombudsman administratively, the function was transferred in 2002 from the Superfund program office to the EPA Office of the Inspector General. Press Release, EPA, Whitman Announces Reorganization of EPA Ombudsman Office (Nov. 27, 2001). The move prompted legislative proposals to establish a National Ombudsman with unprecedented legal authorities, including powers to issue subpoenas and enter facilities. The Ombudsman

Washington, and Coeur d'Alene, Idaho. 226 Through testimony presented by community members, EPA heard voluminous commentary for and against EPA's expanded Superfund work in the Coeur d'Alene Basin, 227 with commenters in Idaho generally opposing and commenters in Washington generally supporting. 228 Following the public hearings, the National Ombudsman issued interrogatories to EPA. In response to these interrogatories, EPA once again unequivocally denied a popular misconception that it considered the Bunker Hill NPL facility to cover the entire 1,500 square miles of the Coeur d'Alene Basin. 229 Unfortunately, in "Working Findings" issued months later, the **National** Ombudsman ignored EPA's oral and written responses, and continued to attribute to EPA a position that the Bunker Hill NPL facility constitutes "1500 square miles." 230 Value from this process thus far came only from the public hearings, providing EPA with

Reauthorization Act of 2002, S. 606, 107th Cong. (2001). Senator Mike Crapo, "Introduction of The Ombudsman Reauthorization Act of 2001," (Mar. 23, 2001) (floor speech) available at http://www.senate.gov/~crapo/.

²²⁶ By any measure, the public hearing held in Coeur d'Alene, on August, 19, 2000, was epic, running nearly 14 hours straight. EPA National Ombudsman Hearing Proceedings, Saturday, August 19, 2000 (transcript) [hereinafter Coeur d'Alene Hearing Tr.]. The meeting began at 9:00 a.m. and the court reporter recorded the conclusion at 10:45 p.m. *Id.* at 550.

**Mong the more eloquent commenters, compare id. at 359-60 (comments of Mary Lou Reed) (expressing hope that Ombudsman will encourage everyone "to work together toward the essential goal, the restoration of the Coeur d'Alene Basin"), with id. at 160 (comments of Jim Vergobbi) ("Yes, we need to hold people accountable, but when is enough enough? When is clean clean? ... There is a balance, and we ask that we, the proud people of Shoshone County, be given the opportunity to work with the State of Idaho and EPA, if needed, to move forward and end the very process by which we sit here today").

²²⁸ See Zaz Hollander, EPA Ripped at Superfund Hearing, IDAHO SPOKESMAN-REVIEW, Aug. 20, 2000, at A1 (account of Ombudsman hearing in Coeur d'Alene); Mike McLean, Business, Community Leaders Solidly Opposed to Expanded Listing, COEUR D'ALENE PRESS, Aug. 20, 2000, at A1 (same); Karen Dorn Steele, EPA Hears Supports for Expansion of Superfund, IDAHO SPOKESMAN-REVIEW, Nov. 15, 2000, at A1 (account of Ombudsman hearing in Spokane). The "tale of two cities" soon garnered national attention. See Nicholas K. Geranios, Washington, Idaho Feud Over Cleanup, SEATTLE TIMES, Dec. 10, 2000, at C7; Nicholas K. Geranios, Northwest States Clash on Control of Environmental Cleanup, L.A. TIMES, Dec. 17, 2000.

²²⁹ See Coeur d'Alene Hearing Tr., supra note 226, at 270 ("site is limited to those areas where hazardous substances have come to be located; and hazardous substances have not come to be located over every square inch of the 1,500 square miles"); Letter from Michael Gearheard, EPA Region 10 Environmental Cleanup Office, to Robert Martin, OSWER National Ombudsman 1-2 (Aug. 31, 2001) (response to interrogatory, providing NPL facility "includes only those areas where hazardous substances . . . have come to be located") (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

²⁵⁰ "Working Findings for Discussion and Comment," letter from Robert J. Martin, National Ombudsman, to Service List for National Ombudsman Investigation of the Bunker Hill Superfund Site "In the Box"/ Coeur d'Alene case (Dec. 18, 2001) [hereinafter Working Findings]

Findings].

direct testimony from citizens concerned with contamination or EPA's efforts in the Coeur d'Alene Basin.²³¹

2. Consensus Process

Organized by the Idaho Department of Environmental Quality with support from EPA and the mining companies, ²⁵² the so-called Consensus Process, launched after the Ombudsman hearings, brought together a wide range of interests including industry, labor, landowners, citizens groups, and government agencies on all levels. ²⁵³ Through a series of public workshops between September 2000 and March 2001, participants worked together to identify four "dominant issues" in the Coeur d'Alene Basin: zinc in water, lead in water, lead exposure to children, and lead exposure to waterfowl. ²⁵⁴ Participants also considered a variety of alternatives for addressing these issues. ²⁵⁵

Without becoming enmeshed in details, Consensus Process participants succeeded in designating "common ground" on the relative ranges for remedial activities, to include more intensive cleanup (mid- to maximum range) for Upper Basin communities and accessible tailings and less intensive measures (mid- to minimum range) for Lower Basin floodplains and riverbanks. Elements within these ranges included permanent remediation where needed to protect public health in communities ²³⁷ and selective use of removals and soil management in the Lower Basin,

²³¹ Following the transfer of the Ombudsman function in 2002, *see supra* note 225, the Office of the Inspector General has continued an Ombudsman review concerning the Coeur d'Alene River Basin, applying auditing standards and seeking improved operational efficiency. See letter from Mary M. Boyer, Acting Ombudsman, to John Iani, Regional Administrator (Dec. 18, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

²⁹² COEUR D'ALENE BASIN STAKEHOLDERS CONSENSUS PROCESS, "GET IT DONE", COLLABORATING FOR BASIN CLEANUP (Mar. 2001).

²⁵³ Citizens groups included the Coeur d'Alene Basin RI/FS Task Force Citizens Advisory Committee, the Kootenai Environmental Alliance, Community Leaders for EPA Accountability Now!, and the Shoshone Natural Resources Coalition. Government representatives included Congressional staff, state and tribal representatives, county commissioners, EPA, and U.S. Fish and Wildlife Service.

²⁵⁴ COEUR D'ALENE BASIN STAKEHOLDERS CONSENSUS PROCESS, "GET IT DONE", COLLABORATING FOR BASIN CLEANUP 1 (Mar. 2001).

²⁵⁵ Id at 4-5

²⁵⁶ Id. at 7 (fig. 1. Ranges of "Common Ground" for Remedial Activities).

²⁵⁷ For cleanup within communities, "There seemed to be agreement that an endpoint of no more lead-testing and no more 'digging' is desirable." *Id.* at 8.

with priorities for protecting particular waterfowl habitat.²³⁸ "Common ground" further endorsed multi-government involvement with cleanup implementation and use of an "iterative" cleanup process to allow "learning from experience." EPA would adopt both of these ideas, and the Proposed Plan would incorporate major elements of the "common ground."

3. EPA National Remedy Review Board

In the particular context of Superfund remedy selection, EPA's National Remedy Review Board (NRRB) can provide effective review of major EPA proposals.²⁴¹ As another of EPA's Superfund administrative reforms,²⁴² EPA established the NRRB in 1996 "to help control remedy costs and to promote consistent and cost-effective remedy decisions at Superfund sites" across the country.²⁴³ The Board is comprised of managers and senior technical and policy experts from EPA Headquarters offices and each EPA Region, and is charged with reviewing all major cleanup prospects before release of a proposed plan for public comment.²⁴⁴ The Board may consider opinions from Regional offices and affected states and tribes before issuing "advisory recommendations" to the Regional decision-makers for consideration and inclusion in the administrative record.²⁴⁵

In the process of preparing the proposed cleanup plan for the Coeur d'Alene Basin, EPA Region 10 program managers appeared twice before the NRRB, in May and in August 2001. 46 Before the

²³⁸ Id. at 7.

²³⁹ Id. at 3.

²⁴⁰ See infra note 315.

For complete information on the National Remedy Review Board, including policies, advisory recommendations, and "success stories," see the NRRB website at http://www.epa.gov/superfund/programs/nrrb/index.htm.

See supra note 161 and accompanying text (Superfund reforms).

²⁴³ Memorandum from Elliott P. Laws, EPA Assistant Administrator, to EPA Headquarters and Regional offices (Nov. 28, 1995).

²⁴⁴ Id. The Board reviews proposed cleanup actions where estimated costs of the preferred alternative exceed \$30 million or are at least \$10 million and 50% greater than the least costly alternative meeting threshold remedy requirements. Id.

²⁴⁶ Memorandum from Bruce K. Means, Chair, National Remedy Review Board, to Michael Gearheard, Director, Office of Environmental Cleanup, EPA Region 10, "National Remedy Review Board Recommendations for the Coeur d'Alene Basin Superfund Site" (Sept. 13, 2001) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) [hereinafter NRRB Recommendations]. The May 2001 meeting also included representatives from the State of Idaho, State of Washington, Coeur d'Alene Tribe, and the U.S. Fish and Wildlife Service.

Board, the Region 10 representatives presented a preferred alternative for ecological protection in the Basin with a total estimated cost of \$1.3 billion. In presenting this alternative, EPA representatives emphasized that EPA was cooperating with others including the affected states and tribes to develop a "phased approach to Basin remediation" that would allow for adapting the cleanup to account for experience gained in the initial remedial efforts. The Board's response included a recommendation that the Region proceed with a proposed plan featuring only the first phase of the ecological cleanup for the Basin, identifying the proposal as an interim action. Upon further consideration of this recommendation, EPA Region 10 agreed and proceeded accordingly. EPA Region 10 agreed and proceeded accordingly.

4. EPA Community Involvement

For the Coeur d'Alene Basin, EPA offered numerous, continuous, and far-reaching opportunities for involvement with the RI/FS process. ²⁵¹ The public involvement requirements of the CERCLA statute itself are spare. CERCLA provides that EPA "shall establish an administrative record upon which [EPA] shall base the

²⁴⁷ U.S. EPA, REGION 10, NATIONAL REMEDY REVIEW BOARD PRESENTATION INFORMATION COEUR D'ALENE BASIN REMEDIAL INVESTIGATION/FEASIBILITY STUDY tbl. 9.2-1 (July 2001).

²⁴⁸ Id. at 10-1.

²⁴⁹ NRRB Recommendations, *supra* note 246, at 2. The Board made this recommendation "given the magnitude of contamination to be addressed within the basin, the significant costs associated with any basin-wide remedial strategy, and the uncertainties involved in predicting the effectiveness of the basin-wide ecological alternatives."

Memorandum from Michael Gearheard, Director, Office of Environmental Cleanup, EPA Region 10, to Robin M. Anderson, Acting Chair, National Remedy Review Board (Oct. 24, 2001) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington). Region 10 provided a final response to the Board's other recommendations after the close of the public comment period on the Proposed Plan. See memorandum from Michael Gearheard, Director, Office of Environmental Cleanup, to Bruce K. Means, Chair, National Remedy Review Board, "Final Response to National Remedy Review Board Recommendations for the Bunker Hill Mining and Metallurgical Complex Superfund Facility Operable Unit 3 (Coeur d'Alene Basin Project)" (Sept. 10, 2002) available at www.epa.gov/superfund/programs/nrrb/siterevs.htm.

²⁵¹ An outstanding overview and critique of EPA's community involvement process for Superfund decision-making appears in Ellison Folk, *Public Participation in the Superfund Cleanup Process*, 18 ECOLOGY L. Q. 173 (1991). While acknowledging criticisms of direct public participation, such as lack of technical expertise and potential delay in the cleanup process, the author identifies both the theoretical and practical bases supporting greater public involvement in the Superfund process. These include supporting democracy traditions, educating community members, and legitimizing the outcome of the remedy selection process. Perhaps most importantly, the author also cautions against a "monolithic, unarticulated" view of the "public interest," reminding readers that in reality "there are many 'publics' and many 'interests.'" *Id.* at 191.

selection of a response action."²⁵² CERCLA also requires that selection of a remedial action must be preceded by a published notice of the proposed plan, an opportunity for the public to submit oral and written comments, a published notice of the final plan, and a written response to each of the "significant" comments submitted.²⁵³ Perhaps most significant, CERCLA also required that EPA promulgate regulations "establishing procedures for the appropriate participation of interested persons..."²⁵⁴

EPA promulgated these regulations in the National Contingency Plan (NCP). The NCP generally requires greater public involvement efforts when there is more time to plan the response action. For example, under the NCP, time-critical removal actions may only require establishing an administrative record, allowing for public comments, and providing a written response. For remedial actions, the NCP also requires conducting community interviews, preparing a formal community relations plan, and "establishing at least one local information repository." 257

For the Coeur d'Alene River Basin, fulfilling a promise from the Regional Administrator, EPA far exceeded the mandatory requirements for community involvement. EPA released a draft community relations plan for public review in October 1998, 259 and finalized it in early 1999. Instead of maintaining "at least one local information repository" in the Basin, EPA set up five, including one in a local field office EPA established in Coeur d'Alene. EPA produced dozens of fact sheets and monthly

 $^{^{252}}$ 42 U.S.C. § 9613(k)(1) (2002). The administrative record, required for both removals and remedial actions, "shall be available to the public at or near the facility at issue." *Id.*

²⁵³ § 9617(a)&(b); see also § 9617(d) (definition of "publication").

^{254 § 96139(}k)(2).

²⁵⁵ National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 (2002).

²⁵⁶ 40 C.F.R. § 300.415(n)(2) (2002).

²⁵⁷ § 300.430(c).

requirements or 'business-as-usual' process." Letter from Chuck Clarke, EPA Region 10 Regional Administrator, "To the Citizens of the Coeur d'Alene Basin" (May 5, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

²⁵⁹ See EPA Fact Sheet: "EPA Invites Your Comments on the Community Involvement Plan" (Oct. 1998).

²⁶⁰ COEUR D'ALENE BASIN ROD, supra note 1, at § 3.0.

²⁶¹ Id. To provide for more direct and continuous contact with community stakeholders, other EPA Regions have also set up field offices. For example, Region 8 (Denver) maintains an office in Helena, Montana, to focus on the Clark Fork Basin and other local sites. EPA Region 2 (New York) recently established a field office to support the Hudson River PCBs

"NewsBriefs," mailing or e-mailing them to a list of over 1000 individuals. EPA developed a publicly accessible website for the Coeur d'Alene Basin, ews clippings, and other resources. EPA encouraged the formation of citizen advisory committees and provided grants to local governments for hiring their own technical advisors. EPA hosted or participated in more than 200 public meetings. Prior to the mandatory public comment period for the Proposed Plan, EPA invited public comment of the draft Human Health Risk Assessment, Ecological Risk Assessment, Remedial Investigation Report, and Feasibility Study, providing written responses to comments on each. Finally, perhaps if all other communication channels failed, EPA Region 10—like all other Regions—also offers a Regional Ombudsman.

More than just receiving public comments, EPA responded to what it heard. For example, responding to concerns about impacts from "stigma" on local tourism, ²⁰⁸ EPA conducted the early study of beach areas in 1998 to affirm that these areas were safe. ²⁶⁹ Responding to concerns about possible impacts on property values and transactions, EPA provided information through such means as written materials ²⁷⁰ and public remarks. ²⁷¹ Responding to support for state or local control, ²⁷² EPA gave the Idaho Department of Environmental Quality the lead role for conducting the Human

cleanup. See Press Release, EPA Region 2, EPA Signs Final Cleanup Plan for Hudson River; Makes Public Involvement a Top Priority (Feb. 1, 2002) (announcing final cleanup plan for Hudson River PCBs and also intent to establish field office in the upper Hudson region).

²⁶² COEUR D'ALENE BASIN ROD, supra note 1, at § 3.0.

²⁶³ See http://yosemite.epa.gov/r10/cleanup.nsf/sites/cda.

²⁶⁴ COEUR D'ALENE BASIN ROD, supra note 1, at § 3.0.

²⁶⁵ *Id*.

²⁶⁶ Id

²⁶⁷ See supra note 161 (Superfund reforms).

²⁶⁸ See, e.g., Ken Olsen & Laura Shireman, Superfund Brings Stigma, Leaders Say, IDAHO SPOKESMAN-REVIEW, June 9, 1998, at A1.

²⁶⁹ See supra note 178 and accompanying text.

²⁷⁰ See, e.g., EPA Fact Sheet: "Coeur d'Alene River Basin, Idaho," (June 1998) (answering questions such as, "Can I be held responsible for pollution on my property?" and "Can I still sell my home or conduct real estate transactions?").

Among the dozens of other public meetings attended over four years, the author discussed the Lender Liability Amendments at a dinner function of the Spokane River Property Owners Association (May 12, 1998) and discussed NPL listing at an annual luncheon of the Coeur d'Alene Association of Realtors (August 16, 2000).

²⁷⁷ See, e.g., Coeur d'Alene River Basin Public Meeting, July 6, 1998 at 52-53 (transcript) (comments of representative from Community Leaders for EPA Accountability Now!).

Health Risk Assessment.²⁷³ Responding to concerns from the state of Washington,²⁷⁴ EPA extended its RI/FS to cover the Spokane River.

IV. THE COEUR D'ALENE BASIN ROD

As the public debate grabbed headlines, and as government and mining company attorneys prepared for trial,²⁷⁵ the technical work of the RI/FS proceeded apace. After assessing human health and ecological risks²⁷⁶ and releasing drafts of the RI and FS reports,²⁷⁷ EPA and partner agencies turned their attention to developing the plan for cleanup of the Coeur d'Alene Basin.²⁷⁸ This Part will discuss some of the issues concerning the Proposed Plan, some of the public comments and EPA responses, and elements of the remedy selected in the Record of Decision for the Coeur d'Alene Basin.

Protection Agency for the Human Health Risk Assessment Coeur d'Alene Basin Remedial Investigation and Feasibility Study (June 17, 1999) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

²⁷⁴ See, e.g., Letter from Flora J. Goldstein, Toxics Cleanup Program Washington State Dept. of Ecology, to Ms. M.J. Nearman, U.S. Environmental Protection Agency, Region X (July 31, 1998) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) ("We [Ecology] strongly encourage EPA to investigate beyond Lake Coeur d'Alene, and include the Spokane River...during this phase of the RI/FS").

²⁷⁵ After the United States filed its complaint in March 1996 seeking natural resource damages and recovery of CERCLA response costs, trial on liability for damages and response costs began in Boise, Idaho, on January 22, 2001. As the trial date approached, the mining company defendants requested that EPA delay the RI/FS process "indefinitely," to allow the parties to focus on the litigation. Letter from Peter J. Nickles to Clifford J. Villa (Dec. 13, 2000) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington). EPA declined the mining companies' request as "unconscionable." Letter from Michael J. Gearheard, Director, EPA Region 10 Environmental Cleanup Office, to Peter Nickles (Dec. 20, 2000) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

²⁷⁶ The Human Health Risk Assessment, led by the Idaho Department of Environmental Quality with funding from EPA, was released for public review and comment in July 2000 and finalized in July 2001. The Ecological Risk Assessment, supported by collaborative efforts of the U.S. Fish and Wildlife Service, Coeur d'Alene and Spokane tribes, states of Idaho and Washington, and other parties, was released for public review and comment in August 2000 and finalized in May 2001. U.S. EPA, COEUR D'ALENE BASIN PROPOSED PLAN 1-3 (Oct. 29, 2001) [hereinafter PROPOSED PLAN].

²⁷⁷ The draft RI report was released for public review and comment in October 2000 and finalized in October 2001. The draft FS report was released for public review and comment in December 2000 and also finalized in October 2001. *Id.*

²⁷⁸ See EPA Fact Sheet: "Work Now Turns to Developing the Cleanup Plan," (June 2001).

A. The Proposed Plan

The Proposed Plan reflected a broad array of influences, including the State of Idaho's Consensus Process²⁷⁹ and the recommendations of the National Remedy Review Board.²⁸⁰ But the foundation of the Proposed Plan was the science and engineering of the risk assessments and the RI/FS reports. The human health risk assessment identified particular threats to public health related to mining contamination in the Basin, with the greatest hazards to children exposed to lead in or around their homes.²⁸¹ The ecological risk assessment documented widespread effects on fish and wildlife from contaminated soils, sediments, and surface water in the Basin, with some of the greatest risks to fish populations in the Upper Basin²⁸² and waterfowl in the Lower Basin.²⁸³ The remedial investigation, supported by more than 17,000 samples of environmental media,²⁸⁴ evaluated the nature and extent of mining contamination in the Basin, calculating vast volumes of mining wastes and expansive areas of impacts.²⁸⁵ Finally,

²⁷⁹ See supra notes 235-236 and accompanying text (Consensus Process).

²⁸⁰ See subra note 250 and accompanying text (NRRB).

²⁸¹ Among other specific findings, the human health risk assessment determined that 26% of two-year-olds tested in the Basin in the years 1996 to 2000 exhibited elevated blood-lead levels, most closely related to house dusts and yard soils. See PROPOSED PLAN, supra note 276, at 4-1. Other limited risks from mining contamination in the Basin include exposure to arsenic in soils and cadmium in vegetables and drinking water. See COEUR D'ALENE BASIN ROD, supra note 1, at 7-9. Threats may also be posed by exposures through subsistence lifestyles (often marked by large consumption of fish and aquatic plants) and through recreation at certain locations (possibly including areas along the Spokane River). See id. at 7-10 to 7-15

²⁸² Among other specific findings, the ecological risk assessment identified approximately 20 miles of the South Fork of the Coeur d'Alene River and 13 miles of tributaries where metals concentrations prevented sustainable fish populations, with Ninemile and Canyon Creeks "essentially devoid of fish and other aquatic life in the area of mining impacts." See PROPOSED PLAN, supra note 276, at 4-3.

²⁸³ Among other findings, the ecological risk assessment found that metals contamination in the Basin posed significant risks to 21 out of 24 bird species evaluated. Contaminated sediments pose particular threats to waterfowl, with 80 percent of waterfowl habitat in the Lower Basin exhibiting potentially lethal concentrations of lead. While waterfowl deaths due to lead poisoning had been reported for years, the problem did not appear declining, with 1997 marking the largest die-off in the Basin since 1953. *Id.* at 4-3.

Through its own field investigations under Superfund, EPA collected more than 10,000 samples of soils, sediments, groundwater, and surface water in the Basin. EPA's database also included some 7,000 samples collected by other parties, including the Idaho Department of Environmental Quality, the U.S. Geological Survey, the mining companies, and EPA offices responsible for other programs including the Clean Water Act. *See id.* at 3-1.

Among other calculations, the RI estimated a total of 7.1 million cubic yards of contaminated sediments in the Upper Basin outside of the Box, and 13.6 million cubic yards of contaminated dredge spoils in one localized area of the Lower Basin. The RI also

the feasibility study analyzed a range of potential remedies to the various risks to human health and the environment across the expanse of mining impacts in the Coeur d'Alene River Basin and Spokane River.²⁸⁶

The feasibility study evaluated six alternatives for ecological protection, ranging from no action (Alternative 1) to maximum soil excavation, sediment dredging, and active water treatment (Alternative 4). 287 In between, Alternative 2 would provide limited removal of contaminated materials, water treatment, streambank stabilization.²⁸⁸ Alternative 3 would provide for greater scope of these measures, including active water treatment. 289 The alternatives also included a plan developed by the State of Idaho (Alternative 5) which would focus on the largest sources of metals to surface water, stabilizing them in place or consolidating them in regional repositories, without providing for active water treatment.²⁹⁰ A plan by the mining companies (Alternative 6) would provide for limited streambank stabilization and removal of materials from watercourses, without any water treatment. 291 Aside from the no-action alternative, the mining company plan would provide the least amount of cleanup, at a total estimated present cost of \$194 million. The maximum alternative carried a price tag of \$2.6 billion. Ultimately, EPA concluded that cleanup goals would be best satisfied by a mid-range alternative (Alternative 3), with an estimated cost of \$1.3 billion. 292

Perhaps the most intractable problem for ecological protection is dissolved metals such as cadmium and zinc in surface water. Even with the most aggressive cleanup alternative, computer modeling predicted that meeting federal water quality criteria²⁹³ for zinc

estimated a total of nearly 3,000 acres in the Upper Basin disturbed by mining activities, and over 18,000 acres of contaminated sediments in the Lower Basin with lead concentrations at levels that may pose risks to waterfowl. *See id.* at 3-3.

The feasibility study evaluated remedial alternatives for human health protection from residential soils, house dust, drinking water, and aquatic food sources; for ecological protection in the Upper and Lower Basin; and for human health and ecological protection related to Coeur d'Alene Lake and the Spokane River. See id. at § 7 and tbls. 7-2 to 7-8.

²⁸⁷ See PROPOSED PLAN, supra note 276, at 6-6 to 6-7.

²⁸⁸ Id. at 6-6.

²⁸⁹ Id. at 6-7.

²⁹⁰ Id.

²⁹¹ Id

²⁹⁷ See Proposed Plan, supra note 276, at tbl. 7-6 and § 8.2.

⁸⁹⁹ 33 U.S.C. § 1314(a)(1) (2002) requires EPA to develop, publish, and, from time to time, revise criteria for water quality accurately reflecting the latest scientific information. Consistent with this direction, EPA has published National Ambient Water Quality Criteria

would take at least 200 years.²⁹⁴ CERCLA establishes statutory requirements for selection of remedies, including two "threshold" criteria: (1) protection of human health and the environment and (2) compliance with applicable or relevant and appropriate requirements (ARARs). 295 CERCLA specifically provides that ARARs shall include water quality criteria where "relevant and appropriate under the circumstances." Water quality criteria were developed to protect aquatic life from exposure to metals such as those threatening aquatic life in the Coeur d'Alene Basin, so such water quality criteria would appear to be relevant and appropriate and thus an ARAR for any remedy selected for the Coeur d'Alene Basin.²⁹⁷ Likewise, the water quality standards based on such criteria, promulgated by EPA or the state, would seem relevant and appropriate—if not applicable—for a remedy for metals contamination in the Coeur d'Alene Basin.²⁹⁸

Now, here's the rub: if CERCLA requires remedies to attain ARARs, and ARARs for the Coeur d'Alene Basin remedy include

(AWQC) for metals of concern in the Coeur d'Alene Basin including cadmium, lead, and zinc. See COEUR D'ALENE BASIN ROD, *supra* note 1, at tbl. 8.2-3 for summary of water quality criteria relevant to Coeur d'Alene Basin. Consistent with the direction to make revisions from time to time, EPA revised the AWQC for cadmium in 2001. 66 Fed. Reg. 18,935 (April 12, 2001).

²⁹⁴ COEUR D'ALENE BASIN ROD, *supra* note 1, at 10-4. Modeling indicated that AWQC for zinc, under the most aggressive alternative, would take 280 years to attain at Pinehurst, on the downstream edge of the Box, and 210 years to attain at Harrison, at the mouth of the river into Coeur d'Alene Lake. The next most aggressive alternative would take about 45 percent longer at both locations. Modeling predicted the alternative submitted by the mining companies would take approximately 250 percent longer to attain AWQC at Harrison, or around 800 years. *Id.* at tbl. 10.2-2.

²⁹⁵ 42 U.S.C. § 9621(d) (2002). The NCP provides that the "threshold" criteria must be met by any alternative to be selected, unless an ARAR is waived. 40 C.F.R. § 300.430(f)(1)(i)(A) (2002). The threshold criteria are the first two of the NCP's "Nine Criteria" for remedy selection, which also include long-term effectiveness; reduction in toxicity, mobility, or volume through treatment; short-term impacts; implementability; cost; state acceptance; and community acceptance. § 300.430(e)(9)(iii).

⁹⁹⁶ 42 U.S.C. § 9621(d) (2) (A) (2002). The statute defines "relevant and appropriate" in this context to include consideration of the designated use of the surface water, the purposes for which the criteria were developed, and the latest information available. § 9621(d) (2) (B) (i).

²⁹⁷ Consistent with such reasoning, for the limited purpose of the selected remedy, EPA designated the AWQC for cadmium as an ARAR for the Coeur d'Alene Basin ROD. COEUR D'ALENE BASIN ROD, *supra* note 1, at 13-10, 13-11. The ROD identified the criteria for cadmium because such criteria reflect the "latest scientific knowledge" and were developed to protect aquatic organisms specifically including bull trout, which may be found in the Coeur d'Alene Basin.

²⁸⁸ Consistently, again for the limited purpose of the selected remedy, the State of Idaho water quality standards were designated as applicable in the Coeur d'Alene Basin ROD. *Id.* at 13-11.

water quality criteria, yet such criteria could not be met for less than 200 years at best, how can CERCLA be satisfied? The answer lies in the inherent flexibility of the Superfund statute and its implementing regulations. The statute itself authorizes ARARs "waivers" in specified circumstances. However, these waivers only apply to satisfaction of ARARs. There is no statutory waiver for the other threshold criterion of protecting human health and the environment. In the Coeur d'Alene Basin, not only are water quality criteria exceeded, but the aquatic life intended for protection by such criteria are also at risk. Therefore, waiving the ARARs in this case would offer no relief from the independent statutory obligation to protect the environment.

For efficient remediation of large or complicated regions (like the Basin), the NCP provides that such sites can be remediated in smaller components, known as "operable units." The division of a single site into operable units is appropriate when "phased analysis and response is necessary or appropriate given the size or complexity of the site, or to expedite the total site cleanup."300 Given the size and complexity of contamination in the Coeur d'Alene Basin, the designation of operable units may well seem appropriate. For the Bunker Hill NPL facility, EPA has designated three operable units (OUs). The first two OUs addressed, respectively, the populated and non-populated areas of the Bunker Hill Box, under the RODs issued in 1991 and 1992.³⁰¹ OU 3 was defined to include the entire remaining area of mining contamination within the Coeur d'Alene Basin. 302 At one time, consistent with the operable unit concept, Region 10 considered dividing the Basin cleanup plan into two phases, with the human health component to be released before the ecological component.³⁰³ However, the proposal provoked a public outcry, led by the State of Idaho, and EPA responded by agreeing to keep the human health and ecological cleanup for the Basin together in one

³⁹⁹ § 9621(d)(4). One circumstance supporting an ARARs waiver is where "compliance with such requirements is technically impracticable from an engineering perspective." § 9621(d)(4)(C). For further information on the "TI" waiver, see SUPERFUND GUIDE, supra note 10, at § 9.5.

⁵⁰⁰ NCP at 40 C.F.R. § 300.430(a)(1)(ii)(A) (2002).

³⁰¹ See supra notes 61-62 and accompanying text.

⁵⁰² COEUR D'ALENE BASIN ROD, supra note 1, at 1-1.

 $^{^{503}}$ See Zaz Hollander, EPA's Plan To Come Out in Two Parts, IDAHO SPOKESMAN-REVIEW, Mar. 23, 2000, at B1.

plan. 304 Accordingly, the flexibility ordinarily available under Superfund through designation of operable units did not appear available for cleanup planning in the Coeur d'Alene Basin.

Beyond ARARs waivers and operable units, a third source of flexibility in Superfund remedial planning had already been suggested by the National Remedy Review Board: selection of an "interim" remedy. While such interim remedies are authorized explicitly in the context of ARARs waivers, ³⁰⁵ nothing in the NCP restricts the interim remedy to the ARARs context, ³⁰⁶ and EPA guidance encourages use of interim remedies when appropriate. ³⁰⁷

For the Coeur d'Alene Basin cleanup, an interim remedy for ecological protection would allow EPA to proceed with a final remedy for human health and to get started with a prioritized set of ecological actions—even if such ecological actions could not be expected to meet ARARs in reasonable time or provide for full ecological protection. An interim remedy would also offer other advantages, such as helping to moderate short-term socioeconomic impacts and allowing consideration of remedial experience and emerging technologies. The interim remedy for the ecological protection in the Basin would not, however, come cheap, given the volume of mining wastes and magnitude of impacts. While only a fraction of the \$1.3 billion Alternative 3, the interim remedy for

³⁰⁴ Concerns expressed by the State of Idaho included presenting the public with one plan to comment upon and allowing consideration of tradeoffs between human health and environmental protection. Zaz Hollander, *EPA To Issue One Silver Valley Plan*, SPOKESMAN-REVIEW, April 4, 2000, at B3.

⁵⁰⁵ 42 Ú.S.C. § 9621(d)(4)(A) (2002) (ARAR may be waived when "remedial action selected is only part of a total remedial action that will attain such level or standard of control when completed"); NCP at 40 C.F.R. § 300.430(f)(1)(ii)(C)(1) (2000) (ARARs waiver available when "alternative is an interim measure and will become part of a total remedial action").

³⁰⁶ See, e.g., § 300.430(a)(1)(ii)(B) (recognizing "interim action operable units" without limit on use); 55 Fed. Reg. 8704 (Mar. 8, 1990) (Preamble to NCP amendments describing process for developing interim actions).

⁵⁰⁷ Appropriate circumstances for interim actions include where quick action is needed to protect human health or the environment while final remedies are being developed, and where temporary measures are needed to stabilize a site or prevent further environmental degradation. EPA's guidance also allows RODs to include both interim action components and final remedies. SUPERFUND GUIDE, *supra* note 10, at § 8.0.

See generally PROPOSED PLAN, supra note 276, at 7-19 (advantages of interim action). Short-term impacts from remedial activity might include truck traffic and dust. See id. at tbl. 7-6. Emerging technologies might include "soil amendments," a technique of applying chemicals to soils so that metals within the soil cannot be absorbed by receptors such as waterfowl, thus potentially reducing the need for more expensive soil removals. See Briefing Sheet: "Collaborative Coeur d'Alene Soil Amendment/ Bioavailability Studies" (March 2001) available at EPA's Coeur d'Alene Basin website, supra note 1.

ecological protection in the Coeur d'Alene Basin would still represent one of the largest Superfund cleanups ever proposed, with an estimated cost on the order of \$250 million over 20 to 30 years. Overall, including actions to address human health and the Spokane River, the Proposed Plan presented the public with a total preferred alternative for cleanup bearing estimated costs of more than \$350 million.

B. Public Comments

Working toward completion of the Proposed Plan, EPA provided the public with a "progress report" in the summer of 2001. The Progress Report reported general agreement with the State of Idaho, Coeur d'Alene Tribe, and other governments for actions to protect human health in the Upper Basin. It also indicated EPA's inclination to address ecological cleanup with an interim or "incremental" approach. For those familiar with the Progress Report and with outcome of the Consensus Process earlier in the year, the Proposed Plan offered few surprises. It

EPA released the Proposed Plan for public review on October 29, 2001, initially proposing to accept written comments for a period of 30 days. Responding to public requests, EPA extended the comment period twice, to close finally on February 26, 2002. 16

³⁰⁹ PROPOSED PLAN, *supra* note 276, at tbl. 8-1. The estimated costs included \$100 million for work on the Upper Basin tributaries, \$67 million for Lower Basin riverbed and banks, and \$81 million for Lower Basin floodplains.

⁵¹⁰ Id. The proposed cleanup for residential communities in the Basin carried estimated costs of \$85 million. The Spokane River cleanup was estimated at \$10 million. The proposal also included costs to address house dusts, drinking water, and aquatic food sources.

EPA Fact Sheet: "Work Now Turns to Developing the Cleanup Plan," at 2 (June 2001) ("Preview of Cleanup Plan Now Available"); U.S. EPA Briefing Sheet: "Progress Report on the Proposed Cleanup Plan" (April 2001). EPA presented the progress report to the public through a series of public meetings in August 2001. U.S. EPA, Coeur d'Alene Basin News Briefs, No. 23 (July 2001) available at EPA's Coeur d'Alene Basin website, supra note 1.

⁵¹² U.S. EPA Briefing Sheet: "Progress Report on the Proposed Cleanup Plan" at 2 (April 2001).

⁵¹³ Id

⁵¹⁴ In presenting the Proposed Plan at a public meeting, EPA observed of the priorities reflected in the preferred alternative: "For folks that participated in the consensus process that was sponsored by the State of Idaho, these three areas look very familiar because they are the exact same three priority areas that were identified by that group." See Coeur d'Alene Basin Meeting Tr., Wallace, Idaho, at 40 (Nov. 13, 2001) (comments of Mary Jane Nearman).

³¹⁵ U.S. EPA, "Notice of Availability, Coeur d'Alene Basin Proposed Plan" (Oct. 2001) (written comments accepted from October 29 to November 28, 2001).

³¹⁶ EPA Fact Sheet: "Public Comment Period Extended for Proposed Cleanup Plan," (Jan. 2002).

Consistent with Superfund requirements,³¹⁷ EPA provided opportunities for the public to submit oral as well as written comments on the Proposed Plan. Public comment meetings were held in mid-November in Wallace, Cataldo, and Coeur d'Alene, Idaho, and in Spokane, Washington. Through the four public meetings and 120-day public comment period, EPA received more than 3,300 comments through 1,317 individual submissions.³¹⁸

Many of the public comments reflected opposition to use of Superfund authority in the Coeur d'Alene Basin. This opposition often reflected the spread of misinformation, among other things attributing to the Proposed Plan costs of "\$1.3-Billion," raising again the myth of the "1500-sq. mile Superfund designation," and suggesting that the Proposed Plan would create "the Nation's largest Superfund site." Most of the comments in opposition, indeed, more than half of all comments submitted, took the form of printed postcards and responses to a questionnaire printed in a

³¹⁷ CERCLA Section 117 requires EPA to provide "a reasonable opportunity for submission of written and oral comments and an opportunity for a public meeting at or near the facility at issue regarding the proposed plan..." 42 U.S.C. § 9617(a)(2) (2002). EPA is also required to keep a transcript of the meeting and make such transcript available to the public. *Id.*

³¹⁸ U.S. EPA, COEUR D'ALENE BASIN ROD, *supra* note 1, pt 3, RESPONSIVENESS SUMMARY at 2-1 (Sept. 2002) [hereinafter RESPONSIVENESS SUMMARY]. Complete collections of all comments received are available for public review in the Coeur d'Alene Basin administrative records located in EPA's Region 10 office in Seattle, Washington, and at the North Idaho College library in Coeur d'Alene, Idaho. Electronic copies of these public comments are also available from EPA on CD-ROM.

³¹⁹ A broader display of opposition to the proposed cleanup could hardly be imagined than a full-page ad appearing in the local paper the week of the public meetings on the Proposed Plan, exclaiming, "EPA's Proposed Plan is WRONG!" (on file with EPA Region 10 Superfund Records Center, Seattle, Washington). The ad also demonstrated a considerable feat of coordination, bearing signatures of the entire Idaho Congressional delegation, the Governor of Idaho, local legislators, local mayors, local chambers of commerce, and other interested parties.

RESPONSIVENESS SUMMARY, supra note 318, at 2-1. EPA does not rank Superfund sites by size. However, if such ranking were ever presented, the Bunker Hill NPL facility would certainly be rivaled by other mega-sites such as the Clark Fork in neighboring Montana, where EPA proposed a plan in 2002 to address a 120-mile stretch of river (supra note 45, at 1); by the Hudson River, where a 200-mile portion was declared a Superfund site in 1984 (see supra note 14); by the Cherokee County site in Kansas, a former mining area covering approximately 115 square miles and part of the 2,500 square-mile Tri-State Mining District (see EPA Region 7 website at http://www.epa.gov/region7/superfund/npl_files/ cherokee _county.pdf); and by a number of federal NPL sites, including the Hanford 200 Area in eastern Washington (over 120 square miles of contaminated groundwater) and the Idaho National Engineering and Environmental Laboratory (890 square miles). EPA Region 10 website at http://yosemite.epa. gov/r10/cleanup.nsf/webpage/Superfund+(CERCLA)#sites.

local newspaper.³²¹ Many other comments presented independent critiques of EPA's Proposed Plan, supported by references and appendices.³²²

Comments opposing the EPA's Proposed Plan for the Basin took many forms from many perspectives, including elected officials, businessmen, community groups, mining companies, academics, and life-long residents. Through it all, some major themes could be discerned. Many commenters expressed concerns about the impact of "stigma" on local economies—discouraging tourism and depressing property values. Hany comments argued that threats from mining contamination, particularly to human health, had been overstated in the Basin risk assessments, and that the science used by the governments should be reviewed by the National Academy of Sciences. Other comments (including some 568)

survey responses were recorded, against a total number of 1,317 submissions. The value of such comments may merit some consideration. On the one hand, comment formsallow ordinary citizens caring strongly enough about an issue to express an opinion even without sufficient time, resources, or inclination for independent study. On the other hand, commentators have observed that "mass participation" may come at some cost to the quality of resulting decisions. See, e.g., Jim Rossi, Participation Run Amok: The Costs of Mass Participation for Deliberative Agency Decisionmaking, 92 Nw. U. L. Rev. 173 (1997). The advent of opportunities to submit public comments electronically may pose even greater challenges to agency decisionmaking. See, e.g., Cindy Skrzycki, U.S. Opens Online Portal to Rulemaking, WASH. POST, Jan. 23, 2003, at E1 (reporting that U.S. Dept. of Transportation received 3,102 public comments on 155 rules in 1997, but then 62,944 public comments on 119 rules in 2000).

³²⁷ See, e.g., "Comments on the Proposed Plan Submitted on Behalf of: Shoshone County Commission and Mayors of Wallace, Mullan & Osburn, Idaho" (Feb. 26, 2002) (including voluminous compilation of papers prepared by members of the Shoshone Natural Resources Coalition Science Committee) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

³²⁵ See, e.g., letter from Don and Barbara Elfsten, Kellogg, Idaho, to Sheila Eckman, U.S. E.P.A. (Feb. 20, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) ("We have lived in Kellogg, Idaho (Silver Valley) since 1946. We have seen the South Fork of the Coeur d'Alene river turn from a milky white to clear water in which fish now live.... The EPA has done a great job in the last years <u>but</u> – it is time to stop and for the EPA to move on...").

³²⁴ See, e.g., supra note 318, Comment # 2607 (CLEAN!) ("Our collective concern about Superfund listing and the stigma that comes with it – is not solely hinged on tourism. We believe EPA's plan and Superfund expansion threaten all aspects of the local/regional economy, including taxpayers, and potentially creating a severe crisis on property values, assessments, and ultimately municipal budgets.").

³²⁵ See, e.g., supra note 318 (comments submitted on behalf of Shoshone County and local mayors); Comment Nos. 3451, 3453, 3457-3462 (comments of Ron Roizen); Comment Nos. 1655 et seq. (comments submitted on behalf of ASARCO Inc. and Hecla Mining Company); memorandum from William M. Calhoun (Nov. 13, 2001) ("My Topic is Lead"). A local newspaper survey published in the Shoshone News-Press (Feb. 22, 2002) asked community members to indicate whether they would support "carrying out of a review of the EPA Basin

printed postcards) suggested that where any cleanup in the Basin was necessary, it should be subject to control by state or local governments, working through Idaho's newly created Basin Commission. Many comments emphasized the need for closure in the cleanup process, that any necessary cleanup should be completed quickly to allow for economic development. Comments also encouraged EPA to delay the Record of Decision, pending completion of the National Ombudsman investigation or a study by the National Academy of Sciences. See

Once again, the general tenor of the comments differed by State. While individuals on either side of the state line stood against their prevailing state view, ³²⁹ the populace and politicians of northern Idaho seemed generally opposed to the Proposed Plan, and the citizenry and leadership in the State of Washington seemed generally in favor. ³³⁰ Letters of support for Basin cleanup arrived from likely sources, ³³¹ and also from unexpected places. ³³²

science by the National Academy of Sciences," and support postponing the Basin ROD until such study is completed.

³²⁶ See RESPONSIVENESS SUMMARY, supra note 318, at 2-1, 2-5. The printed postcards stated explicitly, "The cleanup should be directed by state and local governments through the newly created Basin Commission...."

³⁸⁷ See id. at 3-4. As the postcards explicitly provided, "[T]here must be closure in the plan."

³²⁸ Id. at 3-3 (requested delay for Ombudsman investigation).

See, e.g., letter from Justin Hayes, Program Director, Idaho Conservation League, to Sheila Eckman, Coeur d'Alene Team Leader (Nov. 27, 2001) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington); letter from Gina Brooks, Coeur d'Alene, Idaho, to Sheila Eckman, Coeur d'Alene Basin Team Leader; EPA (Feb. 23, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (supporting EPA's recommendations for cleanup while "respectful to the folks in my community who are frightened by the designation Superfund"); e-mail message from Laura Skaer, Executive Director, Northwest Mining Association, Spokane, Washington, to Sheila Eckman, US EPA (Feb. 23, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (mining association based in Spokane "believes EPA should immediately abandon its proposed alternative" and "wait for the EPA Ombudsman Report").

³³⁰ See, e.g., letter from Gary Locke, Governor, State of Washington, and Doug Sutherland, Commissioner of Public Lands, to Sheila Eckman, U.S. Environmental Protection Agency (Feb. 25, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) (Proposed Plan endorsed by Washington Departments of Ecology, Health, Fish and Wildlife, and Natural Resources); letter from John T. Powers, Jr., Mayor of Spokane, and Rob Higgins, Council President, to Ms. Sheila Eckman, Coeur d'Alene Team Leader (Feb. 25, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) ("The EPA Coeur d'Alene Basin Proposed Plan should be implemented expeditiously"); letter from Jim Wilson, President, Washington Citizen's Advisory Committee, to Ms. Sheila Eckman, Coeur d'Alene Team Leader (Feb. 15, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

³⁵¹ See, e.g., letter from John Osborn, MD, Sierra Club Northern Rockies Chapter, to Sheila Eckman, Coeur d'Alene Team Leader, U.S. Environmental Protection Agency (Feb. 26, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington); letter

Individual and form letters pressed for more aggressive cleanup of "toxic sediments," observed that mining contamination from the Coeur d'Alene Basin is a "bi-state issue," and expressed distrust of Basin cleanup managed by Idaho. SSS 5

By the time the public comment period on the Proposed Plan finally closed on February 26, 2002, EPA had heard views diametrically opposed to each other, with equal conviction, supported by substantial constituencies, and surrounded by perspectives across the spectrum. Given the diversity of opinion, any final decision by EPA would be sure to dissatisfy large segments of the commenting population. Even so, EPA struggled to consider all significant comments and provide substantive responses where possible.

CERCLA requires EPA to provide a written response to "each of the significant comments, criticisms, and new data submitted" in written and oral comments on a proposed plan, 336 and EPA prepared such a response to comments on the Proposed Plan for the Coeur d'Alene Basin. 337 Concerning stigma, EPA suggested that

from Neil Beaver, The Lands Council, to Sheila Eckman, Coeur d'Alene Team Leader (Feb. 11, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington); letter from Naki Stevens, Conservation Director, Audubon Washington, to Sheila Eckman (Feb. 25, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

³³² Some of the most articulate and penetrating of comments came from students in a 9th grade honors class in Spokane, Washington. While generally supportive of Basin cleanup, students wondered about real issues including funding to pay for the cleanup, disposal sites for the volumes of wastes, short-term impacts of construction on local communities, availability of local labor, responsibility for causing the contamination, and the length of time to protect human health and the environment. *See* letters to Sheila Eckman from students at Joel Ferris High School, Spokane, Washington (Nov. 2001) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

See, e.g., letter from Debra M. Boswell, to Sheila Eckman, Coeur d'Alene Team Leader (Dec. 5, 2001) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

354 See, e.g., letter from Lorinda Knight, Spokane, Washington, to Sheila Eckman, Coeur d'Alene Team Leader (Dec. 3, 2001) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington).

See, e.g., letter from Julien Powers, Spokane, Washington, to Sheila Eckman, Coeur d'Alene Team Leader (Jan. 25, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) ("This issue is crystal clear: DON'T TRUST IDAHO TO PROTECT THE ENVIRONMENT," expressing belief that Idaho officials, as well as Idaho media, were "clearly anti-environmental.").

³⁵⁶ 42 U.S.C. § 9617(b) (2002). Consistent with the requirement to respond only to "significant" comments, EPA is under no obligation to respond to invectives or ad hominem attacks. *See, e.g., supra* note 318, Comment No. 3369 (comparing EPA to Taliban); Comment No. 1468 ("EPA is nothing more and [sic] a bunch of communists stealing land from honest hard working people").

⁵⁵⁷ RESPONSIVENESS SUMMARY, *supra* note 318. Public comments and responses are summarized in Part 3 of the ROD, "Responsiveness Summary." Part 4 of the ROD compiles

it would respond by (1), defining areas where cleanup is needed and areas where it is not 338 and (2), quickly completing cleanup of residential communities to remove those areas from Superfund designation without waiting to complete cleanup of the entire Basin. 339 Concerning science and risk assessments. EPA provided lengthy written responses, standing by the science used by it and the State of Idaho to calculate human health risks, and welcoming any review by the National Academy of Sciences.340 Regarding support for control by the State of Idaho and local governments, EPA committed to (1) continuing its collaboration with all levels of government, and (2) participating as a member of the Basin Commission for implementation of the ROD. Regarding concerns about Idaho control, EPA committed to maintaining a role in the Basin, ensuring cleanup consistent with the ROD and CERCLA.³⁴¹ Concerning the need for certainty and closure with respect to cleanup, EPA committed to making community cleanups a top priority, assuring that such work would be completed "well before the 30-years described for the ecological portion of the Selected Remedy."342 Moreover, while the ecological cleanup would take considerably more time, EPA noted that the areas needing ecological cleanup were generally remote and within the floodplain, not areas well suited for development. Responding to petitions for delay pending reviews by the National Ombudsman or National Academy of Sciences, EPA committed to evaluating any final recommendations and taking appropriate actions, which could include a formal process for modifying the ROD.344 Such

all comments received during the comment period and all responses provided, forming a weighty volume of 740 pages. For ease of tracking, all comments and responses were assigned numbers and entered into a database.

³³⁸ See RESPONSIVENESS SUMMARY, supra note 318, at 2-4. For example, EPA stated that based on the limits of mining contamination in the Basin, "the residential areas of the cities of Coeur d'Alene, Post Falls, and Harrison are not considered part of the site." *Id.*

³³⁹ Id. EPA suggested that cleanup of local areas could be recognized through timely certificates of completion, as issued for the Box, or through beginning the process for partial NPL deletion. Releases may be "deleted" from the NPL when "no further response is appropriate." 40 C.F.R. § 300.425(e) (2002). EPA policy provides that deletion may apply to all or only a part of an NPL facility. See 60 Fed. Reg. 55,466 (Nov. 1, 1995) (Notice of Policy Change).

³⁶⁰ See RESPONSIVENESS SUMMARY, supra note 318, at 2-2 and Response Nos. 104, 118, and

³⁴¹ RESPONSIVENESS SUMMARY, supra note 318, at 2-5.

³⁴² Id. at 3-4.

³⁴³ Id. at 3-4 to 3-5

³⁴⁴ Id. at 3-3. See also EPA Fact Sheet: "Record of Decision Issued for Cleanup of Operable Unit 3, States, Tribes and Federal Agencies Support the Plan," 11 (Sept. 2002) ("Can the

action would be consistent with another of the Superfund administrative reforms, which encourages EPA to update selected remedies in order to recognize advancements in science and technology and improve cost-effectiveness and protectiveness.345 Finally, EPA responses also included a stated intent to double the volume of riverbed sediments for removal from the Coeur d'Alene River, a measure requested by the State of Washington to improve water quality in the Spokane River and posing an additional cost of \$26 million. 346

C. The Selected Remedy

After the public comment process was completed, EPA wrote the Record of Decision to select the remedial actions for the Coeur d'Alene River Basin. After all of the public comments preceding the Proposed Plan, in the end, the selected remedy did not differ substantially from the preferred alternative. 347 This final section summarizes elements of the selected remedy and identifies key matters not included in the ROD.

The most obvious matter omitted by the Coeur d'Alene Basin ROD is a final remedy for ecological protection, presently predicted to cost on the order of \$1.3 billion. ³⁴⁸ Because the ROD does not provide a final ecological remedy, it also does not

Record of Decision be Changed? Yes. EPA frequently changes RODs based on new information"). If the remedial action taken "differs in any significant respects" from the selected remedy, CERCLA requires the lead agency to "publish an explanation of the significant differences and the reasons such changes were made." 42 U.S.C. § 9617(c) (2002); see also 40 C.F.R. § 300.435(c)(2)(i) (2002) (Explanation of Significant Differences must be published whenever remedy differs significantly from action selected in the ROD "with respect to scope, performance, or cost"). If, however, the differences "fundamentally alter the basic features of the selected remedy," EPA may amend the ROD after public notice and opportunity for comment. § 300.435(c)(2)(ii).

345 See "Superfund Reforms: Updating Remedy Decisions," memorandum from Stephen D. Luftig, Director, Office of Emergency and Remedial Response, and Barry Breen, Office of Site Remediation and Enforcement, (OSWER Dir. # 9200.0-2). Spinning yet another myth in the Basin, the National Ombudsman claimed to be the only one to bring about a change to a CERCLA remedy based on public concerns. Working Findings, supra note 230, at 2. However, the evidence plainly showed otherwise. In response to the National Ombudsman's Working Findings, EPA Region 10 identified 307 RODs with modifications, including 11 RODs where community concerns were specifically cited. Of these, only three had any known National Ombudsman involvement. Letter from L. John Iani, EPA Regional Administrator, to Honorable Michael D. Crapo, United States Senator 9-10 (July 16, 2002).

³⁴⁶ COEUR D'ALENE BASIN ROD, supra note 1, at 14-1. ³⁴⁷ See RESPONSIVENESS SUMMARY, supra note 318, at 1-2.

That cost estimate could change, of course, as the selected remedy begins showing results, as new technologies emerge, or as other new information figures into development of a final ecological remedy sometime down the road.

generally identify water quality criteria or standards for the protection of aquatic life as Applicable or Relevant and Appropriate Requirements (ARARs) for the remedy to meet. ARARs for the ROD also leave out the Total Maximum Daily Loads (TMDLs) developed for the Basin based on a determination that the TMDLs failed the statutory definition of ARARs. Moreover, after years in the making, the TMDLs for the Basin were invalidated by a state court on procedural grounds. The ROD does not address groundwater contamination, relying instead on actions to address surface waters impacted by groundwater and on measures to ensure safe drinking water at the tap. Finally, the ROD does not directly address Coeur d'Alene Lake, relying instead upon efforts by state, tribal, federal, and local governments to protect the quality of water entering the Lake and passing into the Spokane River.

³⁴⁹ See COEUR D'ALENE BASIN ROD, supra note 1, at 13-10 to 13-11. The exception to this is for point sources such as water treatment units created through the selected remedy, for which discharges will comply with established criteria or standards. *Id.*

³⁵⁰ "Only those state standards that are promulgated . . . may be applicable or relevant and appropriate. For purposes of identification and notification of promulgated state standards, the term *promulgated* means that the standards are of general applicability and are legally enforceable." 40 C.F.R. § 300.400(g)(4) (2002) (emphasis in original). TMDLs may not be legally enforceable where they must be incorporated into an NPDES permit or other enforceable mechanism for effect. Thus, TMDLs generally appear to fail the NCP definition of "promulgated" for purposes of defining ARARs. Consistent with this view, TMDLs developed by EPA are not published in the *Federal Register* as proposed or final rules.

solution states and states and states and the Idaho Department of Environmental Quality finally released final TMDLs for the Coeur d'Alene River Basin in August 2000. See supra notes 114-115 and accompanying text; see also EPA and IDEQ Fact Sheet: "Final TMDL Issued for Metals in Coeur d'Alene River Basin," (Aug. 2000).

sar Memorandum Opinion and Order in re: Summary Judgment, ASARCO Inc., Coeur Silver Valley, Inc., and Hecla Mining Co. v. Idaho, Case No. CV-00-05760 (Sept. 2001). While TMDLs are not generally considered administrative rules, see supra note 350, the state district court found that, under Idaho law, TMDLs do constitute rules, and not "mere guides" as the state had argued. Id. at 23. In reaching this finding, the district court appeared to be relying on state law that provides that TMDLs must be "adopted" by the state and "enforced" through normal enforcement practices. Id. at 20. The district court concluded that because the state admittedly did not follow the rulemaking procedures, the TMDL for the Coeur d'Alene Basin was therefore invalid. The state supreme court subsequently affirmed. 2003 Ida. LEXIS 74 (April 25, 2003). However, the Idaho legislature promptly responded to the ruling by amending the state code to establish that rulemaking procedures do not apply to TMDLs other than those for the Coeur d'Alene Basin. 2003 Idaho Sess. Laws 351 (May 7, 2003), codified at I.C. § 39-3611 (2003).

353 See COEUR D'ALENE BASIN ROD, supra note 1, at 12-11 (drinking water measures).

³⁵⁴ Id. at 12-43. While sediments on the lake bottom contain metals, such contamination does not appear to pose significant health or ecological risks, nor does it appear a major source of metals to the Spokane River. If, however, the quality of lake water deteriorates due to nutrient enrichment, as from municipal sewer systems, it is believed that metals in the

Notwithstanding all it leaves out, the Coeur d'Alene Basin ROD calls for a tremendous scale of cleanup efforts over a generation of time. The selected remedy includes a final remedy to protect human health, an interim action for ecological protection, and measures to protect human health and the environment with respect to the Spokane River, bringing a total combined cost estimated at \$360 million. Major elements of the selected remedy are summarized below.

1. Protection of Human Health

The ROD identifies the primary health concerns in the Basin as exposures to lead and arsenic in soil and dust around homes and recreational areas. Like the cleanup selected for the populated areas of the Box, the selected remedy for the Basin generally provides for removal of yard soils up to a depth of one foot where lead concentrations exceed 1,000 parts per million (ppm). The yard is then backfilled with clean soils and the landscape is restored. For yards below 1,000 ppm lead but above 700 ppm, a barrier such as vegetation will be placed to prevent exposure to bare soils. Yards with arsenic levels above 100 ppm will also be removed to a depth of one foot and backfilled. Combinations of soil excavation and vegetative barriers will also be used for street rights-of-way, commercial properties, common areas such as parks and playgrounds, and recreational areas such as boat ramps, picnic

sediments could be released into the water column at an increased rate, threatening the Lake and Spokane River. To address such prospect, a lake management plan was developed in 1996 by the Coeur d'Alene Tribe, State of Idaho, and others, with recommendations for reducing riverbank erosion, upgrading sewer systems, and other efforts. State, tribal, federal, and local governments are currently in the process of evaluating the 1996 plan and considering mechanisms to implement the plan outside of CERCLA authorities. *Id.* at 12-43.

³⁵⁵ Id. at § 12.0 and tbl. 12.0-1. For a comprehensive summary of the Coeur d'Alene Basin ROD and related issues, see EPA Fact Sheet: "Record of Decision Issued for Cleanup of Operable Unit 3," (Sept. 2002).

³⁵⁶ COEUR D'ALENE BASIN ROD, supra note 1, at § 12.1.

solution in soils had to be reduced to below 700 ppm in order to meet goals for preventing elevated blood-lead levels. See COEUR D'ALENE BASIN ROD, supra note 1, at 7-8 and tbls. 7.1-12a&b.

areas, and campgrounds.³⁵⁸ Institutional controls such as inspections, record keeping, and construction permitting will be established to prevent future exposures to contaminated soils left in place.³⁵⁹

To ensure the effectiveness of these actions, an intervention program will be established to monitor lead levels inside houses, continue blood-lead screening, and provide counseling on personal health and hygiene. Where appropriate after completion of yard cleanups, a program of lead paint abatement (via state program) and interior house cleaning will be employed. As a last resort, for circumstances including high likelihood of recontamination, relocation may be discussed with individual residents and property owners. See

Beyond responses for soil contamination, the selected remedy also addresses metals such as arsenic, lead, and cadmium in drinking water wells. Property owners with drinking water supplies found to exceed drinking water standards will be connected to public water supply systems, if available. Where public water supplies are not available, point-of-use treatment or new groundwater wells may be provided. 364

A final concern for protection of human health is consumption of contaminated fish and other aquatic food sources, including water potatoes. To address these potential risks, the selected remedy will provide education and health advisories to fishermen and other potentially affected parties. The ROD also includes monitoring of fish tissues and anticipates eventual reductions in

⁵⁵⁸ COEUR D'ALENE BASIN ROD, supra note 1, at 12-8 to 12-9.

³⁵⁹ Id. at 12-12. The model for the institutional controls in the Basin will be the Institutional Controls Program (ICP) in the Box, carried out over the years by the local Panhandle Health District with funding from the mining companies. See Upstream Mining Group Consent Decree (1994) at Attach. D.

⁵⁶⁰ COEUR D'ALENE BASIN ROD, supra note 1, at 12-9 to 12-10.

³⁶¹ *Id.* at 12-10. Interior cleaning could include hard surfaces, attics, basements, and ventilation systems, as well as new carpets and soft furniture, depending on the conditions of each residence. *Id.* at 9-6.

⁵⁰² Id. at 12-11. CERCLA specifically authorizes permanent relocation as a remedial response. 42 U.S.C. § 9601(24) (2002) (definition of "remedy" or "remedial action"). Removal actions are authorized to provide for temporary housing. § 9601(23).

⁵⁶³ COEUR D'ALENE BASIN ROD, supra note 1, at 12-11. For drinking water standards, see tbl. 8.1-2. The standards include a new Maximum Contaminant Level (MCL) for arsenic, reduced from 50 to $10 \,\mu/l$. 66 Fed. Reg. 7061 (Feb. 22, 2002). While the new standard does not become effective for community water systems until 2006, EPA determined that it was relevant and appropriate for purposes of providing alternative water supplies under the Coeur d'Alene Basin ROD. See COEUR D'ALENE BASIN ROD, supra note 1, at 13-12.

³⁶⁴ COEUR D'ALENE BASIN ROD, supra note 1, at 12-1.

metals in fish as a result of ecological components of the selected remedy.³⁶⁵

2. Ecological Protection

The selected remedy for ecological protection in the Coeur d'Alene Basin consists of prioritized cleanup actions to be implemented within a period of approximately 30 years. In conjunction with stakeholders, ³⁶⁶ priority issues were identified as dissolved metals (principally zinc and cadmium) in rivers and streams, posing particular threats to fish; lead in floodplain soils and sediments, causing harm to waterfowl and other ecological receptors; and particulate lead in surface waters, creating a continual threat of recontamination in feeding areas in the Lower Basin and recreational areas down to the Spokane River.

To address dissolved metals including zinc in rivers and streams, the selected remedy identifies a whole host of specific actions for the South Fork of the Coeur d'Alene River as well as its tributaries of Ninemile Creek, Canyon Creek, and Pine Creek. Such actions include removal or capping of tailings piles and stabilization of mine dumps, stream banks and streambeds. Actions may also include construction and operation of treatment ponds to capture tributary water and prevent metals from flowing into the South Fork. See

To address lead in floodplain soils and sediments, specific areas of the Lower Basin were identified for cleanup,³⁶⁹ based on high use for waterfowl feeding and low potential for recontamination. Cleanup may be achieved through excavating contaminated material for transport to and disposal in an upland repository. Alternatively, ecological protection may also be achieved through consolidating material within the particular lake or marsh being cleaned up, through capping contaminated material with a layer of clean soil, or through soil amendments to reduce the bioavailability

³⁶⁵ Id. at 12-11,

³⁶⁶ See supra note 232 and accompanying text (Consensus Process).

³⁶⁷ See COEUR D'ALENE BASIN ROD, supra note 1, at § 12.2.1.

⁵⁶⁸ In particular, Canyon Creek currently contributes approximately 20 to 25 percent of metals load to the South Fork. The ROD establishes a goal to reduce at least 50% of this load, possibly by capturing and treating the creek flow with a treatment pond. Before construction of such a pond, bench-scale and pilot testing will be performed, putting pond construction off at least several years. *Id.* at 12-25 to 12-28.

³⁶⁹ See id. fig. 12.2-14 (map of "Lower Basin Cleanup Action").

of metals to ecological receptors.³⁷⁰ Cleanup actions may be extended to areas currently used for agriculture, in cooperation with the landowner, to provide additional safe feeding habitat.³⁷¹

To address particulate lead in surface water, the erosion of riverbank and riverbed sediments must be controlled. Bank stabilization will be prioritized based upon the degree of active erosion and the concentration of metals in bank sediments. Additional remedial actions for riverbanks and floodplains may include bioengineering or excavation. For riverbeds, cost-effective methods for sediment removal must be evaluated and tested before being put to broader use in the Basin. ³⁷²

3. Spokane River

For the Spokane River in Washington, the selected remedy includes the final remedy for protection of human health and the environment within a 16-mile stretch between the state line and Upriver Dam, above the City of Spokane. The selected remedy includes a combination of access controls, capping, and removals to address ten shoreline sites and an underwater area behind the dam. Recognizing the possibility of recontamination, the selected remedy suggests that some areas along the Spokane River may need periodic follow-up contaminant removal or maintenance for clean-soil covers. Overall, the Spokane River environment is expected to improve most through the other actions in the ROD selected to address mining contamination in or entering the Coeur d'Alene River and Coeur d'Alene Lake.

For all of these efforts, running a tab around \$360 million, what will we get? We will get a complete cleanup of residential communities in the Basin, including schoolyards, roadways, and commercial properties. More than 900 residential yards may be excavated and replaced. Some 400 more yards could receive new

⁵⁷⁰ Id. at 12-31. See supra note 308 and accompanying text (soil amendments).

³⁷¹ COEUR D'ALENE BASIN ROD, supra note 1, at 12-31.

³⁷² See id. at 12-33 to 12-35.

⁵⁷³ See id. at 12-45 and fig. 12.4-1. Based on the results of a 1998 screening effort for beaches and wading areas, no actions were determined necessary along the Spokane River within the State of Idaho. *Id.* at 12-44.

⁵⁷⁴ Sediments behind the dam appear contaminated with PCBs, as well as metals, and remain the focus of a separate investigation by the Washington State Department of Ecology. *Id.* at 12-44 to 12-45.

³⁷⁵ Id.

³⁷⁶ Id.

³⁷⁷ Id. tbl. 12.1-1.

plantings.³⁷⁸ Approximately 100 to 200 houses might receive new carpets or interior cleaning.³⁷⁹ Beyond the residential communities, human health will be protected at 31 prioritized recreational areas in the Lower Basin through capping or excavation of contaminated soils.³⁸⁰ Through all this, the selected remedy should achieve the national goal for allowing no more than a five percent probability that a typical child will exhibit an elevated blood-lead level.³⁸¹

In terms of ecological protection, the selected remedy would reduce zinc loading from the Upper Basin by 580 pounds per day. It re-establishes a fishery in Ninemile Creek, enhances spawning and rearing in Pine Creek, and improves a migratory corridor through the South Fork. The selected remedy provides some 4,500 acres of safe waterfowl feeding areas within wetlands and lakes in the Lower Basin, including Thompson Lake, Bare Marsh, Lane Marsh, and Anderson Lake. It stabilizes 33 miles of Coeur d'Alene River bank, reducing particulate lead contribution and providing riparian habitat. It removes an estimated 1.3 million cubic yards of contaminated riverbed sediments, leading to improvements in water quality in the Spokane River. All told, while the remedy might not erase the ecological impacts of a hundred years of mining activities, it could vastly improve the health and safety of humans, fish, and wildlife in the Coeur d'Alene Basin. This is what Superfund can do, if given the chance.

V. CONCLUSION

By the time the Coeur d'Alene River Basin ROD, supported by its voluminous administrative record and multiple letters of concurrence, ³⁸⁷ received final EPA signature in Seattle on

³⁷⁸ *Id*.

³⁷⁹ Id. at 9-6.

³⁸⁰ Id. at 12-9.

See id. at 12-14.

³⁸² *Id.* at 12-40.

⁵⁸³ Id., fig. 12.2-16.

⁵⁸⁴ Id. at 12-30 to 12-32, fig. 12.2-1.

³⁸⁵ *Id.*, at 12-41.

⁵⁸⁶ Id. This volume, while significant, still only represents six percent of the 20.5 million cubic yards of contaminated riverbed sediment in the Lower Basin. Id.

S87 The Coeur d'Alene Basin ROD received written concurrence from the State of Idaho, State of Washington, Coeur d'Alene Tribe, the Spokane Tribe of Indians, the U.S. Department of the Interior, and the U.S. Forest Service. While concurring, parties also noted a number of remaining concerns. See, e.g., letter from Tom Fitzsimmons, Director,

September 12, 2002,^{\$88} the occasion was almost overlooked by the public.^{\$89} The real newsworthy event had occurred a month earlier in Coeur d'Alene. August 13, 2002, marked something of a ceremonial end to the public rancor pervading the four years since EPA stepped outside the Box with the RI/FS for the Basin. On that date, with public fanfare, EPA Administrator Christie Whitman visited the Coeur d'Alene Basin and signed a memorandum of agreement (MOA) with the State of Idaho, Coeur d'Alene Tribe, Washington Department of Ecology, and others, to confirm the role of the Basin Environmental Improvement Project Commission in coordinating Basin cleanup. ^{\$90}

State legislation creating the Basin Commission specifically charged it with implementing the Coeur d'Alene Basin ROD through representatives of the State of Idaho, three northern Idaho counties, the State of Washington, the Coeur d'Alene Tribe, and the federal government. ³⁹¹ While recognizing certain limitations on federal participation in a state function, ³⁹² the MOA

State of Washington Department of Ecology, to Mr. John Iani, Regional Administrator, U.S. Environmental Protection Agency 2 (Sept. 5, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) ("the interim remedy may not achieve Washington surface water quality standards for the metals of concern in the Spokane River"); letter from Dirk Kempthorne, Governor, State of Idaho, to The Honorable Christine Todd Whitman, Administrator, U.S. Environmental Protection Agency (Sept. 9, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington) ("points of disagreement" include duration of cleanup and additional sediment removal). See generally Karen Dorn Steele, Idaho Lends Tepid Support to Basin Plan, IDAHO SPOKESMAN-REVIEW, Sept. 10, 2002, at B1.

³⁸⁸ The Coeur d'Alene Basin ROD was signed in the EPA Region 10 office by Regional Administrator John Iani. Contrary to suspicions that all EPA decisions are made in the other Washington, the authority to select remedial actions under CERCLA has been delegated from the President to the EPA Administrator, and thence to the individual EPA Regional Administrators. See Exec. Order No. 12,580, Sec.1(g), 52 Fed. Reg. 2923 (Jan. 23, 1987) (delegation from President to EPA Administrators); EPA Delegation No. 14-2 (Nov. 8, 2001) (delegation to Regional Administrators).

⁵⁸⁹ Of course, there was still some acknowledgement in the regional media. See, e.g., John Wiley, EPA Signs Coeur d'Alene Basin Cleanup, SEATTLE POST-INTELLIGENCER, Sept. 13, 2002, at R3

See Memorandum of Agreement for the Basin Environmental Improvement Project Commission (Aug. 13, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington). For a colorful review of the day's events, featuring a ceremonial sip of water from Coeur d'Alene Lake, see Karen Dorn Steele, Whitman Toasts Accord, IDAHO SPOKESMAN-REVIEW, Aug. 14, 2002, at B1.

³⁹¹ Basin Environmental Improvement Act, IDAHO CODE § 39-8101 et seq. (2002). "The commission shall adopt as the basin project workplan a record of decision approved pursuant to the federal comprehensive environmental responsibility [sic] compensation and liability act of 1980 (CERCLA)..." § 39-8106(5).

³⁹² See MOA, supra note 390, at sec. VII (citing limitations under CERCLA, federal ethics rules, and the Appointments Clause of the U.S. Constitution). To avoid any legal

nonetheless anticipates an active federal presence on the Basin Commission, represented by the EPA Regional Administrator. In collaboration with the Basin Commission, EPA can meet its continuing CERCLA responsibilities for the Basin while reflecting state or local knowledge and priorities through design and sequence of remedial actions. 394

The state legislation provides the Basin Commission with broad powers including authority to acquire property, to enter contracts, to design and construct remedial actions consistent with the ROD, and to accept donations from parties including the United States and private entities or individuals. This raises perhaps the biggest question of all for cleanup of the Coeur d'Alene Basin: how will it be funded? A primary principle of Superfund says that polluters should pay, and most of the time they do. This principle applies even in the context of "mega-sites." Toward that end, EPA pursued its claims against mining companies in the Coeur d'Alene

uncertainties, the MOA specifically reserved to the parties "all rights, powers, and remedies now or hereafter existing at law or in equity, or by statute or otherwise...." Id.

³⁹³ See EPA News Release, Whitman Commits EPA to Partnership for Historic Clean-up Agreement (Aug. 13, 2002) (noting that the EPA Administrator, on behalf of the President, designated the EPA Regional Administrator to represent the federal government as a member of the Basin Commission).

See RESPONSIVENESS SUMMARY, supra note 318, at 2-5. EPA's continuing CERCLA responsibilities include ensuring that remedial actions implemented in the Basin meet the requirements of the ROD and CERCLA. A number of environmental groups, including the Sierra Club and U.S. PIRG, protested the Basin Commission MOA, complaining that it represented an illegal and "dangerous precedent" for transfer of Superfund authority. Letter from Debbie Sease, Legislative Director, Sierra Club, Grant Cope, U.S. PIRG, et al., to The Honorable Patty Murray, United States Senate, and The Honorable Maria Cantwell, United States Senate (Sept. 30, 2002). EPA denied that the MOA was illegal, pointing out that EPA expressly reserved all of its rights and authorities existing under law. Letter from L. John Iani, EPA Regional Administrator, to The Honorable Patty Murray, United States Senate, and The Honorable Maria Cantwell, United States Senate 3 (Nov. 27, 2002) (on file with EPA Region 10 Superfund Records Center, Seattle, Washington). See generally Karen Dorn Steele, Groups Say Coeur d'Alene Basin Pact Illegal, IDAHO SPOKESMAN-REVIEW, Oct. 1, 2002 at B1.

³⁹⁵ IDAHO CODE § 39-8106(11) (2002).

Consistent with the "polluter pays" principle, approximately 73% of remedial actions between 1991 and 1999 were funded by PRPs. RFF REPORT, supra note 13, at 43, tbl. 3-2. The polluter pays principle has proven politically popular and been affirmed by the Bush Administration. See Whitman, supra note 41 ("the president and I both believe strongly in the principle that 'the polluter pays'.").

³⁹⁷ For implementation of the Hudson River PCBs ROD, with an estimated cost of \$460 million, EPA Region 2 is looking toward General Electric. Kirk Johnson, *Dredging the Upper Hudson River, Without Slinging the Mud*, N.Y. TIMES, April 21, 2002 at 1-33. For remediation within the Clark Fork Basin sites, including the Butte area and the Anaconda Smelter, ARCO has reportedly spent close to \$700 million. *See* Karen Dorn Steele, *Superfund Revived Butte*, IDAHO SPOKESMAN-REVIEW, July 28, 2002 at A1.

Basin all the way through a trial that began on January 22, 2001, and finally concluded on July 30, 2001. Sys As of June 2003, no ruling on the case had been issued. However, since the case was filed in 1996, the assets of the two remaining defendants may have diminished significantly, 400 so that a judgment for the United States would still be limited by the defendants' ability to pay. For cases where the polluter cannot pay for the complete cost of cleanup, Congress established the Superfund trust fund. Over the years, the Superfund trust fund has supported cleanup at many major mining sites including the Summitville Mine in Colorado⁴⁰¹ and the Bunker Hill Box within the Coeur d'Alene Basin.⁴⁰² However, the taxes creating the Superfund, imposed on corporations including oil and chemical industries, expired in 1995 and the Superfund may run dry after 2003 without general appropriations. Beyond the Superfund, Congressional line-item appropriations remain possible. Consistent with the Basin Commission authority to accept donations, voluntary funding or services may also be applied in the Funding for cleanup of the Coeur d'Alene Basin will undoubtedly depend on a variety of sources, including federal,

⁵⁹⁸ See supra note 165 and accompanying text (trial length).

Through the trial in 2001, the United States only asked the district court to rule on the matter of defendants' liability under CERCLA for response costs and natural resource damages. If the judge rules in favor of liability, a second phase of trial could determine the monetary amount of liability.

⁴⁰⁰ "Strongly influenced" by depressed global prices of metals, at least one of the Coeur d'Alene Basin mining company defendants experienced net losses through the 1990s. HECLA MINING CO., ANNUAL REPORT FOR THE FISCAL YEAR ENDED DECEMBER 31, 2000 3-4. See also Elaine Porterfield, Ruston Wary of ASARCO's Plan, SEATTLE POST-INTELLIGENCER, Jan. 10, 2003, at B1, 4 (company official quoted, "We're a copper company and we're struggling to stay alive").

into the Alamosa River of southwestern Colorado, killing aquatic life and threatening downstream farmland. The site was listed on the NPL in 1994, and so far, an estimated \$155 million has been spent. With Fund financing, water quality has improved considerably through such actions as backfilling mine waste into existing pits, plugging two mine adits, constructing a 90-million gallon holding pond for mine water treatment, and revegetating 250 acres of disturbed lands. See EPA Region 8 Fact Sheet: "Summitville Mine" (April 2002) available at http://www.epa.gov/region8/superfund/sites/co/sville.html.

⁶⁰² See supra note 68 and accompanying text (Fund-lead cleanup within the Box). Interestingly, while Superfund has proven fairly successful in making polluters pay for cleanup, one noted exception is cleanup at mining sites, where PRPs have funded only about 39% of remedial actions. RFF REPORT, supra note 13, at 43.

⁴⁰⁵ See Editorial, Funding Superfund, WASH. POST, July 4, 2002 at A22 (endorsing reinstatement of tax).

state, and private contributions. To some extent, this approach has already begun. 404

While the ROD selects remedial actions to be carried out over 30 years, prioritized funding for community cleanups could allow many early, tangible benefits including economic redevelopment. One cannot doubt or deny the personal economic hardships of local residents in places like the Silver Valley. The roots of such hardships, however, could offer grounds for competing theses. Is it the "stigma" of Superfund, property values and business investments depressed by misapplied fears of liability? Is it the stigma of pollution itself, contaminated areas making unattractive places to live and work? Is it the controversy sometimes engendered by Superfund actions, vocal critics attracting hyperbolic headlines? Or is it simply the nature of a local economy based on the extraction of natural resources?

If the only thing local economies had to fear was fear of liability, the solution may be education—an objective this Article and other efforts may further by explaining to the public how CERCLA has changed and how it now applies in practice. If, however, there are real concerns of contamination, the only solution can be moving forward quickly with cleanup. By moving forward with cleanup, discrete areas can be completed and deleted from the NPL. By moving forward with cleanup, communities and surrounding areas can regain recognition as pleasant places to work and play. Cooperative cleanup efforts, such as through the Basin Commission, can help resolve otherwise divisive controversies. Through the cleanup process, as seen in the work inside the

One long-time Idaho resident plainly observed at a public meeting on the Proposed Plan, "Let's face it, folks. The greatest damaging economic impact in the Silver Valley is the price of silver. It's not economically feasible to take it out of the ground. If it were, if silver were above five dollars an ounce, I think you would see some activity there." Coeur d'Alene Basin Meeting Tr., Coeur d'Alene Idaho, 118 (Nov. 15, 2001) (comments of Buell Hollister).

Removal actions conducted throughout the RI/FS process brought nearly \$7 million into the Basin. COEUR D'ALENE BASIN ROD, *supra* note 1, at tbl. 2.3-1 (91 residential yards and 7 schools or day cares cleaned up between 1997 and 2001). Settlement with Coeur d'Alene Mines Corporation in 2001 established an account with more than \$3.8 million available for Basin cleanup and restoration. *See* Coeur Settlement, *supra* note 174. At the behest of the Idaho Congressional delegation, EPA's budget for fiscal year 2002 included \$2,000,000 designated for the Coeur d'Alene Basin Commission "to carry out pilot program for environmental response, natural resource restoration and related activities." *See* S. REP. No. 107-43, at 77 (July 20, 2001). For FY 2003, \$1.8 million was designated to continue this program. H.I.R. 2 at 1444 (Feb. 13, 2003).

Bunker Hill Box, 406 jobs will be created, with millions of dollars pouring into local economies and local workers trained with new skills. 407 In the end, cleanup can allow new economic opportunities through tourism and other industries independent of non-renewable resources.

Cleanup for the Coeur d'Alene River Basin, with all its attendant benefits for human health and the environment as well as for the economy, will result directly from Superfund remedial authority. Voluntary actions or disconnected efforts under other statutes could not provide the comprehensive environmental response of the Comprehensive Environmental Response, Compensation, and Liability Act. While Superfund may never be embraced in certain circles or admired for its legislative clarity, the program has adapted through reforms and amendments. Along the way, Superfund has proven its ability to address contaminated areas beyond the oozing landfills. The story of the Coeur d'Alene Basin tells that pollution may be staggering and critics confounding. Yet if myths can be transcended, and adequate funding found, Superfund stands ready to remedy even the nation's mega-sites of landscapes and watercourses.

Coeur d'Alene Basin Meeting Tr., Coeur d'Alene Idaho, 118-119 (Nov. 15, 2001) (Hollister comments recalling relief brought by New Deal of FDR Administration). Reflecting similar consideration, Governor Kempthorne of Idaho expressed his vision for a "30-year public works project for environmental improvement of the Coeur d'Alene Basin." Coeur d'Alene Hearing Tr., supra note 226, at 34.

⁴⁰⁶ In 2002, the State of Idaho reported that the cleanup work inside Box "contributed \$76.9 million in local wages, commercial property improvements, supplies and services," and that the area addressed by that cleanup "is now positioned for re-vitalization and economic development." State of Idaho Progress Report, *supra* note 33, at 1. For an excellent review of the economic benefits from the Superfund cleanup inside the Box, see Karen Dorn Steele, *Superfund's Silver Lining*, IDAHO SPOKESMAN-REVIEW, July 28, 2002, at D1.