

DIGGING OUT OF THE HOLES WE'VE MADE:
HARDROCK MINING, GOOD SAMARITANS,
AND THE NEED FOR COMPREHENSIVE ACTION

*Bart Lounsbury**

TABLE OF CONTENTS

I.	<i>Introduction</i>	150
II.	<i>Good Samaritan Legislation</i>	152
	A. <i>Introduction</i>	152
	B. <i>Should Environmental Laws Be Waived for Good Samaritan Cleanups?</i>	153
	1. <i>CERCLA and the Clean Water Act</i>	153
	2. <i>The National Environmental Policy Act (NEPA)</i>	154
	a. <i>Analysis of Project Alternatives and Environmental Impacts</i>	154
	b. <i>Public Participation</i>	157
	C. <i>Inherent Risks in Mine Remediation</i>	160
	D. <i>Allocations of Authority and Concerns about Political Process</i>	161
	E. <i>Mining Companies as Good Samaritans</i>	164
	1. <i>Improving the Mining Industry's Corporate Image</i>	164
	2. <i>Extracting Valuable Materials from Historic Mine Residue</i>	165
	3. <i>Avoiding Liability Through Good Samaritan Cleanups</i>	168
	F. <i>Conclusion</i>	170
III.	<i>Alternatives Through Existing Legal Processes</i>	172
	A. <i>Introduction</i>	172
	B. <i>CERCLA Liability Exceptions</i>	173
	1. <i>The "Good Samaritan Provision"</i>	174
	a. <i>Applicability in the Context of Abandoned Mines</i> ..	174
	b. <i>EPA's Model Good Samaritan Comfort/Status Letter</i>	175
	c. <i>EPA's Model Good Samaritan Settlement Agreement</i>	177
	d. <i>The Past and Future of Good Samaritan Settlement Agreements</i>	179
	2. <i>Other CERCLA Liability Relief Provisions</i>	181
	a. <i>State and Local Government Acquisition of Property</i>	181

* J.D., Harvard Law School, 2007. Winner of the Harvard Environmental Law Review Student Writing Competition. The author would like to thank Professor Joseph Singer for his invaluable guidance during the writing of this article.

b.	<i>“Bona Fide Prospective Purchasers”</i>	182
C.	<i>Clean Water Act Liability Exceptions</i>	183
1.	<i>Diverting Clean Water Around Abandoned Mines</i>	184
2.	<i>Reducing Contaminant Burdens and the Interpretation of “Discharge”</i>	185
3.	<i>Conducting Onsite Remediation Activities</i>	187
D.	<i>Conclusion</i>	189
IV.	<i>Legislative Alternatives to Address Mine Contamination</i>	190
A.	<i>Introduction</i>	190
B.	<i>Taxation and Fee Proposals</i>	194
1.	<i>Choosing or Creating a Fund</i>	195
a.	<i>Using the Superfund: Benefits and Drawbacks</i> ...	195
b.	<i>Creating a New Abandoned Hardrock Mine Reclamation Fund</i>	197
2.	<i>Finding Money for Cleanups</i>	199
a.	<i>Taxes and Royalties on Mineral Production</i>	199
b.	<i>Taxes on Post-Extraction Products</i>	201
c.	<i>Expected Revenues from Hardrock Mineral Taxes or Royalties</i>	202
d.	<i>Congressional Appropriations and Other Funding Mechanisms</i>	203
C.	<i>Mining Law Reform</i>	203
1.	<i>Environmental Protection Standards</i>	206
a.	<i>Failings of the Clean Water Act</i>	206
b.	<i>RCRA’s Loophole for Mining</i>	207
c.	<i>FLPMA’s Standard for Federal Land Management</i>	208
d.	<i>Reforms Needed to Ensure Environmental Protection at Mining Sites</i>	209
2.	<i>Patenting Claims</i>	210
V.	<i>Conclusion</i>	213

I. INTRODUCTION

Abandoned hardrock mines dot the western landscape. In some places, the only sign of their existence is an inconspicuous dark hole in a canyon wall; in other places, their gaping pits terrace the ground like gargantuan amphitheatres, ready to seat the Sears Tower with ease. These mines have yielded billions of tons of ore and massive quantities of valuable metals and minerals, from gold and silver to zinc, lead, and even asbestos. They drove much of the exploration of the western United States and nowadays provide some of the region’s highest-paying blue-collar jobs.¹ But their legacy is

¹ In 2005, the average mining job in Nevada paid \$62,712 per year, while the average in all industries statewide was only \$38,740. JOHN L. DOBRA, PH.D., NEVADA MINING ASSOC.,

also written in the thousands of miles of acidified streams and innumerable piles of toxic tailings that threaten the health of humans and ecosystems across the West. Remediation of abandoned hardrock mines has proceeded slowly due to high costs, non-existent or hard-to-find owners and operators, and a dearth of willing volunteers. Even industry representatives do not deny the problem: "Industry wants to see abandoned mines cleaned up. After all, they are our dirty pictures, our Achilles Heel. Mining opponents use pictures of historic, unreclaimed abandoned mines to foment public opposition to new mine proposals. Industry wants to see [these sites] remediated and reclaimed as much as anyone. . . ." ² What can be done, though, to ensure that abandoned mines receive the cleanups they so desperately need?

In 2006, Colorado Senator Ken Salazar proposed S. 1848, the "Cleanup of Inactive and Abandoned Mines Act," ³ while the Bush Administration proposed S. 2780, the "Good Samaritan Clean Watershed Act." ⁴ Although neither bill made it through the Senate, they were the latest iterations of the "Good Samaritan legislation" proposals that members of Congress have tried to enact over the past decade or so. Both sought to enable Good Samaritans—parties who did not create mining waste at a site and who are not legally required to clean it up—to assist in undertaking the massive challenge of remediating contamination at abandoned mines by reducing the liability standards imposed by federal environmental statutes and, in the case of S. 1848, state, local, and tribal laws, as well. Supporters of these bills claimed that the current liability structure of environmental laws defeats Good Samaritans by threatening to saddle them with enormous costs and responsibilities for contamination that they did not generate.

In Part II of this article, I will discuss the advantages and the shortcomings of Good Samaritan legislation as a solution to the problem of remediating abandoned mines. I will use S. 1848 and S. 2780 as representative examples of such legislation, highlighting in particular both the dangerous incentives that these bills would potentially have created and the risks that could accompany wholesale liability waivers of environmental protection laws. In Part III, I will discuss whether federal law already contains sufficient liability relief provisions to address the concerns of Good Samaritans.

ECONOMIC OVERVIEW OF THE NEVADA MINING INDUSTRY 6 (2005), available at http://www.nevadamining.org/position/economy/report/2005_economic_overview.pdf.

² *Opportunities for Good Samaritan Cleanup of Hardrock Abandoned Mine Lands: Hearing Before the Subcomm. on Energy and Mineral Resources of the H. Comm. on Natural Resources*, 109th Cong. 74 (2006) (statement of Laura Skaer, Executive Director, Northwest Mining Association) [hereinafter Skaer Statement].

³ The all-inclusive term for the mines in question is "inactive and abandoned mines," or "IAMs." Some commentators also refer to these sites as "abandoned mine lands," or "AMLs." For the sake of readability and simplicity, I will generally use the term "abandoned mines" throughout this paper. It is worth noting, though, that in some situations a mine may be inactive but not technically abandoned.

⁴ Cleanup of Inactive and Abandoned Mines Act, S. 1848, 109th Cong. (as reported to Senate, Sept. 27, 2006) [hereinafter S. 1848]; Good Samaritan Clean Watershed Act, S. 2780, 109th Cong. (2006) [hereinafter S. 2780].

I will also address the possibility of utilizing administrative procedures and orders that could be tailored to specific Good Samaritan cleanup efforts, such as model documents recently released by the U.S. Environmental Protection Agency (“EPA”).

The central trouble with any solutions attempting to encourage Good Samaritan actions is that there are few Good Samaritans with adequate funding and expertise. By focusing on enabling Good Samaritan cleanups, Congress diverts attention from the larger underlying problems: insufficient funds available for reclaiming abandoned mines and ongoing and future pollution from currently active mines. In Part IV, I will consider these overarching issues of reclamation funding and federal control over hardrock mining operations. Ultimately, we need comprehensive action by Congress and administrative agencies to ensure both that abandoned mine cleanups receive the funds they require and that mining companies do not leave in their wake a ruinous mess of new abandoned mines.

II. GOOD SAMARITAN LEGISLATION

A. Introduction

“Good Samaritan bills” that have come before Congress in recent years were designed to free Good Samaritans from the strictures of environmental laws, whose far-reaching liability and permitting schemes deter remediation efforts by public interest-minded entities. The bills were intended to accomplish this goal by enabling EPA or similar state authorities to waive compliance with environmental laws for Good Samaritans at qualifying mine sites. In one sense, this seems counterintuitive—why should we ignore our pollution-prevention statutes for projects at polluted sites? Supporters of these bills, however, have been quick to claim that laws like the Comprehensive Environmental Response, Liability, and Compensation Act (“CERCLA”) and the Clean Water Act (“CWA”) impose such severe responsibilities on Good Samaritans that they scarcely dare to set foot near an abandoned mine for fear of incurring never-ending liability.⁵ The sponsors of the bills have maintained that because Good Samaritan legislation would apply only to “innocent” parties and require at least some environmental improvement, there is no need to impose on such parties any liability for pollution.⁶ This concept has logical appeal, but it also potentially opens the door to ill-conceived or underhanded projects that could curtail public involvement and leave sites more contaminated than before.

⁵ *Oversight Hearing to Consider Whether Potential Liability Deters Abandoned Hard Rock Mine Clean-Up: Hearing Before the S. Comm. on Environment and Public Works, 109th Cong. (2006)* (statement of Sen. Ken Salazar) [hereinafter Salazar Statement] (on file with the Harvard Environmental Law Review).

⁶ *See id.* (“[I]t is more important to clean up the site than it is to point fingers.”).

B. *Should Environmental Laws Be Waived for Good Samaritan Cleanups?*

1. *CERCLA and the Clean Water Act*

CERCLA and the CWA are the principal laws that commentators and Good Samaritans mention when discussing the difficulty of encouraging mine remediation by non-labile parties.⁷ These federal statutes impose what can be burdensome liability and permitting requirements for cleanups. Under CERCLA, liability is joint, several, strict, and retroactive; it extends to parties classified as current owners or operators, owners or operators at the time of disposal, generators, arrangers, or transporters.⁸ As a result, a Good Samaritan who, for example, removes a small pile of toxic mine tailings that are leaching into a river and caps them elsewhere might become liable for remediating the entire site, including all hazardous residue generated by historic mining operations.⁹ The financial implications of such liability can be devastating. CERCLA cleanups even at “non-mega” mine sites routinely run up seven-figure tabs (one Congressional Research Service study estimated the average cost to be \$22 million), and reclamation of “mega” sites can cost hundreds of millions of dollars.¹⁰ Given the potential for this sort of liability, it is understandable that Good Samaritans would refrain from action in order to avoid the repercussions of CERCLA.

Focusing on permitting rather than on direct liability, the CWA can require Good Samaritans to obtain a National Pollutant Discharge Elimination System (“NPDES”) permit for mine water discharges.¹¹ NPDES permits require that discharges be treated or managed in order to meet and maintain applicable water quality standards,¹² generally an expensive proposition. Since mines often release pollutants into “waters of the United States” and certain parts of mines constitute “point sources” for purposes of the CWA, inactive and abandoned mines frequently come within the purview of the NPDES permitting regime.¹³ Good Samaritans thus face the prospect of be-

⁷ See, e.g., *Oversight Hearing to Consider Whether Potential Liability Deters Abandoned Hard Rock Mine Clean-Up: Hearing Before the S. Comm. on Environment and Public Works*, 109th Cong. (2006) (statement of Stephen L. Johnson, Administrator, U.S. Environmental Protection Agency) [hereinafter Johnson Statement] (on file with the Harvard Environmental Law Review).

⁸ See 42 U.S.C. § 9607 (2000). For a brief explanation of CERCLA’s liability scheme, see Jeffrey A. Kodish, *Restoring Inactive and Abandoned Mine Sites: A Guide to Managing Environmental Liabilities*, 16 J. ENVTL. L. & LITIG. 381, 388-89 (2001).

⁹ For a short description of Good Samaritan liability under CERCLA, see S. REP. NO. 109-351, at 8 (2006).

¹⁰ Jonathan L. Ramseur & Mark Reisch, *Superfund: Overview and Selected Issues*, at 17 (May 17, 2006) (Congressional Research Service Report No. RL33426).

¹¹ Of course, permittees who fail to abide by the terms of their CWA permits face enormous financial penalties, so ultimately liability (though indirect) is a major problem under the CWA, as well as under CERCLA.

¹² 33 U.S.C. § 1342 (2000).

¹³ See *id.* §§ 1311(a), 1362(7), (12), (14); Kodish, *supra* note 8, at 401-03.

coming responsible for acquiring a NPDES permit and perpetually treating wastewater if they work at a mine site whose discharges do not meet the applicable water quality standards, even though the Good Samaritans' actions may have reduced the overall contaminant burden in the water.¹⁴

With such liability dangers under CERCLA and the CWA, the proponents of bills like S. 1848 and S. 2780 do have legitimate concerns that some environmental statutes defeat Good Samaritan cleanups of mine waste. Nonetheless, as discussed below, Good Samaritan cleanups themselves are not environmentally riskless. So, there remains an unanswered question of whether the waiver of environmental laws will encourage too many partial cleanups by ineffectual Good Samaritans, potentially leaving sites in worse condition and without any responsible parties to hold liable for corrective remediation.

2. *The National Environmental Policy Act (NEPA)*

S. 1848 and S. 2780 would have waived NEPA compliance for any actions related to Good Samaritan cleanups.¹⁵ Citizens' groups and public interest environmental lawyers were concerned with this aspect of the bills, as there are two principal dangers inherent in waiving NEPA review. First, plans for Good Samaritan remediation of mine sites may not undergo any real analysis of project alternatives and environmental impacts.¹⁶ This sort of analysis provides permitting authorities with the information necessary to determine whether a proposed cleanup will accomplish its objectives better than any alternatives could and whether the project has the potential to worsen the site's overall conditions. Second, without NEPA review, members of the public may not have sufficient opportunities to discuss their concerns and suggestions, even though the public is, in theory, the principal beneficiary of Good Samaritan remediation projects.

a. *Analysis of Project Alternatives and Environmental Impacts*

The implicit assumption in bills like S. 1848 and S. 2780 seems to be that because the bills intend to allow only environmentally favorable projects to move forward, there is no need to conduct rigorous project alternative and environmental impact analyses.¹⁷ After all, if the proponents of a mine cleanup anticipate that its effects will be positive, why bother to ex-

¹⁴ See *Barriers to the Cleanup of Abandoned Mine Sites: Hearing Before the Subcomm. on Water Resources and Environment of the H. Comm. on Transportation and Infrastructure*, 109th Cong. 61 (2006) (statement of Patricia Limerick, Ph.D., Professor, University of Colorado, Boulder) [hereinafter Limerick Statement] ("A Good Samaritan has the choice of achieving the highest water quality standards or of not undertaking the project at all.")

¹⁵ S. 1848 § 3(f)(3); S. 2780 § 3(g)(2).

¹⁶ As discussed below, NEPA requires that agencies prepare "a detailed statement . . . on (i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, [and] (iii) alternatives to the proposed action . . ." 42 U.S.C. § 4332(2)(C) (2000).

¹⁷ S. REP. NO. 109-351, at 16-17 (2006).

pend time and money on a study of those effects? Under NEPA, however, this beguiling argument would not allow federal agencies to waive impact review. The Council on Environmental Quality ("CEQ") has defined "effects" that require study to include "those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial."¹⁸ If we recognize that environmental impacts are frequently speculative and likely to have positive and negative aspects, we can see the sense in CEQ's rule. Mine remediation is, unfortunately, exactly the type of activity that deserves such treatment because abandoned mine cleanups are far from guaranteed to produce beneficial results, despite the best intentions of the party undertaking the remediation.

The complexity and unknown conditions that characterize many abandoned mines create significant risk of environmental damage during reclamation. A former executive director of the Hazardous Material Policy Council at the U.S. Department of Agriculture highlighted this in testimony before the Senate Committee on Environment and Public Works:

[S. 1848 and S. 2780] may be an attempt to hide the true nature of cleanup challenges with a gross simplification or disregard for the science and engineering needed to insure that we end up with environmental improvement. Effective cleanup actions require a professional honest intentioned approach to the problem, often . . . a high level of expertise and substantial resources. Improperly regulated Good Samaritans will not get the job done. After review of S. 1848 and S. 2780, I see an attempt to remove most environmental regulation from potential Good Samaritan operations as an answer to the fear of liability [under applicable environmental laws]. [The approach taken by S. 1848 and S. 2780 could, however,] lead to degraded environmental conditions after the volunteer action is undertaken.¹⁹

The danger of environmental harm that inheres in the process of mine remediation could be considerably diminished by requiring comprehensive analysis of the impacts of and alternatives to a proposed project.

¹⁸ 40 C.F.R. § 1508.8 (2006).

¹⁹ *Oversight Hearing to Consider Whether Potential Liability Deters Abandoned Hard Rock Mine Clean-Up: Hearing Before the S. Comm. on Environment and Public Works*, 109th Cong. (2006) (statement of Terry Harwood, Former Exec. Dir., Hazardous Policy Material Council, USDA, Former Chief Environmental Engineer, USFS) [hereinafter Harwood Statement] (on file with the Harvard Environmental Law Review). One commentator described the dangers of active mining in similarly unflattering terms. Citing a 1997 EPA study that described the environmental damage occurring at 62 active mining sites, he noted that "[e]ven state-of-the-art hardrock mines, designed and constructed to comply fully with contemporary land use and environmental laws, can cause significant harm to the environment." John F. Seymour, *Hardrock Mining and the Environment: Issues of Federal Enforcement and Liability*, 31 *ECOLOGY L.Q.* 795, 800-01 (2004).

Given NEPA's value as a tool for investigating project impacts and alternatives, Good Samaritan legislation should not waive NEPA review entirely, as S. 1848 and S. 2780 would have done. That said, one could argue that such legislation should allow for a less burdensome form of impacts and alternatives analysis because full-blown NEPA review can take many months (even years) and cost thousands of dollars in consultant fees. The pitfall of bills like S. 1848 and S. 2780, though, is that their few NEPA-like requirements may be so hollow as to enable permit applicants to sidestep meaningful project review.²⁰ By comparison, NEPA, while generally cast as a procedural rather than substantive statute,²¹ requires an analysis of the environmental impacts of all "major Federal actions significantly affecting the quality of the human environment."²² "Major Federal actions" encompass permitting actions by federal agencies, so absent the explicit NEPA waiver granted in S. 1848 and S. 2780, the bills' Good Samaritan permitting regimes would have triggered the need for NEPA analysis. The type of assessment mandated by NEPA is much more rigorous than the weak provisions of S. 1848 and S. 2780—NEPA requires that agencies prepare:

a detailed statement . . . on—(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.²³

²⁰ S. 1848 entirely lacked a provision regarding the analysis of project alternatives, for instance, and S. 2780's provision on the topic was so anemic that it was practically useless. S. 2780 would not actually have required consideration of alternatives—it would merely have required a description of any alternatives that an applicant *may* have analyzed: "an applicant shall submit to the Permitting Authority an application . . . that provides: . . . (10) a description of . . . (C) the remediation alternatives, *if any*, considered in developing the proposed remediation plan." S. 2780 § 3(f) (emphasis added). Concerning the study of project impacts, the bills were no better as models of serious environmental review. S. 2780 would have required nothing resembling a study of the impacts that could result from proposed remediation plans. In order to approve a Good Samaritan project, the permitting authority would only have had to determine that "the permit applicant will minimize any short-term environmental impacts from the remediation, to the maximum extent practicable," which is hardly a strong guiding standard. *Id.* § 3(g)(1)(A)(ii). S. 1848's feeble provision would have mandated that applicants "identif[y], based on an inquiry that is reasonable under the circumstances, . . . any significant adverse effects on the environment that could reasonably be likely to occur if the permittee fails to properly implement the proposed remediation in accordance with the engineering plans." S. 1848 § 3(e)(10).

²¹ "NEPA does set forth significant substantive goals for the Nation, but its mandate to the agencies is essentially procedural." *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 558 (1978).

²² 42 U.S.C. § 4332(2)(C) (2000).

²³ *Id.*

Although Congress has the authority to override NEPA, the inherent complexity and riskiness of abandoned mine remediation counsel against doing so in any future iterations of Good Samaritan legislation. At the very least, NEPA should not be waived wholesale without any significant compensating requirements, as it would have been under S. 1848 and S. 2780.

b. Public Participation

Beyond requiring an analysis of project alternatives and impacts, NEPA serves an important information-gathering and dissemination function. Indeed, the involvement of the public in agency decision-making processes through NEPA review is arguably the statute's most notable accomplishment. As the former Deputy General Counsel of EPA recently concluded, "NEPA's most significant effect has been to deter federal agencies from bringing forward proposed projects that could not withstand public examination or debate."²⁴ This exposure to public scrutiny results from CEQ's NEPA implementation regulations, which mandate that federal agencies "[r]equest comments from the public, affirmatively soliciting comments from those persons or organizations who may be interested or affected."²⁵ Given this strong requirement, waiving NEPA for Good Samaritan cleanups would likely lead to significantly diminished public involvement in decisions about abandoned mine remediation. The danger of this approach becomes apparent in examining the ramifications of bills like S. 1848 and S. 2780.

S. 1848 and S. 2780 would have required that the Good Samaritan permitting authority provide notice of a permit application to the public, to federal, state, and tribal agencies having an interest in the application, and to local governments within a certain radius of the project site (75 miles for S. 1848; 20 miles for S. 2780).²⁶ By not requiring that the Good Samaritan permitting authority affirmatively solicit comments from interested/affected parties and by restricting the geographical range of local governments that must be notified, S. 1848 and S. 2780 would have risked allowing remediation actions to proceed without input from all of the potentially concerned stakeholders and members of the public. This risk is most apparent when we consider how S. 1848 and S. 2780 would have handled projects at isolated sites whose pollution affects communities many miles removed.

The Penn Mine in Calaveras County, California, for example, used to discharge massive quantities of contaminants into the Mokelumne River. The Mokelumne flows into Camanche Reservoir, which provides water for the East Bay Municipal Utility District's ("EBMUD") 1.2 million custom-

²⁴ ROBERT G. DREHER, GEORGETOWN ENVIRONMENTAL LAW & POLICY INSTITUTE, NEPA UNDER SIEGE: THE POLITICAL ASSAULT ON THE NATIONAL ENVIRONMENTAL POLICY ACT 6 (2005), available at http://www.law.georgetown.edu/gelpi/current_research/documents/NEPA_UnderSiegeFinal.pdf.

²⁵ 40 C.F.R. § 1503.1(a)(4) (2006).

²⁶ S. 1848 § 3(k)(1)(B); S. 2780 § 3(k)(2).

ers.²⁷ Worried about pollution reaching the reservoir, EBMUD eventually assumed some liability for remediating the Penn Mine site because of its detrimental impacts on EBMUD's water supply, even though the mine is located approximately 90 miles from EBMUD's service area.²⁸ Under S. 1848 and S. 2780, a Good Samaritan could in theory have come forward with a proposal for the Penn Mine, and the permitting authority would not have been required to notify EBMUD of the proposal, despite the clear threats that such a project, if improperly implemented, could present to hundreds of thousands of people. While EBMUD happened to know of the Penn Mine, there may be other faraway mines of which EBMUD is unaware that could endanger EBMUD's water supply if the mines are disturbed by Good Samaritans, even well-meaning ones.

At the very least, there are certainly other smaller communities and local utility districts across the West that might not have the ability to remain informed of the status of distant abandoned mines affecting their water supply. Indeed, many people in the West depend on water that comes from further than 20 (or even 75) miles away.²⁹ Under S. 1848 and S. 2780, however, these people would not necessarily have received notice of (or an opportunity to comment on) proposed Good Samaritan mine cleanups that could pose significant risks to their communities. From this perspective, waiving NEPA may deprive certain stakeholders of the chance for input in Good Samaritan permitting decisions. As former Senator Jeffords asked during committee hearings, "doesn't the public have a clear interest in seeing that abandoned mine cleanups occur? Some legislative proposals appear to

²⁷ See EBMUD, "Water Supply," http://www.ebmud.com/water_&_environment/water_supply (last visited Nov. 29, 2007); EBMUD, "Service Area," http://www.ebmud.com/about_ebmud/overview/service_area/default.htm (last visited Nov. 29, 2007).

²⁸ *Barriers to the Cleanup of Abandoned Mine Sites: Hearing Before the Subcomm. on Water Resources and Environment of the H. Comm. on Transportation and Infrastructure*, 109th Cong. 120-21 (2006) (statement of Dave Williams, Wastewater Director, East Bay Municipal Utility District) [hereinafter Williams Statement]. I will discuss EBMUD's remediation of the Penn Mine site at greater length in Part II(C), *infra*.

²⁹ In addition to EBMUD, numerous other public utilities in the western United States obtain water from faraway sources. Some of the largest include: the San Francisco Public Utilities Commission (85 percent of water comes from the Hetch Hetchy reservoir in Yosemite National Park, well over 150 miles from San Francisco; see SFPUC, "Water Sources & Water Supply Planning," http://www.sfwater.org/msc_main.cfm/MC_ID/13/MSC_ID/165 (last visited Nov. 29, 2007)); the Los Angeles Department of Water and Power (50 percent of water comes from the Owens Valley through the Los Angeles Aqueduct, which stretches 233 miles; see LADWP, "Los Angeles Aqueduct," <http://www.ladwp.com/ladwp/cms/ladwp000555.jsp> (last visited Nov. 29, 2007) and <http://www.ladwp.com/ladwp/cms/ladwp004409.jsp> (last visited Nov. 29, 2007)); City of Phoenix (water comes primarily from the Salt River Project and the Central Arizona Project, pulling water from the Salt, Verde, and Colorado Rivers, which depend on snowmelt from mountains dozens or even hundreds of miles from Phoenix; see City of Phoenix, "Phoenix in Drought," <http://phoenix.gov/WATER/drtfaq.html> (last visited Nov. 29, 2007); SRP, "Dams and reservoirs managed by SRP," <http://www.srpnet.com/water/dams/default.aspx> (last visited Nov. 29, 2007); Central Arizona Project, "System map," <http://www.cap-az.com/static/index.cfm?contentID=35> (last visited Nov. 29, 2007)).

intentionally restrict the public's role by minimizing public notice and comment [and by] waiving NEPA."³⁰

The NEPA waiver found in S. 1848 and S. 2780 also would have lowered the evidentiary and justificatory bar for permitting decisions by not requiring a meticulous record of decision and by allowing EPA effectively to ignore any public comments it might receive. CEQ's NEPA regulations require that agencies actually consider and respond to comments—agencies may not simply go through the motions of soliciting comments and holding a public hearing. When comments suggest changes, agencies must supplement or improve their analyses, make factual corrections, modify the alternatives under consideration, or develop new alternatives.³¹ If no response is warranted, agencies must then explain why that is the case.³² S. 1848 and S. 2780 would have required only that the permitting authority "provide . . . the public with the opportunity to comment on the draft permit at the public hearing; and to submit written comments during the 30-day period following the date of the hearing."³³ Under these bills, the permitting authority would not have had to prepare any record of or responses to comments. By avoiding the comment-response structure of NEPA, as well as NEPA's record of decision requirements,³⁴ S. 1848 and S. 2780 would have virtually ensured that any Good Samaritan permits issued would be functionally unreviewable in court. A permitting authority would have been acting within its congressionally-delegated power if it declined to justify its permitting decision or its failure to heed any suggestions submitted by the public. Such a high degree of agency discretion should be avoided in any future Good Samaritan bills.

The ultimate consequence of the proposed legislation's NEPA exemption, public participation requirements, and judicial review provisions would have been to remove Good Samaritan permitting decisions arguably too far from the public, the intended beneficiary. In an ideal world, every approved Good Samaritan cleanup would result in unequivocally positive environmental change, so removing decisions from public scrutiny would not be terribly alarming. In reality, though, there is much room for error in mine reclamation. Consequently, waiving environmental protection laws, including the analysis and public participation requirements of NEPA, may prove detrimental to the very communities that Good Samaritan efforts ought to benefit.

³⁰ *Oversight Hearing to Consider Whether Potential Liability Deters Abandoned Hard Rock Mine Clean-Up: Hearing Before the S. Comm. on Environment and Public Works*, 109th Cong. (2006) (statement of Sen. James M. Jeffords) [hereinafter Jeffords Statement] (on file with the Harvard Environmental Law Review).

³¹ 40 C.F.R. § 1503.4(a) (2006).

³² *Id.*

³³ S. 1848 § 3(1)(2)(C). See also S. 2780 § 3(1)(2)(B).

³⁴ See 40 C.F.R. § 1505.2.

C. *Inherent Risks in Mine Remediation*

The potential for botched cleanups is not just a theoretical concern and has motivated at least one member of the Senate Committee on Environment and Public Works to speak out against S. 1848 and S. 2780. The Penn Mine situation discussed above is a prime example of one such Good Samaritan cleanup gone awry.³⁵ When EBMUD attempted to remediate the site, poorly planned cleanup actions severely intensified pollution in the form of acid mine drainage. Senator Boxer highlighted this in her statement at a committee hearing in June of 2006:

Let me read from a letter from a long list of groups opposing the “Good Samaritan legislation” [before us today]: “At Penn Mine, the waiving of environmental review coupled with an egregious lack of understanding of complex geochemical and hydro-geological processes at the site led to exacerbated water quality problems . . . accelerat[ing] the formation of acid mine drainage by up to one million times.” A prominent geochemist testified that “the facility could not have been better designed had its intention been maximum production of toxic acid mine drainage.”³⁶

³⁵ Velma Smith provided several other examples of failed remediation efforts—including an attempt to cover a tailings impoundment in Arizona, a poorly constructed tailings dam in Montana, and a water diversion effort in Oklahoma’s lead mining district—in her testimony before the Subcommittee on Water Resources of the House Committee on Transportation and Infrastructure. She stated that: “[t]hese examples are offered, not to suggest that nothing can be done to abate the problems of mining, but only to caution against a ‘solution’ that tries to fast-track decisions that should not be fast-tracked, that skims over the need for critical baseline data, that imposes unreasonable deadlines on those reviewing cleanup plans, that skimps on oversight, or that absolves operators of responsibility at the outset.” *Opportunities for Good Samaritan Cleanup of Hardrock Abandoned Mine Lands: Hearing Before the Subcomm. on Energy and Mineral Resources of the H. Comm. on Natural Resources*, 109th Cong. 117 (2006) (statement of Velma M. Smith, Senior Policy Associate, National Environmental Trust) [hereinafter Smith Statement I].

³⁶ *Oversight Hearing to Consider Whether Potential Liability Deters Abandoned Hard Rock Mine Clean-Up: Hearing Before the S. Comm. on Environment and Public Works*, 109th Cong. (2006) (statement of Sen. Barbara Boxer) [hereinafter Boxer Statement] (on file with the Harvard Environmental Law Review). EBMUD may not have been as incompetent as Senator Boxer implies. One expert who testified later that day stated:

Cleaning up mining problems can be . . . technically challenging. The case of the Penn Mine in California—the case that initially prompted the call to loosen Clean Water Act requirements for mining cleanups—makes the point The water utility, with the best of intentions, took on what it apparently thought would be a modest project to protect downstream fish and its water source Unfortunately, however, the results fell short Was this particular “Good Samaritan” particularly inept or sloppy? Probably not.

Oversight Hearing to Consider Whether Potential Liability Deters Abandoned Hard Rock Mine Clean-Up: Hearing Before the S. Comm. on Environment and Public Works, 109th Cong. (2006) (statement of Velma M. Smith, Senior Policy Associate, National Environmental Trust) [hereinafter Smith Statement II] (on file with the Harvard Environmental Law Review). Of course, if EBMUD was not “particularly inept” but still managed to exacerbate acid mine drainage problems severely, that makes the prospect of Good Samaritan remediation projects all the more disturbing.

Ironically, the Penn Mine debacle has pushed EBMUD to support Good Samaritan legislation, contrary to its effect on Senator Boxer. Despite the fact that the Penn Mine “cleanup” demonstrates the substantial risk of Good Samaritan projects, EBMUD’s position is comprehensible when we look at who paid for rectifying the botched remediation.

Because EBMUD owned and operated the Penn Mine property and the treatment facilities from the botched cleanup, two citizens’ groups sued EBMUD, and a federal district court (in a ruling upheld by the Ninth Circuit) found EBMUD liable under the Clean Water Act and directed the utility district to obtain a NPDES permit.³⁷ EBMUD and the Central Valley Regional Water Quality Control Board (“CVRWQCB”) worked with EPA and local stakeholders to develop an interim plan to address contamination at the mine site.³⁸ The final remediation cost EBMUD and CVRWQCB about \$10 million. EBMUD’s wastewater director testified that the Penn Mine fiasco “has had a chilling effect on ‘Good Samaritan’ remediation efforts, resulting in no further projects being initiated.”³⁹ While this may sound unfortunate, perhaps disasters like the Penn Mine cleanup *should* have a chilling effect. If projects like EBMUD’s cannot be undertaken safely by Good Samaritans exempted from environmental review, why should pecuniary considerations and misplaced idealism convince us that it is a good idea to waive environmental laws through Good Samaritan legislation?

D. Allocations of Authority and Concerns about Political Process

Even if we conclude that the benefits of Good Samaritan legislation are sufficient to make it worthwhile to waive environmental laws, an inevitable concern arises: who should have the ultimate power to issue a permit for a mine remediation project? Possibilities include EPA, a state agency, a local government in the affected jurisdiction, or some mixture of these entities. The choice of how to allocate power among governments defines to a large degree the type of considerations that will be taken into account, the relative expertise and knowledge of the decision-makers, and the members of the public who get involved. One might expect, for instance, that if EPA has authority over permitting, national environmental organizations might be

³⁷ Comm. to Save Mokelumne River v. E. Bay Mun. Util. Dist., 13 F.3d 305, 306, 310 (9th Cir. 1993).

³⁸ Williams Statement, *supra* note 28, at 122.

³⁹ *Id.* at 123. EBMUD’s status as a Good Samaritan in need of incentives to remediate abandoned mines is dubious. As a public utility with a mandate to provide safe water to its customers, EBMUD already has a strong incentive to seek out and clean up any sources of pollution within its watershed. The availability of Good Samaritan waivers from environmental laws might enable public utilities like EBMUD to spend less money on remediation, but waivers are probably not necessary to encourage such remediation efforts. The target of Good Samaritan legislation should instead be those parties who have no particular legal duty, even an indirect one, that would force them to clean up abandoned mines. In certain situations, this might be entities like EBMUD, but such entities will in general likely have sufficient incentives to undertake remediation, regardless of the liability waivers available.

more likely to insert themselves into the process, and the decision will be based more on experiences at other abandoned mines across the country than on local concerns about the blighting effect of the mine in the community. This is not to say that one or the other is inherently better—on the contrary, each level of government could make valuable contributions to the permitting decision.

Numerous other federal environmental laws have confronted this dilemma, and one of the most popular solutions has been the “cooperative federalism” model. The Clean Air Act and Clean Water Act have followed this model, under which the federal government gives states the choice whether to be regulated by the federal government entirely or to obtain approval from the federal government to implement state-level permitting programs that meet certain federal standards.⁴⁰ This is also essentially the approach that S. 1848 and S. 2780 promoted. They would have allowed the states and Indian tribes to establish their own EPA-sanctioned permitting systems, in the absence of which EPA would have administered the program.⁴¹ Perhaps more than in other environmental contexts, however, abandoned mine remediation raises localism concerns and the specter of regulatory capture.

The real danger behind the models proposed is that they lodge all authority in federal or state agencies, without providing any local veto. Consequently, this removes the permitting process from the communities and people who will be most significantly affected by Good Samaritan projects.⁴² As a result, regulators detached from the affected communities would make

⁴⁰ See *New York v. United States*, 505 U.S. 144, 167 (1992) (describing cooperative federalism model).

⁴¹ S. 1848 § 3(d); S. 2780 § 3(e).

⁴² Both S. 1848 and S. 2780, for example, would have given local governments little or no say in the decision-making process. Under S. 2780, local governments could never have played more than an advisory role because, depending on whether a state had implemented its own permitting system, either the federal government or the state government would have possessed all permit-granting power. In contrast, S. 1848 would have given local governments approval power when a waiver of their laws was contemplated. S. 1848 § 3(f)(1)(c). (Unlike S. 2780, S. 1848 would have allowed Good Samaritan permits to waive state and local environmental laws. *Id.* § 3(g)(1)(c).) One of the bill’s sponsors, Senator Salazar, maintained that this was a sufficient concession to localities:

In order to receive the permit for the project, local, state, and federal authorities must all agree that the overall environmental improvement will be significant, that there is no environmental degradation—at the project or anywhere else—and that the project is technically sound. If the state or the local communities whose laws are affected do not agree with the proposed cleanup plan, they simply refuse to sign the permit and the project does not go forward. But if they think the cleanup plan is sound, they determine the scope of liability protection afforded under the permit.

Salazar Statement, *supra* note 5. His point is well-taken, but local governments still have a distinct and powerful interest in remediation projects even if those projects would not waive their environmental ordinances. Through the provisions of S. 1848, Senator Salazar seems to have been saying that each level of government should concern itself only with the waiver of its own laws, as if local communities do not benefit or suffer from the regulations of higher levels of government, in addition to their own ordinances. Moreover, under S. 1848, a local community that strenuously objected to a proposed Good Samaritan project would have been

decisions about projects that could pose local risks which the local population might consider untenable. Imagine, for instance, a Good Samaritan remediation plan that would decontaminate mine discharges and save a water district \$250,000 per year in water treatment costs but would also have a one percent chance of catastrophic failure leading to complete destruction of a town's water supply. Federal or state regulators worried about federal or state funding of water districts might see such a plan as desirable, while locals might view the potential downside of the project as unacceptably hazardous.⁴³ In such circumstances, a better policy might require the agreement of local governments, whether that allows them to block a project or to force the Good Samaritan applicant to develop less risky alternatives.

Furthermore, entities with political power at the national or state level (mining companies, in particular) might capture federal or state regulatory authorities and push through Good Samaritan projects, enabling them to profit from the reprocessing of historic mine residue (discussed below) without contributing significantly to the diminution of health or environmental hazards presented by the abandoned mine. Local governments could undoubtedly also be captured by self-interested actors, but their constituency (in contrast to the national or state electorate) would at least have a direct interest in the outcome of the permitting process. From this regulatory capture perspective, Good Samaritan legislation would be improved by requiring the meaningful involvement of affected local governments in the permit approval process. Not only might local governments have a better perception of the potential risks of a proposed remediation, but their interest in the remediation's outcome would give them a stronger incentive to support only those projects that adequately balance cleanup benefits and dangers. Although local governments might block some permits, an overall goal of Good Samaritan cleanups is to improve the environment without direct cost to the local taxpayers, so local governments have a fiscal motivation for supporting, not blocking, Good Samaritan projects. In theory, then, local governments should be capable of acting (without too much parochialism) as checks on regulatory capture or on deficient cost-benefit analysis at the federal or state level.

Ultimately, determining the benefits and drawbacks of cooperative federalism and the involvement of local governments in this type of permitting process requires empirical study. With a consensus required from three levels of government for a permit to issue, Good Samaritan projects might never move beyond the conceptual stage. In my opinion, though, the arguments for devolving some amount of authority to local populations outweigh

deprived of all power if the would-be permittee simply decided to withdraw its request for a waiver of local environmental regulations.

⁴³ For information on federal and state funding of drinking water programs, see U.S. ENVIRONMENTAL PROTECTION AGENCY, DRINKING WATER COSTS & FEDERAL FUNDING (2004), available at http://www.epa.gov/safewater/sdwa/30th/factsheets/pdfs/fs_30ann_dwsrf_web.pdf.

the bureaucratic ease of retaining all power in the federal or state governments.

E. Mining Companies as Good Samaritans

The specter of regulatory capture illuminates one of the principal issues that trouble critics of bills like S. 1848 and S. 2780: whether mining companies should ever be considered Good Samaritans capable of obtaining permits under such legislation. One might wonder why any mining companies would contemplate undertaking Good Samaritan cleanups in the first place. They have two acknowledged motivations: improving their corporate image and earning profits from the reprocessing of historic mine residue. There is also a third potential, more underhanded motivation: protecting each other from expensive remediations that they might otherwise be legally required to complete.

1. Improving the Mining Industry's Corporate Image

Numerous mining industry officials who testified about the recently proposed bills bemoaned the (supposedly undeserved) negative public perception of mining companies. John Mudge, Director of Environmental Affairs at Newmont Mining, remarked: "There seems to be a view among some that, merely by having engaged in mining at other sites, the mining company in question is somehow 'morally culpable' for the pollution caused at the [abandoned mine] by someone else. That simply makes no sense."⁴⁴ Indeed, mining industry representatives who have testified before Congress on the issue of Good Samaritan remediation have been united in their conviction that mining companies should qualify as Good Samaritans. Four mining spokespersons told Congress in 2006: "Mining companies that did not create the environmental problems caused by the [abandoned mine land] in question should be allowed to qualify as 'Good Samaritans.'"⁴⁵ They justify this declaration by noting that "[m]ining companies have the resources, expertise, experience and technology to efficiently and appropriately assess the problems [present at abandoned mines], often in conjunction with un-

⁴⁴ *Barriers to the Cleanup of Abandoned Mine Sites: Hearing Before the Subcomm. on Water Resources and Environment of the H. Comm. on Transportation and Infrastructure*, 109th Cong. 78 (2006) (statement of John Mudge, Director, Environmental Affairs, Newmont Mining Corporation) [hereinafter Mudge Statement].

⁴⁵ *Id.* at 73; *Opportunities for Good Samaritan Cleanup of Hard Rock Abandoned Mine Lands: Oversight Hearing Before the Subcomm. on Energy and Mineral Resources of the H. Comm. on Resources*, 109th Cong. 64 (2006) (statement of Harold P. Quinn, Jr., Senior Vice President and General Counsel, National Mining Association) [hereinafter Quinn Statement]; *Oversight Hearing to Consider Whether Potential Liability Deters Abandoned Hard Rock Mine Clean-Up: Hearing Before the S. Comm. on Environment and Public Works*, 109th Cong. 3 (2006) (statement of Scott A. Lewis, Director, Environmental and Governmental Affairs, AngloGold Ashanti North America Inc.) [hereinafter Lewis Statement]; Skaer Statement, *supra* note 2, at 71.

dertaking reclamation measures at nearby active mines which the company operates.”⁴⁶ This is undoubtedly accurate—mining companies *could* undertake Good Samaritan cleanups—yet it does not answer the question of whether mining companies *should* undertake Good Samaritan cleanups.

While burnishing one’s corporate image through Good Samaritan projects may seem like “greenwashing” to skeptics, there is nothing inherently bad about a Good Samaritan remediation completed by a mining company. If the result of the project is some measure of environmental decontamination, why should it matter whether the actor was a coalition of concerned citizens or a multinational corporation? The problem is that proposed Good Samaritan bills have often incorporated incentives for mining companies to undertake cleanups, incentives that might actually undermine the goals of Good Samaritan remediation. The most obvious incentive, for which mining industry representatives seem to have lobbied determinedly, is the possibility of reaping a profit from reprocessing historic mine residue.⁴⁷

2. *Extracting Valuable Materials from Historic Mine Residue*

Many of the inactive and abandoned mines in the West hold waste from old mining operations that were unable to extract desired minerals from ore as efficiently and completely as current machines and processes.⁴⁸ Consequently, tailings piles, which often present the greatest contamination threats, may also contain economically valuable mineral residues. By reprocessing these old wastes, mining companies could conceivably clean a site while simultaneously turning a profit. If this market incentive (i.e., al-

⁴⁶ Quinn Statement, *supra* note 45, at 64.

⁴⁷ See PATRICIA NELSON LIMERICK ET AL., CENTER OF THE AMERICAN WEST, UNIVERSITY OF COLORADO AT BOULDER, CLEANING UP ABANDONED HARDROCK MINES IN THE WEST 38 (2005), available at <http://www.centerwest.org/publications/pdf/mines.pdf>. Industry representatives strenuously defend this free-market incentive:

We . . . disagree with the notion that a mining company should never be in a position to make a potential profit from clean-up activities . . . [A] mining company will be spending its own funds . . . to undertake remediation activities. If it turns out that the price of a metal recovered through remediation activities is such that the mining company has made a profit, this does not detract from the fact that, without spending public funds, the mining company has in fact remediated an environmental danger. Moreover, the price of any given metal could as well go down as go up, leaving the mining company with no profit.

Mudge Statement, *supra* note 44, at 81. This argument, while convincing in some respects, has notable flaws. For instance, is a project really a *Good Samaritan* cleanup if the company spends its own funds in the hope that it will turn a profit? Isn’t this what private business *is*—spending one’s own money in the hope of earning more back? What makes this a public-regarding act? Furthermore, although it may be true that the metals market could render a reprocessing project unprofitable, this is an inherent risk of mining generally. What distinguishes a reprocessing project that turns sour because the price of gold drops from a new mine that has to be abandoned because the price of gold drops? Their main distinguishing feature is that the owner of the new mine will probably lose enormously more money because of the huge startup capital costs of new mines.

⁴⁸ See LIMERICK ET AL., *supra* note 47, at 38.

lowing reprocessing for profit) created a large constituency of mining companies willing to undertake remediation at abandoned sites, this could be an ideal solution to the problem of insufficient funding for cleanups. The important task for Good Samaritan permitting authorities would be to prevent mining companies from abusing the Good Samaritan system.

In a worst-case scenario, permitting agencies might authorize "clean-ups" that pose serious risks to downstream communities, provide little or no public benefit, and allow mining companies to profit from reprocessing while avoiding liability for their actions and possible mistakes. As one expert testified during hearings on S. 1848 and S. 2780, "if a Congressional response [to the problem of inactive and abandoned mines] brings re-mining⁴⁹ operations into the definition of 'Good Samaritan' actions, you may end up creating the exception to swallow the rule, removing normal, for-profit operations, which nearly always take place in old mining districts, from existing regulatory requirements."⁵⁰ Another expert elaborated on this issue:

As metals prices escalate, there is more potential for speculation and re-mining proposals. Under both bills you could have a situation in a mining district where a mining company operating a new or existing facility would be required to meet all of the appropriate environmental regulations while another company operating at a previously abandoned site would be shielded from critical environmental regulation. The re-mining operations can have the same potential for environmental impact as new mining operations where hazardous chemicals such as cyanide are used in leaching operations. There can be activities [in which] there is no difference between a new operation and a re-mining operation.⁵¹

Because of these dangers presented by mining company reprocessing operations, Good Samaritan legislation must protect against abuse and unreasonably risky projects.

S. 1848 contained a facially reasonable model of statutory language that could help thwart underhanded proposals for lucrative waste reprocessing masquerading as Good Samaritan remediation:

[T]he permit shall authorize only those activities that are directly required for the remediation of historic mine residue at the mine site; . . . [a]ny activit[ies] other than [these] . . . (including, with-

⁴⁹ Many people use "re-mining" synonymously with "reprocessing." Since S. 1848 and S. 2780 refer specifically to "reprocessing," I have chosen to use that term, but some of the expert witnesses I have quoted discuss "re-mining." For the purposes of their testimony and of this paper, the two terms apply to the same actions.

⁵⁰ Smith Statement II, *supra* note 36.

⁵¹ Harwood Statement, *supra* note 19. A Congressional Research Service Report noted that the risk of these projects is that "[reprocessing] might simply exchange one environmental problem for another." Claudia Copeland & Robert Meltz, *Cleanup at Abandoned Hardrock Mines: Issues Raised by "Good Samaritan" Legislation in the 109th Congress*, at 14 (Dec. 15, 2006) (Congressional Research Service Report No. RL33575).

out limitation, any mining or processing in addition to that required for the remediation of historic mine residue for the public good) . . . (A) shall not be authorized under a permit issued under this section; and (B) may be authorized under other applicable laws, including environmental laws.⁵²

This statutory provision ought theoretically to enable only reprocessing that benefits the public, but such a restriction may not mean much in practice because mining companies could potentially justify the maximum amount of profitable reprocessing as being—in keeping with S. 1848’s language—“required . . . for the public good.”⁵³ Permitting authorities without much knowledge of the site (and perhaps without much knowledge of mine remediation in general) would have little reason to question an applicant’s assertions, provided that the project looked superficially sound.⁵⁴ This potential for a lack of agency expertise or searching analysis of Good Samaritan proposals is a substantial obstacle precluding the imposition of meaningful safeguards on mining company reprocessing projects. Unless this obstacle is overcome, mining companies should be allowed to undertake Good Samaritan remediation projects only if they can be trusted to act in the public interest.

The other major obstacle to the effectiveness of waste reprocessing as a market incentive is the relative unavailability of amenable sites. If mining companies’ primary concern is whether they could potentially profit from “Good Samaritan” operations, few sites may offer what they want. During congressional committee hearings, a University of Colorado researcher remarked:

Re-mining is a possibility to consider. . . . [but] the [re-mining] process may not be practical. Re-mining generally requires that a large, financially healthy mining operation is already working in

⁵² S. 1848 § 3(c).

⁵³ *Id.*

⁵⁴ Mining industry representatives claim to have more faith in regulatory authorities:

Prior to issuing a permit, the regulatory agency will certainly be aware—and if they are not, the public would make them aware—if a given project is in fact a stand-alone economically viable project that the mining company would undertake without Good Samaritan protections. The permit-writer will also know whether what is being authorized is focused on remediating existing pollution, or whether the project is a for-profit operation operating under the guise of a cleanup.

Quinn Statement, *supra* note 45, at 66. I find Mr. Quinn’s assessment overly (or perhaps strategically) optimistic. Why would the regulatory agency on its own know whether a project is economically viable? The agency’s knowledge of a project is based on the information that a permit applicant submits—it is doubtful that a regulatory agency would have the expertise or time to go to the trouble of conducting its own analysis of a proposed project’s relative economic viability. Additionally, it is almost unimaginable that the public would have any concept of whether a mining company’s proposal is something that the company would undertake without Good Samaritan protections. How could the public possibly possess the sort of technical knowledge and site-specific investigative data that would enable calculation of the financial feasibility of a site remediation?

the same area as the abandoned, polluting mine. Such a company would only be interested in re-mining an old site if the ore was of sufficient quality, and if it did not cost too much to transport the ore to the processing facility. In the end, many abandoned mines may not be good re-mining candidates. Re-mining opponents may not have much to worry about after all.⁵⁵

So, if it is unlikely that mining companies would be interested in more than a few sites, why do their representatives stress the supposedly critical importance of the reprocessing profit incentive?

One possibility is that mining companies have more confidence in their ability to squeeze profitable minerals from abandoned mine wastes than does the University of Colorado professor quoted above. Another possibility is that mining companies would like to tag ancillary Good Samaritan cleanups onto nearby standard mining operations (in the few situations where this may be feasible) so that they can eke out extra profit while publicly promoting their Good Samaritan values. A third, more sinister possibility is that mining companies hope Good Samaritan legislation will enable them to protect each other against liability at polluted, abandoned sites.

3. *Avoiding Liability Through Good Samaritan Cleanups*

Unfortunately, some proposed Good Samaritan bills of the past might have encouraged liability-avoiding deceptive behavior by allowing Good Samaritan projects at abandoned mines for which "potentially responsible parties" ("PRPs") exist.⁵⁶ Under CERCLA, PRPs are liable for the costs of remediation at contaminated sites and must comply with all applicable environmental laws.⁵⁷ Because the contribution of funds from PRPs is a major source of revenue for CERCLA cleanups, the search for PRPs is a critical element of CERCLA actions. Searching for PRPs is such an important component of CERCLA that administrative agencies specially train staff and publish extensive guides on the PRP search process.⁵⁸ Those who might face liability are understandably not wild about any laws or policies that require PRP searches since the explicit goal of PRP searches is to force liable parties to pay for cleanups.

Mining industry representatives' reactions to S. 1848 and S. 2780 illuminate the anxiety they feel with regard to PRP search requirements. Both S. 1848 and S. 2780 would have required some amount of inquiry into

⁵⁵ Limerick Statement, *supra* note 14, at 68.

⁵⁶ A PRP is an "individual or entity including owners, operators, transporters, or generators who may be liable under CERCLA section 107(a)." U.S. ENVIRONMENTAL PROTECTION AGENCY, PRP SEARCH MANUAL (2003) (Glossary) [hereinafter PRP SEARCH MANUAL], available at <http://www.epa.gov/compliance/resources/publications/cleanup/superfund/prpmanual/prp-search-man-cmp.pdf>.

⁵⁷ 42 U.S.C. §§ 9607, 9614(a), 9621 (2000).

⁵⁸ See, e.g., U.S. DEPT. OF AGRICULTURE, USDA CERCLA POTENTIALLY RESPONSIBLE PARTY SEARCH GUIDE (2001); PRP SEARCH MANUAL, *supra* note 56, at Glossary.

whether PRPs exist for the site in question.⁵⁹ These provisions did not go over well with at least one member of the mining community. Among this Northwest Mining Association representative's six "major problems" with S. 2780 was the fact that "a full PRP search and certification is required for privately funded cleanups."⁶⁰ While labeling S. 2780 a "non-starter" for this reason, she praised S. 1848 but suggested that it "could be improved by [the following actions]: . . . the PRP search should be significantly streamlined and eliminated when only private monies are funding the cleanup."⁶¹ Given that no experts apart from mining company representatives objected to PRP search provisions, it seems that the mining industry must have some special fear of such searches. Their fear is not misplaced—one can be sure that a mining company shows up somewhere in the chain of title of every abandoned mine and would therefore be liable as a PRP. Thus, if mining companies could undertake Good Samaritan cleanups without searching for PRPs, they could deflect government attention from liable parties by partially remediating a site but never revealing who should be held responsible for a full-blown cleanup under federal law.⁶²

In theory, if Good Samaritan legislation includes PRP search requirements, mining companies should not be able to take advantage of this liability-avoidance scheme. Of course, there is no guarantee that a permitting agency would pursue PRPs, even if their existence is revealed in a Good Samaritan permit application. The identification of PRPs is by no means the bulk of the work in obtaining financial contributions from PRPs. Inevitably, when the government sues one PRP for cleanup costs, that PRP impleads other PRPs, and the litigation becomes complex.⁶³ These cases can take

⁵⁹ See S. 1848 § 3(e); S. 2780 § 3(a)(8).

⁶⁰ Skaer Statement, *supra* note 2, at 74.

⁶¹ *Id.*

⁶² Imagine this hypothetical situation: Gold Company mined Site 1 through cyanide heap-leach techniques, leaving toxic contamination that has infiltrated the groundwater. Gold Company sold Site 1 to another mining conglomerate, which subsequently sold Site 1 to a third, now-bankrupt company. Gold Company is still solvent and therefore liable under CERCLA for the remediation of Site 1. Copper Company, also a solvent corporation but in no way legally related to Gold Company, is in similar circumstances with regard to Site 2. The federal government, however, has not yet conducted a PRP search for Sites 1 and 2. Gold Company and Copper Company discuss their situations and agree that waste from the sites might be profitably reprocessed, and neither one wants to pay for the type of full-scale cleanup that would be required by federal environmental laws. They agree that Gold Company will submit a Good Samaritan permit application for Site 2 and Copper Company will submit a Good Samaritan permit application for Site 1. Each company proposes a remediation plan that will cost far less than a CERCLA cleanup but will remove some of the contamination through reprocessing. They obtain their permits, reprocess some residual wastes at a profit, and leave the sites slightly less polluted than they were. Meanwhile, the regulatory agency decides not to search for PRPs at these sites, figuring that they have already been remediated and that the agency should focus its limited resources on identifying PRPs at sites that have received no attention. In the end, Gold Company and Copper Company have accomplished a coup: they both look like good corporate citizens, they have earned a modest profit from reprocessing old mine wastes, and they have avoided the substantial liability that would have plagued them had the government undertaken a PRP search and found them in the chain of title.

⁶³ See, e.g., Thomas C. Downs, *Periodic Payment of Claims: New Hope for CERCLA Settlements?*, 8 TUL. ENVTL. L.J. 387, 394 n.36 (1995).

years and hundreds of thousands of dollars in legal fees to resolve.⁶⁴ As a result, an agency like EPA might well figure that because a site has undergone at least partial remediation by a Good Samaritan, it would be better to focus attention on the numerous other sites where no remediation at all has taken place. This is, of course, only conjecture. Any mining companies that did attempt to manipulate the Good Samaritan permitting system in this fashion would run the risk of exposing their colleagues to government prosecution for cleanup costs. This quandary underscores exactly why representatives of the mining industry would want to excise from Good Samaritan legislation any PRP search requirements for remediation undertaken by private parties. If the PRP search requirement were eliminated when private parties apply for Good Samaritan permits, mining companies could take on small-scale cleanups to help each other ("you scratch my back; I'll scratch yours") or even themselves avoid liability for large-scale cleanups, all without ever having to reveal the existence of a responsible party.⁶⁵

F. Conclusion

Many (perhaps most) mining companies would probably not seek to exploit any Good Samaritan permitting scheme as deceitfully as I have suggested that they could. Nonetheless, the possibility of such exploitation is hard to eliminate in Good Samaritan legislation that allows projects by mining companies. Moreover, mining industry representatives testifying before congressional committees have put forth arguments that ought to make us worry about the propriety of their motivations. Besides the previously mentioned stances taken by industry experts (viz., their obsession with being allowed to earn a profit and their desire to eliminate PRP searches), some of their other suggestions should raise a few eyebrows. One testifier proclaimed, for example:

Good Samaritan legislation should allow Good Samaritan actions at [inactive and abandoned mines] to qualify as off-site mitigation under the CWA for mining companies permitting new mines or expansion of existing mines. This would provide an additional incentive for a mining company to undertake a Good Samaritan

⁶⁴ See *id.* at 395 n.39.

⁶⁵ Mining industry representatives, of course, offer a much less unsavory justification for wanting to abolish the PRP search requirement: PRP searches "are too cumbersome and costly." Skaer Statement, *supra* note 2, at 73. This objection doesn't really hold much water, though. Both S. 1848 and S. 2780 would only have required PRP searches that are "reasonable under the circumstances." S. 1848 § 3(e)(4); S. 2780 § 3(a)(8)(D). Given this standard, one can hardly imagine a permitting authority ordering a Good Samaritan to complete a \$200,000 PRP search for a proposed \$50,000 remediation. Certainly, much turns on the issue of determining what is "reasonable," but undoubtedly cost would be one of the primary (if not the primary) factor in this determination.

cleanup while meeting the permitting requirements at new or expanded [mines].⁶⁶

However, this seems contrary to the very idea of Good Samaritanism. Technically, a "Good Samaritan" is "one who compassionately renders personal assistance to the unfortunate"⁶⁷ and this is the spirit in which the term has been used in proposed legislation, including S. 1848 and S. 2780.⁶⁸ The purpose of this legislation is to remove legal obstacles for parties motivated by public interest goals, not parties already liable for remediation activities. Therefore, mining companies that want to take issue with the off-site mitigation provisions of the Clean Water Act ought not to resolve this circuitously through Good Samaritan legislation.

For all of the questionable motivations of mining representatives, the industry might well prove to be a valuable contributor to the Good Samaritan cleanup effort. The question is, would bills like S. 1848 and S. 2780 weed out the bad apples, and more fundamentally, would such bills actually lead to positive results? Despite their lofty goals, the bills' various deficiencies create the potential for more damage than benefit. A poorly constructed bill might enable mining companies to profit from reprocessing while endangering communities that would have no legal recourse because of the bill's waiver of environmental laws. The bill might also enable well-meaning citizens or local governments to embark on cleanups beyond their capacity, cleanups that never would have been allowed under the laws that normally apply to such activities.

The reality is that sometimes we might prefer to have no reclamation at all than to have an ill-conceived partial reclamation. Sometimes, we may need guarantees that a party undertaking remediation activities will hold its work to the most exacting environmental standards. And sometimes, because of the risk of pollution from any site disturbance, we may even want to force anyone who touches a contaminated site to rectify unforeseen problems that might arise, whether or not the remediating party was at fault. These desires are not antithetical to Good Samaritan legislation, but such legislation must be very carefully crafted to avoid the pitfalls that accompany the waiver of environmental laws.

⁶⁶ Skaer Statement, *supra* note 2, at 73. This suggestion has floated around for years. In 2000, during consideration of a predecessor to S. 1848 and S. 2780, one industry representative remarked: "voluntary [abandoned mine] cleanup projects could generate environmental credits that could be used to mitigate or offset impacts at other mining projects operated by the remediating party." *Hearing to Examine S. 1787, the Good Samaritan Abandoned or Inactive Mine Waste Remediation Act: Hearing Before the Subcomm. on Fisheries, Wildlife, and Water of the S. Comm. on Environment and Public Works*, 106th Cong. (1999) (statement of William B. Goodhard, Director, Reclamation and Environmental Affairs, Echo Bay Mines) [hereinafter Goodhard testimony] (on file with Harvard Environmental Law Review).

⁶⁷ WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 979 (2002).

⁶⁸ Both listed as one of their purposes: "to encourage partial or complete remediation of inactive and abandoned mining sites for the public good by persons [who] are not otherwise legally responsible for the remediation." S. 1848 § 2(b)(1); S. 2780 § 2(b)(2).

Whether Good Samaritan legislation would ultimately result in more good than harm is an empirical question that cannot be conclusively answered before Congress passes such legislation and Good Samaritan permits become commonplace. So, as Congress contemplates future iterations of bills like S. 1848 and S. 2780, we should ask ourselves if these bills are truly necessary and well-considered. This means, in addition to working through the issues discussed above, determining whether adequate alternatives already exist under current legal regimes and whether Good Samaritan legislation is where we should focus our mining law reform efforts in the first place. The rest of this article will address these questions.

III. ALTERNATIVES THROUGH EXISTING LEGAL PROCESSES

A. Introduction

Supporters of S. 1848 and S. 2780 adamantly maintained that Good Samaritan legislation is critical to encouraging the remediation of inactive and abandoned mines. Their protestations might make one think that these laws represent the only feasible means of enabling abandoned mine cleanups. Before the Senate Committee on Environment and Public Works, the executive director of Colorado's Department of Public Health and Environment highlighted the perceived need for intervention by Congress: "Colorado believes strongly that only a legislative solution can effectively address liability concerns . . . and [Colorado] therefore strongly encourages Congress to move forward on this issue."⁶⁹ Other politicians and experts on mine remediation disagree with the claim that bills like S. 1848 and S. 2780 are necessary to promote Good Samaritan mine cleanups. Dissenting from the Committee on Environment and Public Works' recommendation, Senators Boxer, Clinton, Lautenberg, Lieberman, and Obama wrote:

S. 1848 . . . unnecessarily waives environmental protection statutes, putting human health and the environment at further risk from threats from abandoned mines. The answer to the environmental threat posed by abandoned mines is not to undermine the environmental standards that apply to the clean-ups. It is instead to fully utilize existing authority to relieve innocent parties from potential liability where appropriate and fully fund existing programs that support abandoned mine cleanups, including Superfund.⁷⁰

⁶⁹ *Oversight Hearing to Consider Whether Potential Liability Deters Abandoned Hard Rock Mine Clean-Up: Hearing Before the S. Comm. on Environment and Public Works*, 109th Cong. (2006) (statement of Dennis E. Ellis, Executive Director, Colorado Dep't of Public Health and Environment) [hereinafter Ellis Statement] (on file with the Harvard Environmental Law Review).

⁷⁰ S. REP. NO. 109-351, at 32 (2006).

Setting aside the issue of Superfund monies,⁷¹ it is not immediately obvious who is right about the value of bills like S. 1848 and S. 2780. Do we *need* Good Samaritan legislation to incentivize voluntary cleanups that supposedly would not occur under the current legal regime? Or could we enable such cleanups to take place simply by “fully utiliz[ing] existing authority to relieve innocent parties from potential liability” under the laws waived by S. 1848 and S. 2780? The answer probably lies somewhere in between.

Various environmental laws do already contain liability relief provisions that could apply to the work of Good Samaritans, and these provisions may offer reasonable statutory and administrative alternatives to bills like S. 1848 and S. 2780 without requiring the passage of new legislation. Supporters of Good Samaritan bills, however, dismiss these provisions as hollow or practically infeasible. Of course, while the supporters of Good Samaritan legislation are perhaps unduly skeptical in their assertions, their worries draw attention to a different but related problem. Even if the currently available exceptions provide shelter from broad liability, these exceptions are of little use or benefit if Good Samaritans remain too fearful of liability to utilize them. Thus, uncertainty over the law in this area has an impact on the willingness of Good Samaritans to take on remediation projects.

B. CERCLA Liability Exceptions

The prospect of CERCLA liability scares people, and with good reason. As previously discussed, liability under CERCLA is joint, several, strict, and retroactive and subjects responsible parties to stringent (and often very costly) cleanup standards. Moreover, anyone who conducts minimal activity on a contaminated site can rather easily become a responsible party, including Good Samaritans.⁷² It is hard to underestimate the anxiety that CERCLA has instilled in the regulated community. One environmental attorney described this anxiety as one of CERCLA’s “virtually undisputed” effects:

[T]he fear of being held liable for clean-up costs under Superfund seriously inhibits the purchase and reuse of properties that may be contaminated. As one court noted, “CERCLA liability has been described as a ‘black hole that indiscriminately devours all who come near it.’” Although a purchaser of contaminated property may face liabilities under other federal and state statutes, the comprehensive net of liability and the staggering costs of Superfund clean-ups have been the primary deterrent for people otherwise interested in restoring and reusing contaminated properties.⁷³

⁷¹ I will address this issue in Part IV, *infra*.

⁷² Kodish, *supra* note 8, at 388-94.

⁷³ *Id.* at 385 (citations omitted).

This powerful and pervasive trepidation undoubtedly discourages Good Samaritan remediation of abandoned mines, but to some extent CERCLA's reputation is unwarranted.

Recognizing the enormous disincentives that CERCLA liability creates for non-responsible parties, Congress has carved out various liability exceptions and defenses to the statute. The most relevant for would-be Good Samaritans are: (1) section 107(d)(1), the aptly nicknamed "Good Samaritan provision,"⁷⁴ (2) the protection of state and local governments that acquire contaminated property either through eminent domain or involuntarily by virtue of their sovereign power,⁷⁵ (3) the "bona fide prospective purchaser" provision,⁷⁶ and (4) the permit exemption for onsite removal/remedial actions.⁷⁷ These liability exceptions and defenses hold promise for encouraging Good Samaritan cleanups, but as skeptics suggest, they may in certain cases be inadequate to compensate for the legitimate worries of Good Samaritans.

1. *The "Good Samaritan Provision"*

a. Applicability in the Context of Abandoned Mines

CERCLA's Good Samaritan provision (section 107(d)(1)) is perhaps the broadest CERCLA liability exception and allows for remediating parties to be released from CERCLA liability if their projects meet certain criteria. Specifically, the provision applies to cleanup actions that are:

taken or omitted in the course of rendering care, assistance, or advice in accordance with the National Contingency Plan ("NCP") or at the direction of an onscene coordinator appointed under such plan, with respect to an incident creating a danger to public health or welfare or the environment as a result of any releases of a hazardous substance or the threat thereof.⁷⁸

The terms of this provision raise a major concern for Good Samaritans: do abandoned mine sites even qualify for remedial activities under this liability exception? The statutory language is by no means dispositive, but EPA and at least one federal court have indicated that Good Samaritans working at abandoned mines can utilize the provision as a defense against CERCLA liability.

During the early 1990s, in response to Colorado's desire to enable Good Samaritan mine remediation, EPA Region VIII determined that section 107(d)(1) "can be used by private parties to avoid CERCLA liability result-

⁷⁴ 42 U.S.C. § 9607(d)(1) (2000).

⁷⁵ *Id.* §§ 9601(20)(D), 9601(35)(A), 9607(b)(3).

⁷⁶ 42 U.S.C. §§ 9601(40), 9607(r) (Supp. I 2001).

⁷⁷ 42 U.S.C. § 9621(e)(1) (2000). I will discuss this fourth exemption in the context of the CWA because it is most likely to be useful for Good Samaritans as a means of avoiding the NPDES permit requirement.

⁷⁸ *Id.* § 9607(d)(1).

ing from voluntary cleanups. . . . [Specifically,] Region VIII [determined] that it could interpret ‘danger to public health or welfare or the environment as a result of any release’ to include nonemergency actions such as the mining remediation projects planned by [Colorado].”⁷⁹ The legislative history of the Superfund Amendments and Reauthorization Act (“SARA”), which included the Good Samaritan provision, generally supports Region VIII’s stance: “Congress intended to protect volunteers who respond to releases of hazardous substances in a manner that the EPA has approved.”⁸⁰ A federal court addressing pollution from a hardrock mine in California provided further support for EPA’s position when it cited the Good Samaritan provision as evidence that “CERCLA expressly addresses the liability of those who act in a remedial capacity, and who are otherwise not liable as owners or operators, and provides them with protection from strict liability.”⁸¹

Although EPA’s proposal of S. 2780 in 2006 tends to imply that EPA headquarters believed it does not have the authority to utilize the Good Samaritan provision in the abandoned mine context, EPA headquarters has since adopted the position taken by Region VIII in the early 1990s. In June 2007, EPA issued two model documents to enable Good Samaritans to benefit from the liability protections afforded by section 107(d)(1). Various groups have called for the creation of such model documents for years, and their issuance will likely produce considerable change in the realm of Good Samaritan remediation. The two documents released by EPA were a model “Good Samaritan Comfort/Status Letter” and a model “Good Samaritan Settlement Agreement.”

b. EPA’s Model Good Samaritan Comfort/Status Letter

This model letter “is intended to encourage Good Samaritans to perform NCP-compliant work at Orphan Mine Sites without having to invest time and resources in negotiating a formal settlement agreement with the federal government.”⁸² The critical question for would-be Good Samaritans is whether their projects are compliant with the NCP.⁸³ Unfortunately for Good Samaritans, the NCP is no small or easily decipherable document. Subpart H details “participation by other persons” and provides some mea-

⁷⁹ Katherine Teter, *The Superfund “Good Samaritan” Exception*, 21 *COLO. LAW.* 1917, 1917-18 (1992).

⁸⁰ *Id.* at 1917.

⁸¹ *United States v. Iron Mountain Mines, Inc.*, 881 F. Supp. 1432, 1443 (E.D. Cal. 1995).

⁸² Memorandum, U.S. Environmental Protection Agency, Interim Guiding Principles for Good Samaritan Projects at Orphan Mine Sites and Transmittal of CERCLA Administrative Tools for Good Samaritans 5-6 (June 6, 2007) [hereinafter EPA Good Samaritan Guidance Memo].

⁸³ EPA describes the NCP as “the federal government’s blueprint for responding to both oil spills and hazardous substance releases.” U.S. Environmental Protection Agency, National Contingency Plan Overview, <http://www.epa.gov/oilspill/ncpover.htm> (last visited Nov. 29, 2007). It contains extensive requirements for all aspects of cleanups of such spills and releases. The NCP is codified at 40 C.F.R. part 300.

sure of guidance for voluntary remediation projects.⁸⁴ Section 300.700(c)(3), for instance, describes the requirements for private parties to obtain a recovery of their costs from responsible parties under section 107(a) of CERCLA.⁸⁵ While not directly on point since many Good Samaritans would not be seeking cost recovery for their efforts, this provision does explain that a project is considered “consistent with the NCP” when it meets various criteria and “results in a CERCLA-like cleanup.”⁸⁶

One attorney recommended that Good Samaritans pursue a specific course of action to ensure NCP consistency:

A private party voluntarily undertaking remediation should document its actions thoroughly. Site investigation and selection of a cleanup option should follow the EPA’s standard sequence of remedial steps, including the following: identification of the source; identification of contaminant pathways and receptors; description of the nature and magnitude of the threat; identification of applicable legal requirements, identification of alternative ways to abate or eliminate the threat; and justification for the remedy selected. The private party also should take steps to involve the public in the remedial process, advising affected local governmental officials of cleanup plans and offering neighbors opportunities to comment informally as investigation and remediation progress.⁸⁷

As this passage implies, the burden of meeting the NCP’s standards can be significant, especially since the NCP may force Good Samaritans to “provide protection equivalent to [the protection required] under [other] environmental laws, such as the CWA.”⁸⁸ From this standpoint, the model Comfort/Status Letter may in fact offer little comfort to remediation volunteers seeking less complex and less costly cleanup options.⁸⁹ However, as it is EPA that promulgated and now enforces the NCP, Good Samaritans can probably expect EPA to require considerably less than a full CERCLA-quality cleanup for abandoned mine remediation proposals. Otherwise, EPA’s model Comfort/Status Letter will prove functionally useless since the whole point of the model letter is to ensure that Good Samaritans are not held to the hefty liability and high remedial standards of a CERCLA-quality cleanup.

The model Comfort/Status Letter also gives EPA’s regional offices, which will be in charge of issuing these letters to Good Samaritans, the ability to waive the attainment of water quality standards if attainment would

⁸⁴ 40 C.F.R. § 300.700 (2007).

⁸⁵ *Id.* § 300.700(c)(3).

⁸⁶ *Id.* § 300.700(c)(3)(i).

⁸⁷ Teter, *supra* note 79, at 1918.

⁸⁸ Copeland & Meltz, *supra* note 51, at 11.

⁸⁹ For a more detailed discussion (written before the creation of the EPA model documents) of exactly what Good Samaritans might have to do to take advantage of CERCLA’s Good Samaritan provision, see Sean T. McAllister, *Unnecessarily Hesitant Good Samaritans: Conducting Voluntary Cleanups of Inactive and Abandoned Mines Without Incurring Liability*, 33 ENVTL. L. REP. 10,245, 10,255-57 (2003).

not be “practicable considering the exigencies of the situation.”⁹⁰ The standard for determining “practicability” is vague and should allow regional officials considerable latitude in granting deviations from normally applicable water quality standards: “In determining whether compliance with [applicable or relevant and appropriate requirements] is practicable, the lead agency may consider appropriate factors, including: (1) The urgency of the situation; and (2) The scope of the removal action to be conducted.”⁹¹ This potential for obtaining a waiver of water quality standards, combined with the ease of not seeking a formal settlement agreement with EPA, should make Comfort/Status Letters a sensible first step for Good Samaritan remediation projects. Nonetheless, if third parties threaten litigation, Good Samaritans will have to negotiate a formal settlement agreement in order to avoid liability. Thus, the Comfort/Status Letter is not a universal panacea for Good Samaritan cleanups.

c. EPA’s Model Good Samaritan Settlement Agreement

EPA’s new model Good Samaritan Settlement Agreement (“Model Agreement”) contains two critical provisions to encourage abandoned mine remediation. First, if there is any likelihood that someone will bring suit against a Good Samaritan, the Model Agreement allows Good Samaritans to seek contribution protection (i.e., immunity from private suits by PRPs) for any mine cleanups they undertake.⁹² Second, the federal government covenants not to sue the Good Samaritan under CERCLA, provided that the Good Samaritan complies with the specific terms of the Model Agreement, as tailored to fit the particular situation in question.⁹³ Together, these two provisions directly address the principal liability issues that have beleaguered Good Samaritans and led to the proposal of Good Samaritan legislation in the past.⁹⁴ Hence, the issuance of this Model Agreement considerably diminishes the need for such legislation, assuming that EPA will freely and expeditiously enter into these Settlement Agreements with deserving Good Samaritans.

The Model Agreement does more, though, than simply eliminate liability for properly completed projects. Like the model Comfort/Status Letter, the Model Agreement allows EPA to waive applicable water quality standards when attainment of those standards would not be “practicable.”⁹⁵ The

⁹⁰ EPA Good Samaritan Guidance Memo, *supra* note 82, at 6.

⁹¹ 40 C.F.R. § 300.415(j).

⁹² U.S. ENVIRONMENTAL PROTECTION AGENCY, MODEL GOOD SAMARITAN SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMOVAL ACTIONS AT ORPHAN MINE SITES § XXI (2007) [hereinafter EPA MODEL GOOD SAMARITAN SETTLEMENT AGREEMENT].

⁹³ *Id.* § XVII.

⁹⁴ EPA’s ability to grant such liability relief emanates from two sources: (1) the United States’ “broad inherent or plenary settlement authorities,” and (2) a CERCLA provision that authorizes the executive branch to craft project-based agreements (Administrative Orders on Consent, or “AOCs”) with remediating parties. See S. REP. NO. 109-351, at 33 (2006); 42 U.S.C. § 9622(a) (2000).

⁹⁵ EPA MODEL GOOD SAMARITAN SETTLEMENT AGREEMENT, *supra* note 92, § XI.

Model Agreement also allows EPA and the Good Samaritan to draft a site-specific work plan that serves as the standard to which EPA will hold the finished remediation.⁹⁶ These benefits do not come without safeguards, however, and the Model Agreement addresses the main concerns that led critics to doubt the value of bills like S. 1848 and S. 2780.

The Model Agreement permits remediation only on sites "for which, despite reasonable and diligent efforts, no financially viable party (except [an innocent landowner]) is potentially liable to perform or pay for, or has been required to perform or pay for, environmental cleanup actions under applicable law."⁹⁷ This means effectively that Good Samaritans will have to engage in PRP searches, and sites for which solvent PRPs exist cannot qualify for Good Samaritan Settlement Agreements. Thus, mining companies cannot help themselves or their friends avoid liability simply by engaging in a Good Samaritan cleanup. The Model Agreement also requires that any work detailed in the Settlement Agreement be "necessary to protect the public health, welfare, or the environment," a forceful standard that should bar dubious profit-driven reprocessing projects.⁹⁸ Additionally, the Model Agreement mandates that Good Samaritans "submit[] information to EPA demonstrating [their] qualifications to perform the [w]ork," or, if contractors are used, that EPA approve those contractors prior to the commencement of any site work.⁹⁹ Theoretically, this should reduce the likelihood that a cleanup will go awry and generate worse pollution than originally existed. The Model Agreement also requires a public notice and comment period and ensures that if the work is not satisfactorily completed, the Good Samaritan will indemnify EPA for the costs of completing the project.¹⁰⁰

All in all, EPA's new Model Agreement appears to do much of what Good Samaritan legislation has proposed to do (except for waiving laws beyond CERCLA and the CWA and protecting Good Samaritans from citizen suits, discussed below). At the same time, the Model Agreement seems to avoid the pitfalls that have worried opponents of Good Samaritan bills like S. 1848 and S. 2780. We will have to wait and see how effective the Model Agreement proves to be in practice, but it is curious to note that the same EPA which drafted S. 2780, claiming that only a legislative solution would suffice, was able to find it within the President's executive authority under CERCLA to accomplish basically all of S. 2780's goals through a model Good Samaritan Settlement Agreement. It would appear that federal environmental laws do allow for some flexibility.

⁹⁶ *Id.* § VIII.

⁹⁷ *Id.* § III(c).

⁹⁸ *Id.* § V(e). Limited reprocessing is allowed, however.

⁹⁹ *Id.* §§ V(f), VII(18).

¹⁰⁰ *Id.* § XXII.

d. The Past and Future of Good Samaritan Settlement Agreements

While EPA's Model Agreement has yet to see a trial run, a similar agreement—crafted especially for the situation in question—was recently tested in the context of Good Samaritan mine cleanups. Trout Unlimited used the Administrative Order on Consent (“AOC”)¹⁰¹ process in 2005 to obtain liability protection for an abandoned mine reclamation project along Utah's American Fork Creek.¹⁰² The AOC that Trout Unlimited negotiated with EPA:

protects TU from being sued by [a] PRP for the costs of the cleanup. The AOC also caps TU's liability in the event that there is a problem during the implementation of the project, and EPA decides to step in and complete the work itself

. . . .

Under the AOC, TU does not have to obtain other environmental permits that might be required under state or federal law so long as it complies with a specific set of applicable or relevant and appropriate requirements drafted for the site.¹⁰³

In other words, the AOC accomplished essentially what the new Model Agreement seeks to institutionalize. EPA Administrator Johnson has cited the Trout Unlimited project as the first example of an abandoned mine remediation under EPA's “Good Samaritan Initiative,” the same initiative through which EPA released the model documents.¹⁰⁴

¹⁰¹ For the purposes of this article, an AOC is equivalent to a Settlement Agreement. I will use the terms interchangeably.

¹⁰² Just a few weeks after issuing its new model Comfort/Status Letter and Good Samaritan Settlement Agreement, EPA presented an award to Trout Unlimited for the organization's Good Samaritan cleanup. Apparently, EPA thought that rewarding the successful use of an AOC might augur well for the prospects of the new model documents, which did not exist when Trout Unlimited began its work. See Press Release, U.S. Environmental Protection Agency, EPA awards Trout Unlimited for Good Samaritan Clean-up of American Fork Site (June 29, 2007), available at <http://yosemite.epa.gov/opa/admpress.nsf/a883dc3da7094f97852572a00065d7d8/dcdf2b41b019b34f85257309005f18bf!OpenDocument>.

¹⁰³ *Barriers to the Cleanup of Abandoned Mine Sites: Hearing Before the Subcomm. on Water Resources and Environment of the H. Comm. on Transportation and Infrastructure*, 109th Cong. 135 (2006) (statement of Chris Wood, Trout Unlimited) [hereinafter Wood Statement].

¹⁰⁴ For other examples of Good Samaritan abandoned mine cleanups that have benefited from existing federal and state laws and processes, see *id.* at 132 (discussing two remediation projects in Pennsylvania); *Barriers to the Cleanup of Abandoned Mine Sites: Hearing Before the Subcomm. on Water Resources and Environment of the H. Comm. on Transportation and Infrastructure*, 109th Cong. 89 (2006) (statement of Joseph Pizarchik, Director, Bureau of Mining and Reclamation, Penn. Dept. of Environmental Protection) [hereinafter Pizarchik Statement] (noting that 34 Good Samaritan projects have been undertaken in Pennsylvania); Skaer Statement, *supra* note 2, at 71 (describing Pend Oreille Mine remediation in Washington State); Christopher G. Hayes and William C. Robb, *Negotiating a Voluntary Agreement Under the Clean Water Act: The Sunnyside Experience*, 26 COLO. LAW. 95 (1997) (analyzing cleanup at Sunnyside Mine in Colorado); LIMERICK ET AL., *supra* note 47, at 34-36 (discussing Wellington-Oro Mine remediation project in Colorado).

Although the AOC process contained its share of frustrations for Trout Unlimited, the creation of the Model Agreement may address Trout Unlimited's principal complaint about the AOC process, namely that it took too long to negotiate an AOC (about 12 months) and required the intervention of both EPA's Office of Water and EPA Administrator Johnson.¹⁰⁵ Otherwise, Trout Unlimited's experience bodes well for the future of the model documents, and the organization sees its AOC as providing "a model that can be widely replicated across the landscape and alleviate many, if not all, of the liability impediments to clean up abandoned mines."¹⁰⁶

Despite the potential broad applicability and usefulness of Settlement Agreements (exemplified by the Model Agreement), there are two central problems in relying on Settlement Agreements to shield Good Samaritans from liability. First, EPA's power to grant covenants not to sue extends only to actions by the government,¹⁰⁷ and contribution protection applies only to actions by potentially responsible parties attempting to implead other potentially responsible parties during the course of a government prosecution.¹⁰⁸ This leaves citizens free to sue a Good Samaritan under CERCLA section 310 or the CWA's citizen suit provisions once the Good Samaritan has completed a cleanup pursuant to an EPA-issued Settlement Agreement.¹⁰⁹ Although CERCLA section 113(h) prohibits citizen suits while a remediation project is being undertaken, there is nothing to prohibit citizen suits alleging that a finished cleanup violated federal law.¹¹⁰ Consequently, Good Samaritans might have to defend themselves against charges either that they failed to undertake an NCP-compliant cleanup or that they impermissibly discharged pollutants without a NPDES permit.¹¹¹

Concerning the first charge, courts would likely defer to EPA's Settlement Agreement, which would protect Good Samaritans, provided that reasonable justifications existed for any authorized deviations from normally applicable environmental standards. This should considerably reduce the danger of citizen suits alleging NCP noncompliance. Concerning the second charge, Good Samaritans could fall back on CERCLA's section 121(e)(1) permit exemption to justify their failure to obtain a NPDES permit.¹¹² Section 121(e)(1) allows waivers of otherwise required permits, like NPDES, for onsite remediation activities (this permit exemption is discussed at greater length in Part III(C) below). Suffice it to say, however, reliance on section 121(e)(1) may be a risky strategy. Thus, the possibility of citizen suits alleging CERCLA or CWA noncompliance underscores the importance

¹⁰⁵ Wood Statement, *supra* note 103, at 135-36.

¹⁰⁶ *Id.* at 135.

¹⁰⁷ 42 U.S.C. § 9622(f)(1) (2000).

¹⁰⁸ *Id.* § 9613(f)(2).

¹⁰⁹ See McAllister, *supra* note 89, at 10,259.

¹¹⁰ 42 U.S.C. § 9613(h).

¹¹¹ NPDES permits are discussed at greater length in Part II.B.1, *supra*.

¹¹² 42 U.S.C. § 9621(e)(1) ("No Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with this section.").

of involving local communities and environmental groups and soliciting their help and support for any proposed Good Samaritan projects at abandoned mines. After all, if the citizens who would want to sue a Good Samaritan are on that party's side, it doesn't matter whether a Settlement Agreement or federal law grants immunity from citizen suits—the Good Samaritan will have de facto immunity instead.¹¹³

2. *Other CERCLA Liability Relief Provisions*

a. *State and Local Government Acquisition of Property*

State and local governments are entitled to avoid CERCLA liability when they acquire property voluntarily by eminent domain or involuntarily by virtue of the governments' sovereign functions (e.g., through bankruptcy proceedings, tax delinquency, or abandonment).¹¹⁴ In many cases, abandoned mines are likely candidates for governmental acquisition by these voluntary and involuntary means. State or local governments could, for instance, condemn polluted mine sites because of the environmental and human health hazards they present. In such situations, the government may have no obligation to reimburse the property owner since the land's value can easily be negative due to remediation liability (this is frequently why the sites have not been sold).¹¹⁵ State or local governments might also obtain contaminated properties through escheatment because the land has been abandoned, or they might foreclose on old mines because of unpaid property taxes. Although these methods of acquiring abandoned mine lands are of little use to private Good Samaritans, many state and local governments have voiced their interest in acting as Good Samaritans for mine remediation projects.¹¹⁶ Of course, the new EPA model Comfort/Status Letter and Agree-

¹¹³ Trout Unlimited's American Fork Creek cleanup, for instance, helped detoxify the waters of "one of the State of Utah's most popular outdoor recreation areas." Wood Statement, *supra* note 103, at 133. "The goal of reclaiming the affected lands and surrounding watershed will be driven by a diverse partnership that includes private land owners, local land users, mining and related industries, conservation organizations, local/state/federal agencies and TU chapters who are dedicated to working together to restore [this site]." Home Rivers Initiative, Trout Unlimited, http://www.tu.org/site/c.kkLRJ7MSKtH/b.3265719/k.BFC8/American_Fork_Utah.htm (last visited Nov. 29, 2007).

¹¹⁴ 42 U.S.C. §§ 9601(20)(D), 9601(35)(A)(ii), 9607(b)(3).

¹¹⁵ See, e.g., Damon D. Tanck, *Getting Snagged in the Environmental Liability Web: The Trouble with CERCLA and Why the Brownfields Act Provides Only Modest Relief*, 35 TEX. TECH. L. REV. 1325, 1358 (2004) ("[O]wners often found it difficult to sell or obtain a loan on property affected by a contaminated aquifer because purchasers and lenders were not willing to accept the risk of CERCLA liability."); William W. Buzbee, *Brownfields, Environmental Federalism, and Institutional Determinism*, 21 WM. & MARY ENVTL. L. & POL'Y REV. 1, 8 (1997) ("Cleanups frequently dwarf the value of the contaminated land, creating properties that, viewed in isolation, may have substantial negative value.")

¹¹⁶ Arizona's governor even seems to have assumed that public entities were the intended beneficiaries of Good Samaritan legislation: "Western governors believe participation in Good Samaritan cleanups should not be limited solely to governments, since there are many non-governmental entities who would be willing to contribute to Good Samaritan cleanup initiatives." Janet Napolitano, *Good Samaritans Proposed Legislation Would Clear the Way for*

ment are also available to state and local governments, but if a governmental entity has obtained contaminated mines through the means described above, it is automatically released from CERCLA liability, even without such a letter or agreement.

b. “*Bona Fide Prospective Purchasers*”

Private Good Samaritans may circumvent CERCLA liability if they buy contaminated property and qualify as “bona fide prospective purchasers.”¹¹⁷ The Small Business Liability Relief and Brownfields Revitalization Act created this liability exception with the hope that it would mitigate the problem of “former industrial urban brownfield property [that] lie[s] abandoned because developers fear acquiring these sites and instantly assuming . . . CERCLA liability.”¹¹⁸ The bona fide prospective purchaser exception can also apply to non-urban, abandoned mines.¹¹⁹ To qualify for this exception, Good Samaritans must satisfy a number of criteria, including not having contributed to hazardous waste at the site, not being affiliated with any potentially responsible party, taking reasonable care with respect to hazardous substances onsite, and making all appropriate inquiries into the previous ownership and uses of the facility.¹²⁰ True Good Samaritans should have no trouble meeting these qualifications—the major impediment to the usefulness of this liability exception is that Good Samaritans must actually buy the property. Many Good Samaritans may not have the necessary funds or desire to own an abandoned mine, which considerably limits the applicability of the bona fide prospective purchaser exception. Moreover, “in the case of sites located on public lands, the Good Samaritan would not be able to purchase the site, even if it wished to do so,” and many abandoned mines lie partially or entirely within public lands.¹²¹ For these reasons, the bona fide prospective purchaser exception probably will not help most Good Samaritans shelter themselves from CERCLA liability.

Abandoned Mine Cleanup Efforts in the West, HEADWATER NEWS, Aug. 29, 2005, available at <http://www.headwatersnews.org/p.goodsam082906.html>.

¹¹⁷ 42 U.S.C. §§ 9601(40), 9607(r).

¹¹⁸ Ronald G. Aronovsky, *Federalism and CERCLA: Rethinking the Role of Federal Law in Private Cleanup Cost Disputes*, 33 *ECOLOGY L.Q.* 1, 104 n.285 (2006).

¹¹⁹ “[T]he term ‘brownfield site’ includes a site that: . . . is mine-scarred land.” 42 U.S.C. § 9601(39)(D). The Small Business Liability Relief and Brownfields Revitalization Act may even allow Good Samaritans to obtain federal funding for abandoned mine cleanups: “The financial assistance provisions of the [Act] . . . set forth a number of criteria for the EPA to consider when evaluating applications for funding These sections of the [Act] clearly demonstrate that Congress intended to encourage the use of brownfields tools for the restoration and preservation of [inactive and abandoned mines] in nonurban areas.” Jeffrey Kodish, *Addendum to Restoring Inactive and Abandoned Mine Sites: A Guide to Managing Environmental Liabilities*, 17 *J. ENVTL. L. & LITIG.* 257, 259 (2002).

¹²⁰ 42 U.S.C. § 9601(40).

¹²¹ S. REP. NO. 109-351, at 9 (2006).

C. Clean Water Act Liability Exceptions

Good Samaritans' principal motivation for seeking exemptions from the CWA is to avoid the burden of obtaining and adhering to a NPDES permit.¹²² Although some abandoned mine sites may not require a NPDES permit for remediation, probably most of the sites that would spur Good Samaritans to action do meet the threshold criteria for a NPDES permit, namely that they add pollution to navigable waters from a point source.¹²³ For mines, one critical question regarding these factors is whether any of the mines' water discharges come from artificial water bodies or conveyances that constitute "point sources." The answer is frequently yes. "[C]ourts have held that sediment basins, lagoons, and leachate collection ponds are point sources. In addition, groundwater seeps traceable to mine waste piles are point sources. EPA also views runoff from mine waste piles as a point source because the mine waste piles are a discernible conveyance from which pollutants are discharged."¹²⁴ Another question, which I will discuss below, is whether a Good Samaritan's remediation activities could be considered to create a "discharge" within the meaning of the statute.

If a mine's water-borne effluents ultimately meet the statutory threshold, Good Samaritans must obtain a NPDES permit to undertake any remediation on the site, and NPDES permits come with restrictive and costly conditions. During consideration of S. 2780, the majority of the Senate Committee on Environment and Public Works specifically complained that "[o]nce the NPDES permit requirements are triggered, the Good Samaritan assumes liability under the statute for all existing and future discharges."¹²⁵ This led one supporter of Good Samaritan legislation to call the liability that attaches to NPDES permits "an overwhelming disincentive in the Clean Water Act."¹²⁶

The CWA and relevant case law do provide some exceptions to the NPDES permitting and liability regime, though. Two deserve particular consideration: (1) the statutory permit exemption for uncontaminated water that is conveyed around, and never comes into contact with, mine sites;¹²⁷ and (2) the court-allowed exception for discharges which the remediating party did not create or from which the remediating party removed some, but not all, pollutants.¹²⁸ The first may be of limited utility, depending on the characteristics of the site in question and the type of cleanup that a Good Samaritan intends to undertake. The second exists only in certain jurisdictions (the courts of other jurisdictions have come to opposite conclusions), so this exception may also be of limited utility.

¹²² See Part II(B)(1), *supra*.

¹²³ 33 U.S.C. § 1362(12) (2000).

¹²⁴ McAllister, *supra* note 89, at 10,248.

¹²⁵ S. REP. NO. 109-351, at 8.

¹²⁶ Williams Statement, *supra* note 28, at 124.

¹²⁷ 33 U.S.C. § 1342(1)(2).

¹²⁸ See Section III(C)(2), *infra*.

Two additional possibilities for CWA relief exist in CERCLA. First, CERCLA provides authority for the President to "enter into an agreement with any person . . . to perform any response action . . . if the President determines that such action will be done properly by such person."¹²⁹ This is one of the provisions that EPA used to justify its authority to issue Good Samaritan Settlement Agreements.¹³⁰ As explained above, though, EPA may only waive water quality standards in a Settlement Agreement when their attainment is impracticable, so depending upon how strictly EPA interprets "impracticability," this administrative power may not be terribly useful to Good Samaritans. Second, CERCLA contains an exception to theoretically *all* permit requirements (federal, state, and local alike) for any onsite remediation activities. This exception has considerable potential value for Good Samaritans and could be advantageous as a mechanism for avoiding the NPDES permit requirement.

1. *Diverting Clean Water Around Abandoned Mines*

Concerning the first of the CWA-specific permit exceptions, the statute provides that neither EPA nor states administering NPDES permitting programs:

shall . . . require a permit . . . for discharges of stormwater runoff from mining operations . . . composed entirely of flows which are from conveyances or systems of conveyances . . . used for collecting and conveying precipitation runoff and which are not contaminated by contact with, or do not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct, or waste products located on the site of such operations.¹³¹

In simpler terms, a Good Samaritan would not need to obtain a NPDES permit if the remediation project's water discharges came solely from diversions of clean water and never touched any mining products or wastes.¹³² Depending on the particular contamination pathways present at an abandoned mine, this permit exception could prove extremely useful to Good Samaritans. Indeed, many of the water pollution problems at abandoned

¹²⁹ 42 U.S.C. § 9622(a) (2000).

¹³⁰ EPA MODEL GOOD SAMARITAN SETTLEMENT AGREEMENT, *supra* note 92, § I.

¹³¹ 33 U.S.C. § 1342(l)(2).

¹³² One author has noted the relationship between water diversion projects and CERCLA:

[Because of this exception,] the CWA should not hinder Good Samaritan efforts to implement clean water diversion projects, assuming the diversion works do not come into contact with pollutants. Similarly, without the release or threatened release of a hazardous substance, there is no liability under CERCLA for diverting clean surface waters Thus, the utilization of runoff control techniques presents no risk of CERCLA liability.

mines result from clean water that flows through waste piles and old tunnels, accumulating residual contaminants and often acidifying to the point of killing everything but bacteria for several miles downstream.¹³³ Where feasible, water diversion projects could be optimal for Good Samaritans because these projects may cost relatively little, significantly reduce pollution flowing from mine sites, and shield Good Samaritans from both CWA and CERCLA liability. The drawback to this NPDES permit exception, however, is its very restricted scope. Many mine sites present extremely complex (and sometimes intractable) groundwater flow problems that make diversion an unavailable option.¹³⁴ And even where diversion is technically achievable, it may not accomplish much unless combined with other actions that would trigger liability under CERCLA and/or the CWA.

2. *Reducing Contaminant Burdens and the Interpretation of "Discharge"*

The second CWA-specific permit exception is potentially more widely applicable than the water rerouting provision, but it relies on judicial interpretations of the CWA's terminology, and courts have split on their interpretations. At issue is the CWA's prohibition of unpermitted "discharge[s] of any pollutant by any person."¹³⁵ If Good Samaritans can prove that their cleanup actions do not result in any such discharges, then they need not obtain a NPDES permit and need not accept the accompanying liability for water-borne pollution flowing from the abandoned mine. To succeed in this argument, Good Samaritans must tread a complicated legal path that offers no certainty. The following excerpt highlights the difficulty of this issue:

¹³³ The acidification of water from abandoned mines is the consequence of a series of chemical reactions, often accelerated by acidophilic bacteria. The resulting discharge, known as "acid mine drainage" or "acid rock drainage," dissolves heavy metals in the materials that it contacts and carries these often toxic elements into the surrounding environment. Consequently, one common strategy employed in mine construction and remediation is to cut off and reroute flows of clean water that would otherwise reach mine sites and become contaminated. See, e.g., MRITUNJOY SENGUPTA, ENVIRONMENTAL IMPACTS OF MINING: MONITORING, RESTORATION, AND CONTROL 169-176, 197 (1993). During a trip to Colorado in mid-September 2006, I spoke with EPA engineers who were hoping to use water diversion techniques as one method of reducing contamination from an abandoned mine (the Wellington-Oro Mine) near Breckenridge. Interview with Victor Ketellapper, Engineer, U.S. Environmental Protection Agency, in Breckenridge, Colo. (Sept. 30, 2006). The project was a joint effort between EPA, Summit County, and the Town of Breckenridge—the latter two had taken ownership of the site through a complex deal with EPA and a mining company and were effectively acting as Good Samaritans. For more information on this cleanup, see U.S. Environmental Protection Agency, Region 8—Superfund: French Gulch, <http://www.epa.gov/region8/sf/co/frenchgulch/index.html> (last visited Nov. 29, 2007) (on file with the Harvard Environmental Law Review).

¹³⁴ See, e.g., PAUL L. YOUNGER ET AL., MINE WATER: HYDROLOGY, POLLUTION, REMEDIATION 169-218 (2002). The Berkeley Pit in Butte, Montana, is a classic example of seemingly intractable groundwater infiltration problems. For more information, see <http://www.mbmgtmtech.edu/env/env-berkeley.asp> (last visited Nov. 29, 2007).

¹³⁵ 33 U.S.C. § 1311(a).

Good Samaritans' fundamental argument is that the CWA does not apply to them because other parties are responsible for the original discharge and they are merely attempting to mitigate the negative impacts of that original discharge Good Samaritans could claim that holding them liable for the discharges of other parties is anathema to the plain meaning of the term "discharge of pollutants" because their activities result in a net withdrawal of pollutants from the water. A few courts have adopted this reasoning to limit the reach of EPA's power under the CWA Despite this case law, . . . other cases have held that it is immaterial if the remediating party created the original pollution. [Thus], it is clear why Good Samaritans fear CWA liability for any treatment system that conveys pollutants. The broad interpretation of discharge in [some court opinions] makes it irrelevant if there is a nexus between the Good Samaritan and the origin of the pollutant. It is similarly irrelevant if a Good Samaritan intends to improve water quality overall if [that Good Samaritan's remedial] activities ultimately result in the discharge of a pollutant from a point source into navigable waters.¹³⁶

The split among the circuits and the ambiguity that plagues determinations of statutory "discharges" have left Good Samaritans without a guarantee that they will be protected from NPDES permit liability, even if their projects partially decontaminate mine effluents and create no new pollution. This has produced a strong disincentive to undertake abandoned mine cleanups that would lead to any water discharges covered by the CWA.¹³⁷

¹³⁶ McAllister, *supra* note 89, at 10,253-54 (citations omitted).

¹³⁷ Good Samaritans can also avoid the necessity of obtaining a NPDES permit by taking only actions that do not result in anything that could be construed as a "discharge," actions like capping tailings and waste rock piles:

The creation of [acid mine drainage] at inactive or abandoned mines can be stopped if sulfur-laden waste rock or tailings piles are isolated from contact with runoff from natural precipitation or other surface and groundwater flows. Waste rock and tailings piles can be separated from clean water flows by placing an impermeable cap over the piles. Following the capping, there would be no discharge of pollutants to trigger CWA liability. In addition, there would not be a discrete or confined conveyance that could be interpreted as a point source. Thus, the successful capping of waste rock or tailings piles by a Good Samaritan should not entail the discharge of a pollutant from a point source into navigable water. As a result, a CWA discharge permit should not be necessary for this activity. Similarly, after a pile is capped, there should be no release of hazardous substances from a facility so as to trigger CERCLA liability. However, Good Samaritans could be subject to "arranger" liability under CERCLA because, in doing the work, they will be arranging for the disposal of a hazardous substance. To avoid this result, EPA has used CERCLA's Good Samaritan provision in § 107(d) to allow Good Samaritans to cap waste rock piles without incurring liability.

Id. at 10,260-61. McAllister describes how mine cleanups near Leadville, Colorado, and in Colorado's Clear Creek watershed used these techniques and cooperated with EPA to mitigate CERCLA liability and avoid NPDES permit requirements. *Id.* at 10,260.

3. *Conducting Onsite Remediation Activities*

CERCLA authorizes exemptions from federal, state, and local permits for “the portion of any removal or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with [section 121].”¹³⁸ While opposing S. 1848, Senators Boxer, Clinton, Lautenberg, Lieberman, and Obama cited this provision as a mechanism for significantly limiting liability under laws beyond CERCLA:

It is . . . worth noting that pursuant to Section 121(e) of CERCLA, [no permits shall be required for onsite removal or remedial actions]. Accordingly, if an innocent party enters into an agreement with the United States to perform an interim clean-up at an abandoned mine, permitting requirements, including Clean Water Act permitting requirements[,] are limited. This protection allows a party to reach agreement with EPA on a scope of work that includes flexible application of relevant standards, while at the same time receiving protection from permitting requirements and liability to the United States.¹³⁹

Based only on the plain language of CERCLA, section 121(e)(1) would seem to be an ideal device for avoiding the NPDES permit requirement, except that the provision’s applicability and reach are unclear because “[t]he [breadth] of § 121(e) has never been thoroughly explored by the courts.”¹⁴⁰ In *United States v. Colorado*, the Tenth Circuit Court of Appeals highlighted the possibility that section 121(e)(1) would conflict with other provisions of CERCLA and applicable federal laws, but declined to resolve the issue: “While [section 121(e)(1)] arguably conflicts with [42 U.S.C.] §§ 9652(d) and 9614(a) when a state has been authorized to issue and enforce RCRA permits, the facts of this case do not require us to reconcile the potential conflict.”¹⁴¹

A district court in California actually reached the issue with regard to non-federal permits, however, and held that an air pollution control district could not force the U.S. Army to obtain a permit for prescribed burns that came within the definition of section 121(e)(1). “CERCLA exempts remedial actions ‘conducted entirely onsite’ from *all* federal, state, and local permit requirements.”¹⁴² Another district court’s description of a CERCLA consent decree implies that the court believes section 121(e)(1) can exempt remediation projects from the NPDES permit requirement specifically.

¹³⁸ 42 U.S.C. § 9621(e)(1) (2000). EPA’s Model Agreement specifically references the permit waiver provision of section 121(e) as one of very few exceptions to the rule that Good Samaritan cleanups must meet all federal, state, and local standards apart from CERCLA. EPA MODEL GOOD SAMARITAN SETTLEMENT AGREEMENT, *supra* note 92, § XI.

¹³⁹ S. REP. NO. 109-351, at 33 (2006).

¹⁴⁰ McAllister, *supra* note 89, at 10,259.

¹⁴¹ 990 F.2d 1565, 1582 (10th Cir. 1993).

¹⁴² Monterey Bay Unified Air Pollution Control Dist. for the People of the State of Cal. v. U.S. Dep’t of the Army, 176 F. Supp. 2d 979, 990 (N.D. Cal. 2001) (emphasis added).

“The consent decree requires [a NPDES permit] despite the fact that, under 42 U.S.C. § 9621(e)(1), ‘[n]o Federal, State, or local permit shall be required for the portion of any removal or remedial action conducted entirely onsite. . . .’”¹⁴³ In other words, the court appears to indicate that, but for the consent decree’s explicit mandate that the litigants obtain a NPDES permit, the court would have presumed the NPDES permit requirement to be preempted. One other federal case upheld section 121(e)(1)’s preemptive language against challenges by governments whose laws were to be preempted,¹⁴⁴ but, ultimately, the provision has received scant judicial examination, so Good Samaritans should invoke it cautiously (and certainly with a backup plan).

Apart from the basic issue of whether section 121(e)(1) even *can* override all permit requirements, the scope of the provision’s applicability is far from crystal-clear. Good Samaritans might worry particularly about what “onsite” means. The D.C. Circuit has found the term to be ambiguous, both in CERCLA and in the NCP, but the court still upheld the NCP’s broad definition of the term against a challenge by various States: “[F]orced to construe the NCP definition in a vacuum, we have no trouble in concluding that the regulation on its face is not unlawful. The NCP definition allows EPA to respond to releases expeditiously and, one would hope, efficaciously.”¹⁴⁵ The NCP’s judicially sanctioned definition ought to enable many Good Samaritan mine cleanups to fit within its scope: “The term *onsite* means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action.”¹⁴⁶

Another significant obstacle to the usefulness of section 121(e)(1)’s permit waiver is the uncertainty of what constitutes “compliance with [section 121].” Section 121 serves several functions. It sets the basic standard for the “degree of cleanup” as that which “assures protection of human health and the environment.”¹⁴⁷ It also identifies remedial action selection criteria for the President: “Remedial actions selected under this section or otherwise required or agreed to by the President under this chapter . . . shall be relevant and appropriate under the circumstances”¹⁴⁸ The statute elaborates on this requirement:

With respect to any hazardous substance . . . that will remain onsite, if [any federal or state environmental] standard, requirement,

¹⁴³ *United States v. Bliss*, 133 F.R.D. 559, 563 (E.D. Mo. 1990).

¹⁴⁴ *See United States v. City and County of Denver*, 100 F.3d 1509, 1513 (10th Cir. 1996) (“In our view, to hold that Congress intended that non-uniform and potentially conflicting zoning laws could override CERCLA remedies would fly in the face of Congress’s goal of effecting prompt cleanups of the literally thousands of hazardous waste sites across the country. We would need especially reliable indications of an intent so contrary to the overall objectives of CERCLA, and we do not find any in either CERCLA or its legislative history.”).

¹⁴⁵ *Ohio v. EPA*, 997 F.2d 1520, 1549 (D.C. Cir. 1993).

¹⁴⁶ 40 C.F.R. § 300.5 (2006).

¹⁴⁷ 42 U.S.C. § 9621(d)(1) (2000).

¹⁴⁸ *Id.*

criteria, or limitation . . . is legally applicable to the hazardous substance . . . concerned or is relevant and appropriate under the circumstances . . . , the remedial action selected . . . shall require . . . a level or standard of control for such hazardous substance . . . which at least attains such legally applicable or relevant and appropriate standard, requirement, criteria, or limitation.¹⁴⁹

In less opaque terms, to obtain a waiver of federal, state, or local permits under this provision, Good Samaritans must meet effectively the same standards that they would be required to meet if they actually obtained the relevant permits. The only exception to this requirement allows the President (i.e., EPA) to select a remedial action that does not attain applicable or relevant and appropriate requirements when certain restrictive criteria are met.¹⁵⁰ Unfortunately, Good Samaritan abandoned mine cleanups are unlikely to meet these criteria, so without some type of special waiver or immunity, conceivably granted in a Settlement Agreement, most Good Samaritan projects would probably not find section 121(e)(1)'s permit exemption very useful.

Overall, Good Samaritans have a strong argument (and some attenuated judicial support) that section 121(e)(1) relieves them of the obligation to acquire a NPDES permit for onsite remedial activities (off-site activities fall outside the purview of this CERCLA-created exemption.) As mentioned above, though, the applicability and reach of the section 121(e)(1) exception remain relatively unexplored, so Good Samaritans may be treading in unknown waters if they rely on this exception, and this could be quite dangerous when violations of CERCLA or the CWA are the consequences of an adverse administrative or judicial decision.

D. Conclusion

Federal law contains a number of exceptions to the stringent liability and environmental standards of CERCLA and the CWA. These exceptions may not prove useful to every Good Samaritan in every situation—admittedly, the scope of some of these exceptions is quite limited—yet their availability calls into question the supposed need for Good Samaritan legislation. Bills proposed in the past would clarify issues regarding the applicability of CERCLA and the CWA by simply making them inapplicable.¹⁵¹ But, do we really need to create a new permitting system whose operative thrust (complete exemption from environmental laws) is so blunt when the statutes of concern already offer potentially more tailored instruments for granting liability protection to Good Samaritans? Opponents of Good Samaritan legislation would say no.

¹⁴⁹ *Id.* § 9621(d)(2)(A).

¹⁵⁰ *See* 40 C.F.R. § 300.430(f)(1)(ii)(C).

¹⁵¹ Of course, S. 1848 would waive several more laws, as well.

Clearly, the tools exist in the law to formulate settlements that are protective of innocent parties who wish to clean-up an abandoned mine site. At the same time, environmental standards are clear but flexible, ensuring that the sites are not made worse despite a party's good intentions. The notion that the environmental laws stand in the way of environmental protection is a fallacy.¹⁵²

As the law currently stands, however, Good Samaritans may be understandably afraid to commence abandoned mine cleanups while relying on liability and permit exceptions that remain relatively untested in court and in practice.

Recently, with the issuance of its model documents, EPA has taken a substantial step toward establishing a workable administrative system to ensure that deserving Good Samaritans can pursue abandoned mine cleanups relatively free from daunting liability. These documents—especially the Model Good Samaritan Settlement Agreement—could eliminate the supposed necessity of Good Samaritan legislation, as well as dramatically change (for the better) the opportunities for Good Samaritan cleanups in the future. Some issues remain problematic, though. For instance, EPA and Congress should clarify when Good Samaritan mine cleanups dealing with water pollution create “discharges” that require a NPDES permit. It makes little sense to saddle Good Samaritans with liability for water-borne contamination that they are mitigating and did not create, but courts have nonetheless issued opinions imposing such liability.¹⁵³ EPA and Congress should also seek to determine the boundaries of CERCLA section 121(e), so that Good Samaritans may rely on that provision's permit exemption when undertaking mine remediation projects.

With all of the recent administrative and legislative attention focused on Good Samaritan mine cleanups, we may be on the cusp of a major transformation in this sphere. Even if things work out perfectly for Good Samaritans, however, we must wonder whether Good Samaritan cleanups, no matter how easily they can be undertaken, will ever contribute significantly to reducing the environmental dangers posed by abandoned mines.

IV. LEGISLATIVE ALTERNATIVES TO ADDRESS MINE CONTAMINATION

A. Introduction

Although, as explained above, Good Samaritan legislation has both benefits and drawbacks, and there may exist better alternative solutions, such bills do at least strive to tackle the immense environmental problem of contamination from inactive and abandoned mines. As the West continues to attract new residents and as ecosystems suffer ever greater stresses, we

¹⁵² S. REP. NO. 109-351, at 33 (2006).

¹⁵³ See Part III(C)(2), *supra*.

must confront the legacy of hardrock mining and begin remediating polluted sites across the western landscape. We must also consider how to allow for further resource extraction while ensuring that its effects are not so detrimental as they have been in the past.

While it is easy to debate how legislation and administrative processes should enable Good Samaritan cleanups, we must consider two major questions that delve deeper into mining law and the realities of the situation on the ground. Will we really be able to accomplish much in the way of environmental decontamination by authorizing Good Samaritan cleanups, whether through current laws and Settlement Agreements or through Good Samaritan legislation? And what should we do to prevent environmental damage from active mining operations so that Good Samaritans will not need to intervene in the future? Clearly, Good Samaritan legislation and EPA's model documents have a retrospective orientation and will do nothing to address the second question. As to the first question, though, supporters of S. 1848 and S. 2780 maintained that these bills would contribute significantly to the remediation of existing abandoned mines. Senator Salazar made this fervent plea to his colleagues:

Passing this bill would be a great step forward for Colorado and Western states. For too long we in the West have been frustrated by the legacy of mining, stymied by liability schemes that focus primarily on who is responsible for what, rather than on developing a practical solution to the problem I very much look forward to working with you . . . to pass this Good Samaritan legislation, which is of such importance to the land, water, and people of Colorado and the Nation.¹⁵⁴

Unfortunately, statistical and economic realities belie Senator Salazar's enthusiasm for his "practical solution," as well as whatever hopes we might have for EPA's Good Samaritan Initiative. The number of abandoned mines and the estimated costs of remediating them are staggeringly high, so high that it is hard to imagine how there could possibly be enough Good Samaritans in the United States to have a meaningful impact on the environmental degradation caused by these sites.

The data on abandoned mines are imprecise, and their quality varies widely across states, but well-studied estimates put the number of unreclaimed sites at over 500,000.¹⁵⁵ As of 2003, the U.S. Geological Survey

¹⁵⁴ Salazar Statement, *supra* note 5.

¹⁵⁵ KELLY CUSTER, MINERAL POLICY CTR., CLEANING UP WESTERN WATERSHEDS 4 (2003). One study concluded that 35 percent of these sites are benign. STUART BUCK & DAVID GERARD, POLITICAL ECONOMY RESEARCH CENTER, RESEARCH STUDY 01-1: CLEANING UP MINING WASTE 3 (2001). Another concluded that 80 percent of these sites "create neither environmental nor immediate public safety concerns." WESTERN GOVERNORS' ASSOC. & NATIONAL MINING ASSOC., CLEANING UP ABANDONED MINES: A WESTERN PARTNERSHIP 5 (1999). Whatever the actual number may be, there are still *many* abandoned mines that present significant hazards to human health and the environment. For maps of abandoned mines sur-

had already catalogued 230,000 sites.¹⁵⁶ These abandoned mines contain “fifty billion tons of untreated mine waste and pollute 12,000 miles of waterways and 180,000 acres of lakes and reservoirs.”¹⁵⁷ The Mineral Policy Center has calculated the total cleanup price-tag to be \$33-72 billion; the defunct Bureau of Mines’ estimate is lower, but still an astounding \$4-35 billion.¹⁵⁸ Recently, the EPA Inspector General estimated that just 156 of the nation’s worst mining sites “have the potential to cost between \$7 billion and \$24 billion to clean up (at a maximum total EPA cost of \$15 billion).”¹⁵⁹ Even if we believe the lowest of these numbers, the scale and costs of remediating all of the mines threatening public health and the environment are astronomical. Could we possibly find enough Good Samaritans with enough money to make a noticeable contribution toward reducing these numbers?

A simple mathematical exercise serves to demonstrate the true impracticality of relying on Good Samaritan cleanups to remedy environmental problems. Taking the Western Governors’ Association’s and National Mining Association’s estimate that 80 percent of the abandoned mines in the West present no environmental or immediate public safety concerns,¹⁶⁰ approximately 110,000 sites warrant remediation (i.e., 20 percent of the overall 557,000 sites in 35 states¹⁶¹). Assuming a total cleanup budget of \$10 billion (one-third of the *lower* bound of the Mineral Policy Center’s calculation and in the lower range of the government’s calculation), one cleanup will cost about \$90,000 on average. This means that, for the 300 million residents of the U.S., there is one site needing remediation for every 2,700 persons, and each U.S. resident would have to raise about \$33 to donate to Good Samaritan mine remediation efforts. Of course, the idea that everyone in the country would give \$33 for this cause is absurd, especially since most of the mines at issue lie far from population centers and do not have a large local constituency to fight for their remediation. Even in areas where residents of populous cities recreate near abandoned mines on the weekend, the economics of Good Samaritan remediation seem intractable. If we use the same conservative estimates when looking at Colorado, for instance (i.e., 20 percent of the state’s 22,000 sites¹⁶² call for treatment; each site will cost an average of \$90,000), the Denver metro area’s share of the burden would require funding 2,200 Good Samaritan cleanups at a total cost of \$200 mil-

vayed in the western states, see <http://www.earthworksaction.org/AMLMaps.cfm> (last visited Nov. 29, 2007) (on file with the Harvard Environmental Law Review).

¹⁵⁶ CUSTER, *supra* note 155, at 4.

¹⁵⁷ DAVID STILLER, *WOUNDING THE WEST: MONTANA, MINING, AND THE ENVIRONMENT* 14 (2000) (emphasis in original) (citing JAMES S. LYON ET AL., *BURDEN OF GILT* (1993)).

¹⁵⁸ BUCK & GERARD, *supra* note 155, at 3.

¹⁵⁹ U.S. ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF INSPECTOR GENERAL, *ANNUAL SUPERFUND REPORT TO CONGRESS FOR FISCAL 2004 3* (2005) [hereinafter *SUPERFUND REPORT 2004*].

¹⁶⁰ WESTERN GOVERNORS’ ASSOC. & NATIONAL MINING ASSOC., *supra* note 155, at 5.

¹⁶¹ CUSTER, *supra* note 155, at 4.

¹⁶² WESTERN GOVERNORS’ ASSOC. & NATIONAL MINING ASSOC., *supra* note 155, at 4.

lion.¹⁶³ For Denver-based Good Samaritans even to remediate five percent of these mines (110 sites at \$10 million) would probably be a miracle.

Given the shocking enormity of U.S. abandoned mine remediation needs, Good Samaritan efforts will likely contribute no more than a drop in the bucket. To put such efforts thus far into perspective, Trout Unlimited had to solicit funding from the Tiffany & Company Foundation and from Senator Bennett to raise a mere \$200,000 for its restoration of Utah's American Fork Creek.¹⁶⁴ This area receives more than 1.2 million visitors annually, and Trout Unlimited has over 160,000 members in 36 states.¹⁶⁵ Could Good Samaritans ever write enough grant proposals and pull enough political strings to make a dent in the remaining 100,000 or so cleanups of approximately this magnitude that are needed? Even with every liability waiver conceivable, it seems unlikely that Good Samaritans could have more than a tiny impact on the overall problem. Where and when they come forward, Good Samaritans should certainly have the opportunity to undertake remediation projects, but we should not delude ourselves into thinking, as Colorado's Senator Salazar seems to have done, that bills like S. 1848 or S. 2780 can make any significant difference in mitigating the very real threats that abandoned mines pose to human health and to the environment.¹⁶⁶ What we need instead is a two-fold strategy that will both ensure funding for the decontamination of existing polluted sites and regulate future mining operations such that we will never again have to confront hundreds of thousands of abandoned mines.

Experts and politicians have proposed a number of legislative mechanisms to accomplish the complementary goals of remedying past harm and averting future harm. These fall roughly into two categories: (1) proposals for new taxes or fees whose proceeds would fund remediation projects, and (2) proposals for the overhaul of federal laws that currently govern mining. Commentators have also suggested various market-based strategies and changes in management approaches that could help mitigate the problems of

¹⁶³ To give this amount some discouraging context, consider that the remediation of Colorado's most notorious abandoned mine (Summitville) has already cost over \$200 million alone. See U.S. Environmental Protection Agency, Region 8-Superfund: Summitville Mine, <http://www.epa.gov/region08/superfund/co/summitville/index.html> (last visited Nov. 29, 2007). Taking into account natural resource damages can make the costs of mining seem downright horrifying: at a 1,500 acre study area in the Coeur d'Alene basin of northern Idaho, the Coeur d'Alene tribe and the Department of the Interior have assessed natural resource damages at \$600 million to \$1.3 billion. U.S. ENVIRONMENTAL PROTECTION AGENCY, RISKS POSED BY BEVILL WASTES 10 (1997) [hereinafter BEVILL WASTES REPORT].

¹⁶⁴ Wood Statement, *supra* note 103, at 133.

¹⁶⁵ *Id.* at 131, 133.

¹⁶⁶ As former Senator Jeffords said during committee hearings, "Can we expect Good Samaritans to volunteer to pay more than a small fraction of the cost to clean up the nation's abandoned mines? Of course not." Jeffords Statement, *supra* note 30. Senator Boxer echoed his sentiments: "The need for cleanup of abandoned mine lands dwarfs any Good Samaritan Initiative. This is a large complex problem and the Good Samaritan proposals are a drop in the bucket. Worse if they go wrong." Boxer Statement, *supra* note 36.

mine reclamation.¹⁶⁷ Ultimately, we should focus our efforts on advancing these proposals and strategies, rather than on trying desperately to encourage Good Samaritan cleanups that will not move us very far toward decontaminating the country's numerous abandoned hardrock mines and will not help prevent the creation of new polluted mining sites. Centering our strategy on Good Samaritan remediation risks causes us to "ignor[e] the monster in the room which is the lack of sufficient commitment and funding by state and federal governments and industry to adequately address the task of cleanup."¹⁶⁸ Good Samaritan projects should be promoted where appropriate, but our critical job now is both to correct our mistakes from the past and to stop ourselves from making those same mistakes in the future—neither Good Samaritan bills nor model documents are a sufficient means to that end.

B. Taxation and Fee Proposals

Those who disagree with the focus of Good Samaritan legislation most often criticize the bills for not addressing the issue of cleanup funding. Testifying before the Senate Committee on Environment and Public Works, the National Environmental Trust's representative remarked:

[T]hough I realize you may tell me that I'm in the wrong hearing room, we would argue that the single most compelling barrier [to abandoned mine remediation] is not regulatory[,] but financial: Mining sites are not being cleaned up fast enough because neither the industry nor the government is contributing sufficient money to the task.¹⁶⁹

Trout Unlimited's representative noted that for his organization's Good Samaritan projects, "[f]unding is an overriding concern."¹⁷⁰ One supporter of S. 1848 and S. 2780 also acknowledged the seriousness of the funding question but dismissed it as too controversial to be considered simultaneously with Good Samaritan liability protection: "A bill designed to allow Good Samaritans to proceed with their work without incurring Clean Water Act liability could encounter much less opposition if it did not attempt to address the question of who will pay."¹⁷¹ She urged Congress to construct a funding program *after* the passage of Good Samaritan legislation. "Having gotten a Good Samaritan provision in place, Congress could then work on the right

¹⁶⁷ I will not discuss these other approaches in this paper. They include effluent trading (see Randall Hale Cherry, *Mine Waste, Clean Water, and Good Business: Using Effluent Trading to Clean up Orphan Mine Sites in the Clear Creek Watershed*, 2 U. DENV. WATER L. REV. 80 (1998)), watershed-based strategies (see Seymour, *supra* note 19, at 949-51), and streamlining of federal procedures combined with increased coordination among agencies (see *id.* at 951-53).

¹⁶⁸ Harwood Statement, *supra* note 19.

¹⁶⁹ Smith Statement I, *supra* note 35, at 79.

¹⁷⁰ Wood Statement, *supra* note 103, at 133.

¹⁷¹ Limerick Statement, *supra* note 14, at 9-10.

formula for funding such cleanups.”¹⁷² This approach seems reversed, however. Why create a permitting program that lacks the funding for its intended beneficiaries to take advantage of it? Especially now, with the issuance of EPA’s model documents, there is surely already a cadre of willing and able Good Samaritans waiting to find funding. Moreover, Congress should not divert attention from problematic financial details of mine remediation by pretending that Good Samaritan legislation will have a significant impact on its own. Certainly, avoiding the funding issue—without question the most significant impediment to abandoned mine remediation—will not help alleviate what the sponsors of S. 1848 themselves identified as the “vexing problem” of pollution from old mines.¹⁷³

1. *Choosing or Creating a Fund*

a. *Using the Superfund: Benefits and Drawbacks*

Proposals for financing cleanups at the federal level have suggested either fully funding the Superfund program or creating a new fund dedicated specifically to reclaiming abandoned mines. The differences between these two options deserve some examination.¹⁷⁴ The “Superfund” (or “Hazardous Substance Superfund,” as it is formally known) was created by Congress to carry out the purposes of CERCLA section 111.¹⁷⁵ These provisions allow the government to spend Superfund monies for three main purposes: (1) the government’s own response actions at hazardous waste sites, (2) third party response actions carrying out the NCP, and (3) technical assistance grants.¹⁷⁶

Perhaps the principal benefit of using Superfund for reclamation projects is that it has an established structure which EPA has utilized for over two decades to address abandoned mines, as well as many other hazardous waste sites. Consequently, if Congress simply appropriated more money for the Superfund, EPA would already have the institutional knowledge and structure to begin almost immediately disbursing money for mine cleanups. In contrast to any new statutory funding system, EPA would not have to worry—at least, not as much—about whether it was misinterpreting its authorities and duties under the law. Moreover, Superfund is currently severely underfunded and many mine sites already targeted for funding continue to stream toxics into the environment while awaiting new appropriations. Commentators have repeatedly chastised the executive branch and Congress for allowing the Superfund to dwindle:

Unfortunately, the EPA has slowed cleanups and begun scaling down spending requests. More frightening still is the growing

¹⁷² *Id.* at 10.

¹⁷³ Salazar Statement, *supra* note 5.

¹⁷⁴ As discussed below, the more difficult and controversial topic is how the money for these funds would be generated.

¹⁷⁵ 26 U.S.C. § 9507(c)(1) (2000).

¹⁷⁶ 42 U.S.C. § 9611(a) (2000).

backlog of cleanup projects that the EPA currently faces—two years and growing, by the last estimate. Many of the sites include those that have been “studied and prepared for restoration.” Communities adjacent to these sites have waited as long as three years for work to recommence.¹⁷⁷

The Superfund clearly needs a boost from the President and Congress, which would undoubtedly lead to the funding of more abandoned mine cleanups by EPA.

While the institutionalized character of the Superfund is one of its primary advantages for enabling mine remediation, that character may also be one of the Superfund’s primary drawbacks. Legally, CERCLA and the Internal Revenue Code restrict the use of Superfund monies in ways that could make many mine cleanups difficult to fund. For one, the federal government can use Superfund monies to pay for any CERCLA section 104 projects that it undertakes,¹⁷⁸ but typically the federal government undertakes remedial actions only at the very worst sites. In fact, the NCP prohibits EPA from using Superfund monies for long-term remedial actions unless the site in question is on the National Priority List (“NPL”).¹⁷⁹ Currently, only around 1,250 sites have received NPL listings, and few of those are abandoned mines.¹⁸⁰ EPA does have the authority to conduct Superfund-financed, short-term removal actions without listing a site on the NPL,¹⁸¹ but funding decisions and political realities disfavor concentrating much attention on removal actions at abandoned mines. Recent funding decisions, for instance, have channeled two-thirds of Superfund money to projects on the NPL, leaving less than \$200 million annually for removal actions.¹⁸² Since mine cleanups constitute only a tiny fraction of removal actions undertaken by EPA anyway, the actual amount of money available for removal actions at abandoned mines is much (probably orders of magnitude) smaller than \$200 million.¹⁸³ Abandoned mines may also receive relatively less attention than other CERCLA sites because they are often not located in highly populated areas and they present hazards that are not as politically compelling as, say, rusting waste barrels in a suburban neighborhood. This should not cause us to discount the environmental and public health consequences of hardrock mines, however. Even with today’s laws, “the metal mining industry was

¹⁷⁷ Martina E. Cartwright, *Superfund: It's No Longer Super and It Isn't Much of a Fund*, 18 TULANE ENVTL. L.J. 299, 318 (2005) (citations omitted).

¹⁷⁸ 42 U.S.C. § 9611(a)(1).

¹⁷⁹ 40 C.F.R. § 300.425(b)(1) (2006).

¹⁸⁰ Search for sites “Currently on the Final NPL” in U.S. Environmental Protection Agency’s CERCLIS Database, Superfund Information Systems, <http://www.epa.gov/superfund/sites/cursites> (last visited Nov. 29, 2007).

¹⁸¹ 40 C.F.R. § 300.425(b)(1).

¹⁸² Ramseur & Reisch, *supra* note 10, at 6.

¹⁸³ Data obtained from search of EPA’s CERCLIS Database, *supra* note 180.

the largest toxic polluter in 2000, releasing 3.4 billion pounds of toxics, or 47 percent of the total released by U.S. industry.”¹⁸⁴

Besides the pressures that draw EPA’s Superfund attention away from abandoned mines, the Superfund money that does reach mine sites is restricted in unfortunate ways. Non-federal entities, for instance, cannot easily obtain reimbursement of their cleanup costs from the Superfund. To be eligible for such funding, they must be “carrying out the [NCP, and their] costs must be approved under [the NCP] and certified by the responsible Federal official.”¹⁸⁵ Additionally, Superfund monies may be used to fund the restoration of damaged natural resources only when the federal government or state or tribal governments undertake the restoration and have exhausted all administrative and judicial remedies for recovering their costs from PRPs.¹⁸⁶ These restrictions on the expenditure of Superfund monies make the Superfund a suboptimal financing mechanism for abandoned mine remediation projects, despite the benefits provided by Superfund’s pre-established structure. The abovementioned institutional and political limitations of the Superfund further diminish its appeal. Thus, a more attractive option is a new fund created by Congress and specially tailored to funding abandoned mine cleanups.

b. Creating a New Abandoned Hardrock Mine Reclamation Fund

A new fund dedicated to reclaiming abandoned hardrock mining operations could draw on the precedent of the Abandoned Mine Reclamation Fund, created by the Surface Mining Control and Reclamation Act of 1977 (“SMCRA”).¹⁸⁷ The Abandoned Mine Reclamation Fund targets abandoned coal mines and disburses money for cleanups based on a hierarchy of priorities:

- (1)(A) the protection of public health, safety, and property from extreme danger of adverse effects of coal mining practices;
- (B) the restoration of land and water resources and the environment that:
 - (i) have been degraded by the adverse effects of coal mining practices; and
 - (ii) are adjacent to a site that has been or will be remediated under subparagraph (A);
- (2)(A) the protection of public health and safety from adverse effects of coal mining practices;

¹⁸⁴ SUPERFUND REPORT 2004, *supra* note 159, at 3.

¹⁸⁵ 42 U.S.C. § 9611(a)(2) (2000). The issue of exactly who can make which claims against whom and for what under CERCLA is exceptionally complex and not worth delving into for the purposes of this article.

¹⁸⁶ *Id.* §§ 9611(b)(2)(A), 9611(c)(1)-(2). For more information on the use of Superfund monies, see *Exxon Corp. v. Hunt*, 475 U.S. 355, 360 (1986).

¹⁸⁷ 30 U.S.C. § 1231 (2000).

(B) the restoration of land and water resources and the environment that:

(i) have been degraded by the adverse effects of coal mining practices; and

(ii) are adjacent to a site that has been or will be remediated under subparagraph (A); and

(3) the restoration of land and water resources and the environment previously degraded by adverse effects of coal mining practices including measures for the conservation and development of soil, water (excluding channelization), woodland, fish and wildlife, recreation resources, and agricultural productivity.¹⁸⁸

In creating a new hardrock mine reclamation fund, Congress could adopt this list of funding priorities almost verbatim.¹⁸⁹ Congress could also avoid imposing the legal restrictions that make the Superfund a somewhat inadequate mechanism for funding abandoned mine remediation projects. For instance, the new fund could allow EPA to support state and local government efforts, as well as private Good Samaritan efforts, without requiring strict NCP compliance and without erecting the numerous hurdles that constrain funding under CERCLA. This lowering of transaction costs could allow a much more efficient expenditure of funds than CERCLA does currently. Indeed, CERCLA opponents often accuse the statute of forcing private parties and the government to waste money on lawsuits and PRP searches, money that should be supporting cleanups instead.¹⁹⁰

The laws creating and implementing the new fund could even establish incentives for non-federal entities to undertake remediation projects on their own. This might streamline the cleanup process by avoiding the bureaucracy that afflicts Superfund cleanups. And where potentially responsible parties do exist, the new fund could "help to pay for the 'orphan share'—that share of response costs attributable to parties who are defunct or otherwise unlocatable."¹⁹¹ The concept of an abandoned hardrock mine reclamation fund like the Abandoned Mine Reclamation Fund established by SMCRA has much to recommend it. The only problem is finding the money to deposit in the new fund.¹⁹²

¹⁸⁸ 30 U.S.C.A. § 1233(a) (West 2007).

¹⁸⁹ The hierarchical ranking of these priorities clearly places a higher value on addressing dangers to humans and a lower value on addressing environmental damage. If Congress did not want to impose this sort of hierarchy on funding decisions, it could remove subsection (1) and delete the statutory language that establishes the list as a ranking of priorities "in the order stated." *Id.*

¹⁹⁰ The numbers vary, but even according to the more optimistic sources, Superfund loses much in transaction costs. "[O]nly 12% of [Superfund] moneys have actually gone into cleaning up the environment[,] while the balance went to legal and consulting fees." Skaer Statement, *supra* note 2, at 73. "Sixty percent of Superfund costs go to litigation." McAllister, *supra* note 89, at 10,249 n.64.

¹⁹¹ Seymour, *supra* note 19, at 943.

¹⁹² The same question applies for the Superfund, as well.

2. *Finding Money for Cleanups*

a. *Taxes and Royalties on Mineral Production*

The Abandoned Mine Reclamation Fund has gathered its money from a per-ton tax on coal mined in the U.S.¹⁹³ This tax has generated significant revenue—between January 1978 and October 2005, the Abandoned Mine Reclamation Fund collected \$7.4 billion and appropriated \$5.7 billion.¹⁹⁴ In establishing a fund for hardrock mine reclamation, Congress could impose a similar fee on the minerals extracted by hardrock mining operations.¹⁹⁵ This issue of imposing royalty fees on hardrock mines has arisen over the years, but amazingly hardrock mining companies have dodged the bullet for well over a century. Recently, though, congressional support for royalties has increased, at least where public lands are concerned. At a congressional oversight hearing in July 2006, for instance, Rep. Rahall “urge[d] [his] colleagues to look to H.R. 3968, . . . a bill [that] . . . would prohibit the continued giveaway of public lands. It would require that a fee be paid for the use of the land, and that a royalty [(8 percent of net smelter return)] be paid on the production of valuable minerals, such as gold and silver, extracted from Western public domain lands.”¹⁹⁶ Another proposal, H.R. 1265, would have accomplished the same goal by imposing royalties based on a mine’s net proceeds as a percentage of gross proceeds.¹⁹⁷

While attractive in many senses, these royalty proposals entail certain problems. First, the federal government must divvy up fund revenues

¹⁹³ 30 U.S.C. § 1232(a) (2000):

All operators of coal mining operations subject to the provisions of this chapter shall pay to the Secretary of the Interior, for deposit in the fund, a reclamation fee of 35 cents per ton of coal produced by surface coal mining and 15 cents per ton of coal produced by underground mining or 10 per centum of the value of the coal at the mine, as determined by the Secretary, whichever is less, except that the reclamation fee for lignite coal shall be at a rate of 2 per centum of the value of the coal at the mine, or 10 cents per ton, whichever is less.

¹⁹⁴ Office of Surface Mining, Abandoned Mine Land Fund: Status, <http://www.osmre.gov/fundstat.htm> (last visited Nov. 29, 2007).

¹⁹⁵ The contribution formula would probably require more detail than SMCRA’s formula because hardrock mines, unlike coal mines, yield a variety of different products with different market values. Calculating fees for these various minerals is by no means an impossible task, however. *See, e.g.*, Abandoned Hardrock Mines Reclamation Funding Act, H.R. 1265, 109th Cong. § 3(a) (2005); Federal Mineral Development and Land Protection Equity Act of 2005, H.R. 3968, 109th Cong. § 111 (2005). Mining experts have distinguished royalties from “reclamation fees”—the differences are not terribly important for the purposes of this article since both are means of recouping money from hardrock mining operations. “The reclamation fee is in the nature of a tax rather than a royalty, because it is not based on the United States owning title to the mineral. It could be combined with, or levied in place of, a royalty.” John D. Leshy, *Mining Law Reform Redux, Once More*, 42 NAT. RESOURCES J. 461, 473 (2002).

¹⁹⁶ *Opportunities for Good Samaritan Cleanup of Hardrock Abandoned Mine Lands: Hearing Before the Subcomm. on Energy and Mineral Resources of the H. Comm. on Natural Resources*, 109th Cong. 6 (2006) (statement of Rep. Nick J. Rahall) [hereinafter Rahall Statement].

¹⁹⁷ Abandoned Hardrock Mines Reclamation Funding Act, H.R. 1265, 109th Cong. § 3(a) (2005).

among the states, a decision-making process that can lead to interstate battles over how much each state deserves. In the coal context, these problems were exacerbated by the fact that the East contains most of the abandoned mines, while the West contains most of the new mines, so western mining companies and states felt that they would effectively be paying to remediate eastern lands.¹⁹⁸ The hardrock mining industry is not as temporally-geographically split as the coal mining industry, but undoubtedly some resentment would arise between states. Thus, Congress would have to write into the new fund a formula that adequately addresses states' concerns, as well as mine remediation needs.¹⁹⁹ Second, the mining industry is, naturally, against the imposition of fees on hardrock mining operations. Their arguments appeal to concerns of fairness and domestic self-sufficiency. Two free-market devotees at the Property and Environment Research Center offered this perspective: "[W]hen mining companies are required to pay both [abandoned mine cleanup] fees (for the damage caused by miners decades ago) as well as post reclamation bonds (for their own ongoing activities), the result is double liability."²⁰⁰ Mining companies claim, furthermore, that supposedly excessive regulation and fees would force their operations overseas, thus costing the U.S. thousands of jobs and millions of dollars.²⁰¹ These arguments hardly pass the straight-face test, though. While hardrock mining is the only extractive industry not to pay a federal royalty, mining companies seem to have no trouble paying substantial state royalties (e.g., 18 percent for a gold mine in Nevada's Carlin Trend).²⁰² The House bills mentioned

¹⁹⁸ Paul Stokstad, *Structuring a Reclamation Program for Abandoned Noncoal Mines*, 25 *ECOLOGY L.Q.* 121, 140 (1998). The ultimate compromise was to require that 50 percent of funds raised by mining in a given state be returned to that state, while the remaining 50 percent would be spent basically at the federal government's discretion. *Id.*

¹⁹⁹ One proposed bill would have given 25 percent to the state where the revenue was generated, 50 percent to the states based upon historical hardrock mineral production, and 25 percent to projects at the Secretary of Interior's discretion. Abandoned Hardrock Mines Reclamation Act, H.R. 504, 108th Cong. § 103(g) (2003).

²⁰⁰ BUCK & GERARD, *supra* note 155, at 14-15.

²⁰¹ See, e.g., Tara Cavanaugh, *Mining Contamination of Ground Water: The Need for Legislation and Reform*, 2 *U. DENV. WATER L. REV.* 60, 78 (1998); Tyler L. Weidlich, *The Mining Law Continuum—Is There a Contemporary Prospect for Reform?*, 44 *BRANDEIS L.J.* 951, 952 (2006). Some commentators also argue that consumers have benefited from relatively unregulated mining activity because the historical (and current) lack of costly government controls and fees allows the mining industry to pass its products along to consumers at a lower price. These commentators have therefore called for consumers to display "a willingness . . . to pay for abandoned mine remediation." Limerick Statement, *supra* note 14, at 67. This suggestion has intuitive appeal and should be heeded to a certain extent, but it would be delusional to assume a direct correlation between the amount a mining company saves through weak governmental regulation and the price that it charges to buyers of its product. I find it hard to believe that mining industry shareholders do not reap a large portion (if not the vast majority) of the monetary benefits of toothless mining laws. Mining companies and consumers should both be forced to internalize the negative externalities of their actions, whether those actions are the actual extraction of minerals or the buying of products made from those minerals.

²⁰² Shi-Ling Hsu, *Fairness Versus Efficiency in Environmental Law*, 31 *ECOLOGY L.Q.* 303, 401 n.96 (2004). See also Leshy, *supra* note 195, at 472 ("Today, campers on BLM and national forest land, like visitors to national parks and wildlife refuges, livestock graziers, coal and oil and gas producers, telecommunications site operators, and timber harvesters all pay

previously would have imposed fees of 8 percent or less, which the Congressional Research Service concluded “[would] not radically affect mining economics in the United States.”²⁰³

b. Taxes on Post-Extraction Products

An additional option, which would allow costs to be passed on more directly to wholesalers and consumers, is a federal tax on products that contain metals or minerals derived from hardrock mines. Congress could apply this tax to all sources (domestic and foreign) of the substance in question, thus answering the mining industry’s worries about losing business to international mines. Moreover, much of the revenue from and damage caused by hardrock mines came (and still comes) from the pursuit of luxury metals, particularly gold.²⁰⁴ Thus, this tax could target certain luxury goods (e.g., jewelry) and avoid more essential products (e.g., copper), which would ultimately make consumers pay for the environmental externalities generated by various nonessential items we buy. In recommending the imposition of this type of tax, a University of Colorado study underscored consumers’ role in propelling the mining industry:

Consumers, we believe, have both an opportunity and obligation to acknowledge the extent to which they have driven mining enterprises, and [to] accept responsibility for the environmental consequences [of] their consumption

. . . . Perhaps the proper place to raise revenue for acid mine remediation is a tax, not on mining production, but on the processing of metals into consumer products. Here the financial burden would fall more directly . . . on the members of a society that was built on and continues to prosper through the abundance of mineral commodities.²⁰⁵

The normative appeal of this tax proposal, however, may not overcome the relatively greater difficulty of creating the administrative structure to levy

fees to extract or otherwise use the resources of the federal lands. The exemption enjoyed by hardrock miners is ever more glaring and ever more difficult to sustain.”). Further demonstrating the irrationality of the industry’s supposed fears, fees would not have to be imposed when mines are unprofitable. “[The hardrock mining companies’] argument conveniently ignores the fact that all federal mineral royalty provisions now on the books, and all those in Mining Law reform bills, authorize the Secretary to suspend royalties when ongoing operations are operating at a loss. That has not been enough for the industry. Characteristically, it wants special, favorable treatment.” *Id.* at 473. For a summary of state royalty fees for hardrock mining, see Aaron M. Flynn, *Hardrock Mining: State Regulation*, at 4-53 (Mar. 14, 2005) (Congressional Research Service Report No. RL32813).

²⁰³ Marc Humphries, *Mining Law Reform: The Impact of a Royalty*, at 8 (May 12, 1994) (Congressional Research Service Report No. 94-438).

²⁰⁴ In 2004, gold accounted for 27.2 percent of U.S. metal mining revenues. That percentage was even higher in 2003 (36.7 percent) and in 2002 (36.1 percent). Figures calculated from U.S. GEOLOGICAL SURVEY, *MINERALS YEARBOOK 2004: STATISTICAL SUMMARY* (2005).

²⁰⁵ LIMERICK ET AL., *supra* note 47, at 36.

and collect such a tax. While U.S. hardrock mines can be easily located and their production easily tracked (making the imposition of a royalty administratively simple), the sales of domestically and internationally processed metals may be considerably harder to identify, disassociate from other products, and tax. For this reason, a royalty on mine production is probably the preferable funding option.

c. Expected Revenues from Hardrock Mineral Taxes or Royalties

While one can dismiss the mining industry's supposed fears of a royalty by citing state precedents, there remains a problematic question: would a hardrock mineral royalty actually generate significant revenue? The Mineral Policy Center calculated that a bill proposed during the 108th Congress and very similar to H.R. 1265 would have netted approximately \$45 million per year.²⁰⁶ While nothing to scoff at, \$45 million annually will not move us very rapidly toward full cleanup of abandoned mines if the total price-tag for such cleanups is likely in the \$30 billion (or greater) range. The royalty formula might, of course, be adjusted upward to direct more money toward the new hardrock mine reclamation fund. If, for example, the formula resulted in an effective royalty of 1 percent of gross proceeds from metals mining, the fund would receive approximately \$110 million per year.²⁰⁷ Congress would ultimately have the unenviable task of setting the appropriate royalty, but the numbers above demonstrate that assessing a fee against hardrock mining operations could move us a fair distance toward funding the necessary reclamation efforts.²⁰⁸ Nonetheless, royalties are unlikely to provide a cure-all for the problem of where to find funds for abandoned mine remediation.

²⁰⁶ MINERAL POLICY CENTER, UDALL ABANDONED HARDROCK MINES RECLAMATION ACT (HR504): REVENUE ESTIMATE (2003).

²⁰⁷ As in the House bills mentioned previously, the royalty formula should be based on a mine's net proceeds, not gross proceeds, in order to ensure that more profitable mines bear proportionately more of the royalty burden. Given the fluctuations in mineral markets and the consequent difficulty of calculating net proceeds during any given year, however, I have based this particular simple example on the more easily obtainable statistic of gross proceeds. During the 10 years from 1995 to 2004, metals mined in the U.S. were worth an average of \$10.94 billion annually. Figure calculated from U.S. GEOLOGICAL SURVEY, MINERALS YEARBOOKS 1995-2004 (1996-2005). Metals constitute the lion's share of "locatable minerals" governed by the General Mining Law of 1872; thus, while my calculations ignore revenues from certain "locatable minerals" (e.g., gemstones), these unincluded minerals would likely not increase my numbers by more than 20 percent or 30 percent. *See id.*

²⁰⁸ A 1994 Congressional Research Service report reviewed five different mining royalty studies conducted by the Department of Interior (DOI), Congressional Budget Office (CBO), Evans Economics, Inc. (EEI), John Dobra/Thomas Harris (DH), and Goldman Sachs (GS). The base assumptions of the studies varied widely and, consequently, yielded quite disparate results. The estimates for revenues to the U.S. Treasury were as follows: DOI: +\$133 million; CBO: +\$20 million to +\$146 million; EEI: -\$505 million; DH: +\$122 million; GS: +\$58 million for an 8 percent of gross revenue royalty, +\$4.1 million for a 2.5 percent net income royalty. Humphries, *supra* note 203, at 7.

d. *Congressional Appropriations and Other Funding Mechanisms*

Other funding possibilities beyond a hardrock mining royalty do exist. The simplest from an administrative perspective would be straightforward appropriation from Congress. If Congress cut expenses elsewhere in the federal budget, it might be able to find several billion dollars' worth of general government revenues to place into a new hardrock mine reclamation fund.²⁰⁹ This is admittedly a pie-in-the-sky hope, but perhaps if our priorities were realigned, we would appreciate the value of remediating contaminated mines that endanger the health of our nation's people and environment.

Commentators have suggested other revenue-generation mechanisms that could fill the coffers of a new federal hardrock mine reclamation fund or state analogs to such a federal fund. These mechanisms include tourism taxes and pollution taxes.²¹⁰ Such taxes might prove politically appealing because they either target those who have little choice but to pay (tourists) or offer polluters the opportunity to decide for themselves to what extent they will change their ways and internalize the negative externalities of their actions. That said, unless Congress miraculously devotes a huge amount of the federal government's general tax revenue to abandoned mine remediation, Congress and the states will have to utilize several of the funding options mentioned above in order to make available a sufficient amount of money. By depositing this money in a new, specially designed abandoned hardrock mine reclamation fund (and equivalent state funds), Congress and the states will be able to overcome the barrier of inadequate funding which has so severely inhibited abandoned mine cleanup efforts. Good Samaritan remediation might even become entirely unnecessary if the funding barrier is torn down.

C. *Mining Law Reform*

No matter how much money we devote to abandoned mine remediation, we will never rid ourselves of the ill effects of mining waste unless we ensure that modern operations meet far more stringent reclamation standards than previous mines. In most industries, rigorous environmental regulation and cleaner technologies and processes have developed at the same time. Mining, to a significant extent, represents the exception to this rule and remains disturbingly weakly regulated from the federal environmental perspective. Rather than moving toward more robust laws and policies in

²⁰⁹ Congress should also consider allowing CERCLA recoveries from potentially responsible parties at mining sites to be used solely for remediating abandoned mines, rather than allowing these recovered funds to be diverted to non-mining-related Superfund projects.

²¹⁰ See, e.g., LIMERICK ET AL., *supra* note 47, at 37 ("A state tourism tax might be considered because abandoned mine remediation restores aquatic habitat, and fishing is a major attraction for visitors in most Western states."); BUCK & GERARD, *supra* note 155, at 15-16 (describing concept and function of pollution taxes).

recent years, the federal government has deliberately allowed its control over hardrock mines to erode:

[T]he [Bush] [A]dministration has sharply rolled back environmental safeguards for the hardrock (primarily gold) mining industry on federal lands Along the way, it has taken the position that the United States has no legal authority to say no to a proposed gold mine on its own lands, even when going forward would cause substantial and irreparable harm to other public resources. It followed up that remarkable ruling with another giving metal mining companies not merely the opportunity, but the legal right, to use as much federal land as they need for polluting waste dumps. Both of these overturned Clinton Administration rulings [T]he industry pays the federal government nothing when it extracts minerals from federal lands, even though it pays states, private property owners and foreign governments when it mines on their lands; and it produces enormous amounts of waste and long-lasting pollution problems which historically have been left for the nation's taxpayers to clean up.²¹¹

The unfortunate truth of the matter is that the nation's current mining laws do little to stop this incredible ravaging of our natural resources. In particular, mining companies benefit from the lax standards of the General Mining Law of 1872, which was written well over a century ago and which Congress has left relatively intact since John Wesley Powell was exploring the Grand Canyon.²¹²

The deficiencies of U.S. mining laws have manifested themselves in some appalling disasters in recent times. The Summitville mine debacle in the late 1980s and early 1990s especially focused public attention on statutory and regulatory inadequacies, but truculent mining companies and controversy in Congress have restricted legal reform to numerous minor changes in the outdated laws that govern hardrock mining.²¹³ The laws' failings have been recognized for decades, however. In 1970, a congressionally appointed commission issued a report that "identified a host of shortcomings [in these laws], including the lack of any 'means by which the Government can effectively control environmental impacts' from hardrock mining. Nearly 100 years after [the laws'] enactment, the Commission observed, federal powers over hardrock mining on the public land remained extraordi-

²¹¹ John Leshy, *Natural Resources Policy in the Bush (II) Administration: An Outsider's Somewhat Jaundiced Assessment*, 14 DUKE ENVTL. L. & POL'Y F. 347, 348-49 (2004) (citations omitted).

²¹² Leshy, *supra* note 195, at 461 ("While calls for reforming the Mining Law have been around almost as long as the law itself, achieving it has been elusive The Mining Law of 1872 is the last important surviving remnant of nineteenth century federal land policy. Although its scope has been sharply limited and its operation greatly modified by subsequent legislation, much of the law's basic architecture remains in place."). The General Mining Law of 1872 and its amendments are codified at 30 U.S.C. §§ 21-54 (2000).

²¹³ Cavanaugh, *supra* note 201, at 64-65.

narily limited.”²¹⁴ Around the same time, the Department of the Interior voiced a concern that the nation’s mining statutes “leave [the Bureau of Land Management] without authority to consider environmental factors in [the laws’] administration.”²¹⁵ The Secretary of the Interior opined, “[a]fter 8 years in office, I have come to the conclusion that the most important piece of unfinished business on the Nation’s natural resource agenda is the complete replacement of the Mining Law of 1872.”²¹⁶ Nearly 40 years later, Congress has yet to promulgate such a replacement. In the years since the fault-finding 1970 report was issued, Congress, regulatory agencies, environmentalists, and the mining industry have skirmished with each other, leading ultimately to insufficient substantive changes in the law.²¹⁷

We should have rewritten the mining laws years ago, and bills like S. 1848 and S. 2780 highlight the problems that we now confront as a result of having failed to do so. In concert with enabling Good Samaritan cleanups and funding the remediation of abandoned mines, we must remedy what John Leshy, former Solicitor of the Interior, described as the “national embarrassment” of our mining laws.²¹⁸ Reforming these laws will require addressing a number of concerns. These include: (1) the failure of the mining laws to impose direct environmental protection standards; (2) the ability of miners to “patent” claims and obtain ownership over public lands for a nominal fee (\$2.50 or \$5.00 per acre); and (3) the previously discussed lack of any royalty fee that miners must pay to the U.S. government for mineral extraction on federal (or formerly federal) lands.²¹⁹ There are straightfor-

²¹⁴ Seymour, *supra* note 19, at 836 (citations omitted).

²¹⁵ *Id.* at 837 (citations omitted).

²¹⁶ *Id.* at 839 (citation omitted).

²¹⁷ *See id.* at 839-57. Arguably the most important indirect amendment to the General Mining Law of 1872 is the Federal Land Policy and Management Act of 1976 (“FLPMA”), a statute that sets certain standards for the use of federal lands. Regulatory agency interpretations of FLPMA have significantly influenced its ability to impose stringent requirements on hardrock mining operations; most recently, the Bush Administration has returned to relatively permissive interpretations of FLPMA, prompting lawsuits by environmental organizations. *See* Weidlich, *supra* note 201, at 954-56. FLPMA is discussed in greater detail below.

²¹⁸ James R. Rasband, *The Rise of Urban Archipelagoes in the American West: A New Reservation Policy?*, 31 ENVTL. L. 1, 70 n.330 (2001).

²¹⁹ *See generally* NATIONAL RESEARCH COUNCIL, *HARDROCK MINING ON FEDERAL LANDS* (1999) (addressing the existing regulatory framework (as of 1999) and the adequacy of environmental protection laws, and suggesting measures for congressional and administrative reform). Other potential areas for mining law reform that I will not discuss include claim-holding limitations, the federal government’s ability to withdraw minerals from production, and the role of the states. *See* Leshy, *supra* note 195, at 467-71, 480-82. Some related concerns, like the posting of reclamation bonds for post-mine-closure cleanup, have received attention from administrative agencies. *See, e.g.*, 36 C.F.R. § 228.13 (2007) (U.S. Forest Service bonding requirements); 43 C.F.R. §§ 3809.500-599 (2006) (Department of the Interior bonding requirements). A cursory comparison of the Forest Service’s and Interior’s regulations, though, reveals how vastly such regulations can differ from each other—standardization and tightening of these bonding rules (basically bringing the Forest Service’s rules up to the level of Interior’s) would help ensure that sufficient money is available to fund reclamation activities even if a mining company abandons its operations. States have learned the importance of requiring large reclamation bonds, especially since the mining company at the Summitville site declared bankruptcy after posting a \$7.2 million bond for a cleanup ultimately

ward reforms that could cure these flaws. Along with funding for abandoned mine remediation, we should be advocating for these reforms.

1. *Environmental Protection Standards*

On the issue of environmental protection, the General Mining Law of 1872 says nothing. This is hardly surprising for a statute written just a few years after the Civil War. The wave of environmental legislation that began in the late 1960s and early 1970s brought with it a few statutes which restricted the ability of mining companies to operate with impunity. The problem with these restrictions is that they either contain various environmentally detrimental exceptions or lack clarity and allow some mining to proceed unregulated.

a. *Failings of the Clean Water Act*

The CWA established the NPDES permitting program, subjecting certain discharges of pollution from mines to federal regulation.²²⁰ As it pertains to mining, the principal failings of the CWA are definitional and interpretational. Although Good Samaritans, as discussed in Part III(C), have much to fear regarding CWA liability, a NPDES permit is required only when mining activity results in “the discharge of any pollutant by any person.”²²¹ This cryptic threshold requirement actually means “the addition of any pollutant to navigable waters from any point source [by any person],” hardly a clear standard.²²² Each component of the definition—“addition,” “pollutant,” “navigable waters,” and “point source”—has generated a massive amount of litigation. Suffice it to say that discharges of mine pollution solely to groundwater or to non-navigable waters (an increasingly large category under recent Supreme Court jurisprudence) may be entirely exempt from the CWA.²²³ The loopholes created by the CWA’s definitions and provisions allow many polluting activities in addition to mining and

costing over \$200 million. *See supra* note 163; Thomas F. Darin, *The Bureau of Land Management’s Proposed Surface Management Regulations for Locatable Mineral Operations: Preventing or Allowing Degradation of Public Lands?*, 35 LAND & WATER L. REV. 309, 320 (2000). New Mexico recently asked Phelps Dodge to post a bond of nearly \$1 billion for an open pit copper mine. Leshy, *supra* note 195, at 478.

²²⁰ 33 U.S.C. § 1342 (2000).

²²¹ *Id.* § 1311(a).

²²² *Id.* § 1362(12).

²²³ *See, e.g.,* Rice v. Harken Exploration Co., 250 F.3d 264, 271-72 (5th Cir. 2001) (citations omitted):

In *Exxon*, we noted that Congress was aware that there was a connection between ground and surface waters but nonetheless decided to leave groundwater unregulated by the CWA [We based] that holding on our reading of the statute as well as a detailed examination of the legislative history of the CWA, which we held “demonstrat[ed] conclusively that Congress believed it was not granting the [EPA] any power to control disposals into groundwater.”

See also Rapanos v. United States, 126 S.Ct. 2208 (2006) (restricting “navigable waters” to those that are relatively permanent and not intermittent or ephemeral).

have prompted calls for reform.²²⁴ Certainly, tightening the CWA's standards to include, or more stringently regulate, discharges to groundwater and to non-navigable waters could lessen the environmental degradation caused by hardrock mining.

b. RCRA's Loophole for Mining

The Resource Conservation and Recovery Act ("RCRA") contains a more explicit loophole than the CWA. The Bevill Amendment (RCRA section 3001(b)(3)(A)) exempts from RCRA regulation "[s]olid waste from the extraction, beneficiation, and processing of ores and minerals. . ."²²⁵ CERCLA incorporates this exemption and therefore treats mining waste as non-hazardous waste.²²⁶ The Bevill Amendment thus considerably limits the government's ability to enforce hazardous waste standards against the mining industry.²²⁷ If Bevill wastes were truly non-hazardous and did not pose a threat to human and environmental health, the government's circumscribed enforcement power would not be worrisome. Not surprisingly, though, it turns out that some Bevill wastes pollute our land, water, and air just like listed hazardous wastes:

[S]ome currently operating Bevill mining and mineral processing wastes continue to contaminate groundwater and surface water, often through leaking surface impoundments, runoff from piles, wind blown dust, contaminated soil, and failure of dams. Further, the environmental consequences of mining and mineral processing may not be realized until long after cessation of operations, as indicated by the growing list of mine and mineral sites being addressed under the CERCLA Superfund program

[EPA's] qualitative review of damage cases indicate[s] that the risks posed by disposal of Bevill waste [are] similar to risks from other industrial hazardous wastes. [No quantitative studies had been undertaken at the time of this report.]²²⁸

The solution to this environmentally detrimental lack of regulatory authority is simple: repeal the Bevill Amendment and start regulating all hazardous

²²⁴ See, e.g., Cavanaugh, *supra* note 201, at 61 ("Ground water is one of the most critical unresolved issues in United States' environmental and health protection today The most significant example of the lack of ground water regulation is its omission from the Clean Water Act, the paramount regulation of waste discharge into water.").

²²⁵ 42 U.S.C. § 6921(b)(3)(A)(ii) (2000).

²²⁶ *Id.* § 9601(14)(C).

²²⁷ See, e.g., Clifford J. Villa, *The Road Taken: a Reflection on Michael C. Blumm and William Warnock's Roads Not Taken: EPA vs. Clean Water*, 34 ENVTL. L. 809, 811 n.22 (2004) ("As an EPA attorney, my enforcement options against private parties are typically constrained by the limits of applicable statutes For example, under the Bevill Amendment to [RCRA], mining wastes are largely excluded from the requirements for managing hazardous wastes.").

²²⁸ BEVILL WASTES REPORT, *supra* note 163, at 4, 16.

mining byproducts. As one testifier recommended to the Senate Committee on Environment and Public Works, "Deal with the most dramatic regulatory loophole for mine operations by directing EPA to establish waste regulations specifically crafted for the management of [mine waste]."²²⁹

c. FLPMA's Standard for Federal Land Management

Although Congress expressly exempted certain aspects of mining from RCRA's coverage, Congress expressly subjected all mining on federal lands to regulation under the Federal Land Policy and Management Act of 1976 ("FLPMA"). FLPMA affects mining activities mainly through a provision that requires the Secretary of the Interior, "by regulation or otherwise, [to] take any action necessary to prevent unnecessary or undue degradation of the lands."²³⁰ Clearly worried about the possibility that mining companies would find a way to avoid this "unnecessary or undue degradation" standard, "Congress left no doubt that this directive applied to activities carried out under the Mining Law of 1872, albeit in a left-handed way."²³¹ While the unnecessary or undue degradation standard mandates some measure of environmental protection, its vagueness has resulted in administrative interpretations that have mostly let mining companies sidestep forceful environmental regulation. As John Leshy has noted, the original rulemaking implementing FLPMA's standard for mines (promulgated in 1980 and known as the "3809 regulations") contained four major shortcomings. First, the 3809 regulations did not require mines disturbing less than five acres of public land to obtain advance governmental approval of their activities. This placed the burden on the BLM to oversee the mines and, if the BLM found violations of environmental laws, to prove the mines' noncompliance in federal court—"[t]he BLM hardly, if ever, went to the trouble of doing that."²³² Second, the 3809 regulations did not contain vigorous financial assurance requirements, which left the government with no guarantee that a mine's operator would fund reclamation of the mine.²³³ Third, the 3809 regulations did not allow the Department of the Interior (the "Department") to assess administrative penalties for violations, making court proceedings the only option. "As a result, enforcement actions were rare."²³⁴ Fourth, the 3809 regulations ignored the "disjunctive 'or'" in the statutory "unneces-

²²⁹ Smith Statement I, *supra* note 35, at 87.

²³⁰ 43 U.S.C. § 1732(b) (2000).

²³¹ Leshy, *supra* note 195, at 489 n.40 ("The section provides that nothing in FLPMA 'shall in any way amend the Mining Law of 1872 or impair the rights of any locators or claims under that Act, including, but not limited to, rights of ingress or egress,' except for four specified exceptions. One of the exceptions was the 'last sentence of this section,' which told the Secretary to prevent 'unnecessary or undue degradation.'").

²³² *Id.* at 475 ("The BLM also categorically exempted the 'notice' mines from the otherwise near-universal environmental impact assessment requirement of the National Environmental Policy Act (NEPA).").

²³³ *Id.* at 475-76.

²³⁴ *Id.* at 476.

sary or undue degradation” standard and treated “unnecessary” and “undue” as one and the same.²³⁵

Although the Department recognized the shortcomings of its 3809 regulations, the Reagan Administration took no action. During the first Bush Administration, the Department prepared for a new rulemaking, which the Clinton Administration put on hold as it fought for broader legislative reform of the mining laws.²³⁶ This fight was unsuccessful, however. “Ultimately, . . . Interior came to doubt Congress’s willingness or ability to undertake reform and announced that it would review its surface mining regulations in anticipation of rulemaking.”²³⁷ As a result of delay tactics employed by congressional allies of the mining industry, administrative reform of the 3809 regulations took four years to complete.²³⁸ The new regulations contained much more stringent environmental protection provisions, including detailed performance standards, authorization of administrative penalties for noncompliance, unambiguous financial assurance obligations, and a “‘right to say no’ to new proposed plans of operations that threatened to cause ‘significant irreparable harm to outstanding resources that could not be mitigated.’”²³⁹ Just a few months after these new regulations came into force, the second Bush Administration gutted them.²⁴⁰ While it was statutorily required to retain the financial assurance provisions, the Administration eliminated the authorization of administrative penalties, weakened the regulations’ performance standards, removed a joint and several liability standard for reclamation costs, and got rid of the Department’s “right to say no” to mines that would produce “substantial irreparable harm.”²⁴¹

d. Reforms Needed to Ensure Environmental Protection at Mining Sites

The ultimate outcome of the back-and-forth battle among presidential administrations and Congress is that environmental regulation of hardrock mines remains critically lacking nearly 40 years after deficiencies in the mining laws were identified. To remedy this unfortunate situation, Congress should intervene in several ways. It should clarify the standard of environmental protection to which mines are held. It should authorize an administrative system for penalizing or issuing compliance orders to mine owners

²³⁵ *Id.*

²³⁶ *Id.* at 476-77.

²³⁷ Seymour, *supra* note 19, at 847.

²³⁸ Leshy, *supra* note 195, at 477.

²³⁹ *Id.* at 479.

²⁴⁰ Roger Flynn and Jeffrey C. Parsons, *The Right to Say No: Federal Authority over Hardrock Mining on Public Land*, 16 J. ENVTL. L. & LITIG. 249, 326-27 (2001) (“The 2001 regulations either eliminated outright or substantially weakened almost all of the environmental performance standards.”).

²⁴¹ Leshy, *supra* note 195, at 477-80.

and operators who fail to uphold environmental standards.²⁴² It should set general performance guidelines to address the environmental impacts of mining activities. And it should establish a permitting system for hardrock mines, so that mining on federal lands is treated as a privilege to be granted by the government and not as a right to be exercised by private parties.²⁴³ Administrative agencies, in turn, should promulgate regulations that address these various concerns in greater detail and prohibit the permitting of mines which would impair the environment or public health and welfare.

2. Patenting Claims

The General Mining Law of 1872's system for allowing private parties to "patent" federal lands has been arguably one of the federal government's largest giveaways.²⁴⁴ Under the statute, private parties who have "located"

²⁴² Such systems are common under federal environmental statutes. See, e.g., 33 U.S.C. § 1319 (2000) (CWA enforcement and penalties); 42 U.S.C. § 7413 (2000) (Clean Air Act enforcement and penalties).

²⁴³ Various congressional proposals for mining law reform have included such measures. See, e.g., Federal Mineral Development and Land Protection Equity Act of 2005, H.R. 3968, 109th Cong. Title III (2005).

²⁴⁴ See, e.g., 140 CONG. REC. H3354-5 (daily ed. May 16, 1994) (statement of Rep. Miller):

[L]ater today, unfortunately, the Secretary of the Interior . . . is going to have to participate in the biggest giveaway of American resources in the history of this country. Because of the 1872 mining law that this Congress has refused to reform since that time, . . . the Secretary of the Interior is going to have to comply with that law and transfer to the American Barrick Mining Co., a Canadian-owned mining company, 10 billion dollars' worth of gold to be mined in the coming years, and the Secretary will receive on behalf of the taxpayers and the citizens of this country \$9,000, and that will be it.

Secretary Bruce Babbitt called attention to this patent to prompt reform of the General Mining Law of 1872, and several months later Congress instituted a moratorium on patenting. See Leshy, *supra* note 195, at 464. Mining industry advocates claim that being able to obtain patents and not pay royalties helps mining companies survive in a competitive world, and that ending the patenting system would harm the domestic mining industry and cause companies and workers to lose profits and wages. See, e.g., Andrew P. Morriss et al., *Homesteading Rock: A Defense of Free Access Under the General Mining Law of 1872*, 34 ENVTL. L. 745, 781 (2004). They attack environmentalists and others who see the patenting system and general lack of regulation as egregious relics of a bygone era. Mining companies' own operations, however, belie their assertions of the necessity of allowing patenting while eliminating royalty fees. The State of Nevada, for instance, assesses four taxes against mining companies, one of which is the "Net Proceeds of Minerals Tax" ("NPOM") calculated on a sliding scale between two and five percent of net proceeds. NEV. REV. STAT. § 362.140 (2007). In 2004, mining companies paid Nevada a total of \$103.4 million in taxes, of which \$39.6 million came from the NPOM. DOBRA, *supra* note 1, at 7. The value of minerals produced in Nevada during 2004 was \$3.5 billion, meaning that mining companies in Nevada paid almost three percent of their total production value to the State. U.S. GEOLOGICAL SURVEY, MINERALS YEARBOOK 2004: STATISTICAL SUMMARY at 2.5 (2004). Despite these taxes, and despite the moratorium on patenting that has existed every year since 1994, twenty-two mining companies reported spending \$79.7 million on exploration activities in Nevada during 2004, and more than 28,800 new mining claims were recorded in Nevada that year. U.S. GEOLOGICAL SURVEY, MINERALS YEARBOOK 2004 30.2 (2004). Evidently, paying royalty fees and not being able to patent land haven't put much of a damper on the expansion of hardrock mining in Nevada. Indeed, the

and “perfected” a mining claim on federal land have a right to buy that claim for a nominal fee.²⁴⁵ In lay terms, this means that a miner must have found a valuable deposit of a marketable mineral and must comply with laws relating to posting notice, recording claims, paying annual fees, and other applicable legal requirements.²⁴⁶ Although the patent system does not have direct consequences on the environmental impacts of mining, it does have important implications for reclamation.

Once a mine site is excised from federal lands, federal land management agencies lose their regulatory jurisdiction over that site. State agencies can step in to fill certain, but not all, parts of this void—governments will always have more control over what happens on government-owned property than over what happens on identical private parcels. Moreover, where federal-state jurisdictional overlap exists, such overlap may be desirable, at least until state mining laws are as environmentally protective as federal statutes and regulations. Given the weakness of federal laws in the mining realm, many states already have more stringent environmental protection standards for mining than the federal government, but this is not universally the case. Reclamation funding crises could arise, for instance, on patented BLM land in Arizona. In that state, reclamation bonds are required, but only in the amount necessary to revegetate the mine site for three growing seasons and to “[p]erform the approved reclamation measures . . . on the area of surface disturbance.”²⁴⁷ BLM’s financial assurance regulations, in contrast, do not restrict reclamation bond amounts to expected surface disturbance,²⁴⁸ and damage to groundwater (from surface and subsurface activities) can constitute a large portion of remediation costs.²⁴⁹ Emphasizing this problem of insufficient reclamation bonding, a study conducted in 2000 estimated that the “potential unfunded [reclamation] liability” for 13 western states is \$254 million to \$1.037 billion.²⁵⁰ For these reasons, the patent system of the General Mining Law of 1872 is an environmental, as well as economic, concern.

Fraser Institute ranked Nevada as having the most mining-conducive policy climate *in the world*. FRASER INSTITUTE, ANNUAL SURVEY OF MINING COMPANIES 2005/2006 5 (2006). And Nevada is the world’s third largest producer of gold, surpassed only by South Africa and Australia. NEVADA BUREAU OF MINES AND GEOLOGY, THE NEVADA MINERAL INDUSTRY 2004 3 (2005).

²⁴⁵ 30 U.S.C. §§ 28, 28(f), 29, 37 (2000).

²⁴⁶ See *Mineral Policy Ctr. v. Norton*, 292 F. Supp. 2d 30, 47 (D.D.C. 2003).

²⁴⁷ ARIZ. REV. STAT. ANN. § 27-992(C) (2007) (emphasis added).

²⁴⁸ 43 C.F.R. §§ 3809.500-599 (2007).

²⁴⁹ Heavy metal contamination from the Summitville mine, for example, came from one surface source (heap-leach piles) and two subterranean sources (seeps in the old mine workings and water flows from an adit). U.S. GEOLOGICAL SURVEY, ENVIRONMENTAL CONSIDERATIONS OF ACTIVE AND ABANDONED MINE LANDS 20 (1998). The costs of merely monitoring groundwater and seeps at the Summitville site in 2002 were approximately \$350,000 per year! U.S. ENVIRONMENTAL PROTECTION AGENCY & U.S. ARMY CORPS OF ENGINEERS, REMEDIATION SYSTEM EVALUATION: SUMMITVILLE MINE SUPERFUND SITE, SUMMITVILLE, COLORADO 23 (2002).

²⁵⁰ JAMES R. KUIPERS, PE, & CATHY CARLSON, NATIONAL WILDLIFE FEDERATION, HARDROCK RECLAMATION BONDING PRACTICES IN THE WESTERN UNITED STATES 1 (2000).

Historically, patenting was a relatively easy process, and between 1867 and the mid-1990s the federal government received paltry sums for handing over thousands of patents, which covered 3.3 million acres of land containing billions of dollars' worth of minerals.²⁵¹ A Congressional Research Service study underscored the disparity between the minerals' value and the payment the government collected: "[The General Accounting Office] estimated that, for 20 patents it reviewed, the federal government had received less than \$4,500 since 1970 for lands valued between \$13.8 and \$47.9 million."²⁵² After a particularly shocking patent was granted in 1994, Congress began inserting annual appropriations riders to prohibit patenting.²⁵³ Although this has prevented patenting for the past 13 years, the situation calls for a permanent resolution.

Two straightforward reforms of the General Mining Law of 1872 could accomplish a permanent resolution of the patenting issue: Congress could either require that mining companies pay fair market value for land to be patented or abolish the patenting system altogether. The first option invites disputes over what constitutes fair market value. The mining industry has voiced its willingness to pay fair market value for surface estates only, but, of course, the value of the subsurface estate "dwarfs the value of the land *sans* minerals."²⁵⁴ So, the mining industry's offer is not as generous as it might appear. Continued patenting also exacerbates the fragmentation of public lands which has plagued regions with widespread mining. For these reasons, the second option is probably the better of the two, although the mining industry would surely protest a ban on patenting. A preferable alternative to either complete allowance or complete prohibition would be the authorization of patents (at fair market value of the entire estate, accounting for the costs of removing minerals from the ground) only in locations where the federal land in question is isolated from other public lands and therefore difficult to manage and lacking in public value. In all other locations, patents should be unavailable, but mining companies could rest assured in the security of their investment through the establishment of a federal mineral leasing system such as the system that currently governs oil and gas development.²⁵⁵

²⁵¹ Marc Humphries, *Mining on Federal Lands*, at 3 (Feb. 28, 2005) (Congressional Research Service Issue Brief No. IB89130).

²⁵² *Id.* at 7.

²⁵³ See *supra* note 244.

²⁵⁴ Leshy, *supra* note 195, at 465. Leshy notes that there is a "respectable case for renewing patenting" when the site in question is located within a hodgepodge of federal, state, and private ownership. *Id.*

²⁵⁵ For a description of how the oil and gas leasing system works, see 38 AM. JUR. 2D *Gas and Oil* §§ 259-80 (2007) (describing the structure and requirements of the Federal Mineral Leasing Act). Proposals for instituting a hardrock leasing system have been presented several times during the past few decades. See Seymour, *supra* note 19, at 956 n.206 ("In 1971, for example, Senator Henry Jackson of the State of Washington proposed to repeal the public mining laws, and subject hardrock mining to a leasing system similar to that in place for oil and gas, and 'leasable' minerals."); Leshy, *supra* note 195, at 462 ("[F]rom the late 1960s until the mid-1980s[,] . . . [r]eformers generally advocated putting hardrock mining under a

V. CONCLUSION

Hardrock mining helped spur the development of the western United States, and it still plays an important role in the region's economy. We need only look to official state nicknames—the “Golden State” (California), the “Silver State” (Nevada), the “Gem State” (Idaho), the “Treasure State” (Montana)—and professional sports teams—the San Francisco 49ers, the Denver Nuggets—to see the lore and significance of mining firmly entrenched in the West's identity. Along with our romanticized image of grizzled miners roughing it amongst jagged peaks, however, has come the contaminated legacy of a century and a half of mining that progressed mostly unimpeded by environmental laws. Western states (and even some eastern states, such as Florida with its phosphate deposits) bear the scars of hundreds of thousands of abandoned hardrock mines. Acids, heavy metals, and other toxic substances from these mines diffuse into the surrounding land, water, and air. Although we may not see these mines on a daily basis or perceive their contaminants as readily as other human-generated pollution like smog, hardrock mines represent a significant danger both to the people and to the ecosystems of the United States.

In 1970, a congressionally appointed commission condemned the nation's public land laws for preventing the government from effectively controlling the environmental harms of mining.²⁵⁶ In 1997, EPA noted that “[its] evaluation of population [demographics] . . . found that mining and mineral processing sites do in fact have the potential to affect large numbers of people living nearby.”²⁵⁷ In 2006, EPA's Administrator called the residual impacts of hardrock mines “one of the most important environmental issues, and opportunities, facing the United States [Drainage from these mines] pos[es] serious risks to human health, wildlife, and the environment.”²⁵⁸ Yet these risks remain, decades after they were first identified and

leasing system comparable to the Mineral Leasing Act In response, the hardrock industry closed ranks, papered over its differences, and presented a united front to defend what it liked to call its “Magna Carta.” Reform was supported across a broad spectrum . . . [.] yet, while numerous bills were introduced, none passed either house of Congress.”). Compared to the existing patent system, the advantages of leasing are many:

Primary distinctions of the mineral leasing system include . . . that [it] requires permission from the government to prospect or mine, [generates] economic returns in the form of royalties and other rents, [and creates] a fixed lease term instead of fee title that may be renewed upon a proper showing of mineral production. In addition, a due diligence or production requirement is imposed to maintain each lease, allowing the government to terminate the lease if mining operations are not [being undertaken]. With such discretion reserved to the government to deny or annul leases[, and with] a production requirement to maintain . . . lease[s], abuse is thwarted and public lands are left untied for legitimate mineral development.

Weidlich, *supra* note 201, at 972-73 (citations omitted).

²⁵⁶ See Seymour, *supra* note 19, at 836.

²⁵⁷ BEVILL WASTES REPORT, *supra* note 163, at 12.

²⁵⁸ Johnson Statement, *supra* note 7.

decades after Congress enacted far-reaching environmental legislation. Why?

In some senses, it seems that hardrock mining just fell through the cracks. CERCLA covers the remediation of abandoned mines, but EPA has mostly focused Superfund money on the numerous other toxic disposal sites across the country. Besides, abandoned mines do not usually have next-door neighbors and do not contain the visually jarring corroded barrels and leaking tanks that we tend to associate with hazardous waste dumps. Meanwhile, many former mine owners and operators have disappeared or lack the financial capacity to undertake the cleanups required.

In other senses, it seems that disagreement among members of Congress and coordinated industry lobbying led to years of indecision and inaction. "The debate over reforming the Mining Law continues to evolve Through it all, the industry has yielded ground very grudgingly. It has shown a remarkable ability to defend positions and to deflect criticisms that have brought other heavy industries to heel in battles with environmentalists."²⁵⁹ Whatever or whoever is to blame, the sooner we take decisive action, the better. Abandoned mines will not remediate themselves, and until we pass robust laws that regulate the environmental impacts of modern mining operations, we risk allowing the creation of new abandoned sites overflowing with contamination.

Every session of Congress seems to have another set of proposals addressing hardrock mine reclamation and mining law reform. To date, none of these proposals has moved very far, but the issues appear to be gaining momentum. In 2006, Senators Allard and Salazar and the Bush Administration offered the Good Samaritan legislation discussed above, which they claimed would contribute significantly to resolving the problem of abandoned mine remediation by waiving various environmental laws for Good Samaritan mine cleanups. Unfortunately, despite S. 1848's and S. 2780's laudable stated goals, these bills could have created perverse incentives for Good Samaritan cleanups and may not adequately have ensured environmental protection. In any case, existing alternatives to the liability relief provisions of Good Samaritan legislation probably suffice to enable Good Samaritan mine remediation. Certainly, with its new model documents, EPA has begun to clear the way for Good Samaritans without creating dangerous blanket exemptions from environmental laws.²⁶⁰ In the end, though, it probably makes little difference whether we incentivize Good Samaritan abandoned mine cleanups one way or the other. "The potential for [well-meaning], technically qualified Good Samaritans to make a discernable im-

²⁵⁹ Leshy, *supra* note 195, at 464.

²⁶⁰ Other Good Samaritan bill proposals have been less susceptible to exploitation. See, e.g., Abandoned Hardrock Mines Reclamation Facilitation Act, H.R. 1266, 109th Cong. (2005) (creating a new permitting system under the Clean Water Act specifically for abandoned mine remediation). The targeted focus and clearer, more elaborate standards of a bill like H.R. 1266 would be much preferable to the wholesale liability waivers of S. 1848 and S. 2780.

pact on this huge problem is highly questionable.”²⁶¹ Indeed, focusing attention on bills like S. 1848 and S. 2780 may deflect (to the country’s detriment) consideration of the underlying issues. “There seems to be an attitude that volunteerism will offset real commitment by government and industry to deal with mining-related environmental problems.”²⁶²

The central obstacle to accomplishing abandoned mine remediation is the unavailability of adequate funding from federal, state, or private entities. Given the national scope of the problem, a federal solution is desirable, and funding vehicles like the Superfund or a new abandoned hardrock mine reclamation fund should be deployed. Congress should fill the coffers of its fund of choice through some combination of mineral royalties, luxury product taxes, and general appropriations. States should do likewise to the extent that they are able. The agencies managing fund monies (most likely EPA and its state equivalents) could then help pay for cleanups undertaken by various non-liable parties, including the federal government, state governments, and private Good Samaritans.

Of course, establishing a fund for abandoned mine remediation does not guarantee that we will arrest the future creation of contaminated mine sites that threaten human health and the environment. The only way to accomplish this goal, which should be one of our foremost concerns, is to reform the laws that govern mining practices in the United States. This entails several legislative actions, including clarifying the Clean Water Act’s application to mining operations and extending its jurisdiction over groundwater, repealing the Bevill Amendment, elaborating and tightening FLPMA’s land management standards, and overhauling or eliminating the patent system for mining claims on federal lands.

Comprehensive legislative and administrative action should both greatly reduce the danger that existing abandoned mines present and considerably diminish the possibility that active and future mines will become the Summitville disasters of tomorrow. Nonetheless, even the best constructed laws cannot prevent all environmental contamination. Hardrock mining is an inherently destructive activity that relies on ripping away chunks of the Earth to retrieve its valuable metals and minerals. We use these products in our daily lives, and we should not scorn the mining industry in general, for without it, our lives would be inconceivably different. By the same token, we should not take for granted the benefits we derive from the mines that pollute the land, water, and air around us. We no longer live in a world of seemingly unlimited resources where the horizon is new territory and the mountains an inexhaustible supply of wealth. Our buying gold earrings or chrome hubcaps has environmental consequences that seem far-removed from the jewelry store or car dealer. As we examine legal efforts to mitigate the impacts of hardrock mining, we should remember this chain of causation

²⁶¹ Harwood Statement, *supra* note 19.

²⁶² *Id.*

and recognize that through millions of personal decisions, as well as larger-scale congressional choices and industrial actions, we have created holes and we will need to dig ourselves out.