The Hard(rock) Truth About Abandoned Mines in the Western United States: Why the Pressure Is On to Enact Good Samaritan Legislation as a Way to Recover

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Table of Contents

I. INTROE	DUCTION		. 257
II. ANIMAS RIVER SPILL			. 258
A.	Background of 1872 Hardrock Mining Act		. 256
	1.	How the Hardrock Act Governs Most Mines	. 259
	2.	Hardrock Act and the "Right to Mine" Have	
		Since Become Outdated	. 260
	3.	Environmental Concerns of the Hardrock Act.	. 261
B.	The Gold I	King Mine	. 261
	1.	What Was Going On?	. 262
	2.	Why Were They Cleaning Up?	. 263
C.	The Accide	ent	. 264
D.	The Long-	Term Effects	. 265
III. HOW WILL THE ANIMAS RIVER SPILL BE ADDRESSED			
NOW?			. 267
A.		er Act	
B.	Superfund		. 269
IV. GOOD SAMARITAN LEGISLATION			. 272
A.	Backgroun	d	. 272
B.	Pennsylvania Environmental Good Samaritan Act		. 273
C.	Current Ef	forts to Implement	. 275
V. PROPOSED LEGISLATION			. 277
A.	Good Sam	aritan Provision	. 277
B.	Funding		. 278
C.		ard Solution	
VI CONCLUSION			200

I. INTRODUCTION

The water was mustard yellow. It was unnatural and unsafe, but was it unexpected? The normally blue, free-flowing Animas River, which flows from Southern Colorado into New Mexico, a part of the Colorado River System, was instantly transformed from a serene, natural river into a toxic wasteland. Three million gallons of toxic mining waste rushed into the Animas River on August 5, 2015, spilling over from Gold King Mine, located near Silverton, Colorado. Although Gold King Mine has been inactive since 1920, when the Environmental Protection Agency sought to cleanup a small leak in the mine, they accidentally drilled into the side of the mine, causing a deluge of toxic waste to enter into the Animas River.

Although the River has since been flushed out and is mostly back to normal,³ this was an environmental disaster that has the potential to occur at countless other abandoned mines throughout the west. Gold King Mine is not the only inactive, abandoned mine that contains toxic chemicals and materials in Colorado and throughout the western United States. Many of these mines have not been cleaned up or even addressed in any way at all. The legal framework surrounding mining in the United States is outdated and disincentivizes organizations who are actually willing to clean up the mines by making them potentially liable for incidents similar to the Animas River spill.

The harms of the outdated mining act, called the Hardrock Mining Act, have led to massive spills and catastrophes throughout the United States. Current environmental regulations have failed to address the resulting slow damage caused by these disasters and have discouraged others from cleaning up these sites. Additionally, because of the real risk of exposure to potential liabilities connected to these sites, the abandoned mines continue to leak chemicals into the ground and water sources, with little hope of being cleaned up or restored.

While current legislators have been working to solve this problem, the legislation and efforts have fallen short. Therefore, legislation is needed to incentivize the cleanup of these sites for the sake of the

¹ Ben Brumfield, *By the Numbers: The Massive Toll of the Animas River Spill*, CNN (Aug. 13, 2015, 12:57 PM), http://www.cnn.com/2015/08/13/us/animasriver-spill-by-the-numbers/.

² Lauren Pagel, *The Real Culprit in the Animas River Spill*, CNN (Aug. 13, 2015, 12:56 PM), http://www.cnn.com/2015/08/12/opinions/pagel-animas-river-pollution/.

³ Jesse Paul, *EPA Chief Gina McCarthy Says Water Quality in Animas Back to "Pre-Event Conditions"*, THE DENVER POST (Aug. 12, 2015, 12:12:04 PM), http://www.denverpost.com/news/ci_28627376/epa-chief-gina-mccarthy-durango-wednesday-see-animas.

environment, without the fear of liability for potential disasters or mishaps. This paper will propose new legislation to encourage the cleanup of these sites, reduce the toxicity of United States waters, and prevent spills such as the Gold King Mine waste into the Animas River from occurring. Beginning with the Hardrock Mining Act and flowing through to the Clean Water Act, this paper will address the current state of mining laws and abandoned mines in the United States, identify the pressing issues, and propose a solution through an analysis of the Animas River spill and what went wrong.

II. ANIMAS RIVER SPILL

A. Background of the 1872 Mining Act

The General Mining Law of 1872, (Hardrock Act), is the bedrock of mining law in the United States.⁴ Prompted by the California Gold Rush in 1848, the Hardrock Act became necessary due to increase of mining activity throughout the western United States.⁵ Prior to the Hardrock Act, there were no laws governing the discovery of mineral deposits on land – most of which was public federal land. As a consequence of this regulatory vacuum, miners could be considered trespassers on the land and did not have the right to maintain the minerals they may have found, or any rights to the land itself.⁶ The Hardrock Act, states in relevant part,

Except as otherwise provided, all valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, shall be free and open to exploration and purchase, and the lands in which they are found to occupation and purchase, by citizens of the United States and those who have declared their intention to become such, under regulations prescribed by law, and according to the local customs or rules of miners in the several mining districts, so far as the same are applicable and not inconsistent with the laws of the united States.⁷

Essentially, the Hardrock Act provides that the finder of any mineral deposits, namely gold, silver, uranium, copper, molybdenum, iron, lead, aluminum, and gemstones, on public lands is entitled to their possession

⁴ CHARLES F. WILKINSON, CROSSING THE NEXT MERIDIAN: LAND, WATER, AND THE FUTURE OF THE WEST, 43 (1992).

⁵ Roger Flynn, *The 1872 Mining Law as an Impediment to Mineral Development on the Public Lands: A 19th Century Law Meets the Realities of Modern Mining*, 34 LAND & WATER L. REV. 301, 302 (1999).

 $^{^{6}}$ Id

⁷ 30 U.S.C.A. § 22.

and to the mining site as a whole.⁸ The Hardrock Act differs from other extraction laws, such as those that govern the oil, coal, and natural gas industries, which require a 12.5% royalty on minerals they extract.⁹ This possession can extend to not only the resources found, but also the ability to build on the land, graze cattle, cut timber, among other things.¹⁰ As Charles Wilkinson, states, "the statute requires no permit, lease, or other form of federal approval prior to entry," so the simple act of discovery is considered enough.¹¹ This "right to mine" mantra is an essentially privatized concept, with few requirements. Although some lands have since been considered federal acres set aside for special purposes¹², to which the statute does not apply, over 400 million acres, mostly located in the western United States, are open for mining.¹³

1. How the Hardrock Mining Act Governs Most Mines

The aim of the Hardrock Act is to protect miners' rights. Once a miner discovers a valuable hardrock material on a site, it becomes an "unpatented mining claim," of twenty acres, which the miner has exclusive rights and possession over. As the moment of "discovery" can be ambiguous and hard to define, the Interior Department established the "prudent person test", which essentially states, "a miner has made a discovery if there is a reasonable prospect for future success." The requirements to maintain an unpatented mining claim are relatively easy to comply with. All the miner needs to do is "conduct annual 'assessment work' and file annual reports with the Bureau of Land Management." In sum, if a miner finds a source of mineral deposits on a piece of land that have the potential to be fruitful, the finder gains both access and possession over that area.

The next step in the process to preserve the mining site is to obtain a patent, if the miner has made the discovery and accomplished \$500 worth

⁸ Wilkinson, *supra* note 4 at 44.

⁹ Frances Causey, 1872 Mining Law is Obsolete and in Need of Reform, THE HUFFINGTON POST, (Jan. 11, 2013, 3:14 PM),

http://www.huffingtonpost.com/frances-causey/1872-mining-law-obsolete b 2456346.html.

¹⁰ Wilkinson, *supra* note 4 at 45.

¹¹ *Id*. at 44.

¹² See id. Some lands have been set aside by presidents or Congress for special purposes, such as military bases or recreation lands, thought to be inconsistent with mineral development.

¹³ *Id*.

¹⁴ *Id*. at 45.

¹⁵ Id. at 46.

¹⁶ *Id.* at 47.

of assessment work in labor or improvements.¹⁷ However, many miners do not acquire patents, even though full title "eliminates most regulation by federal agencies, provides somewhat greater security, and in some cases may establish ownership to valuable nominal resources...," and the cost is only \$2.50 to \$5 per acre, because the miners have little incentive to do so.¹⁸ The "right to mine" standard holds strong even without a patent, so many do not find the need to take this next minimalistic step.¹⁹ While protecting miners' rights is important, the Hardrock Act emphasizes that the fundamental decision to mine is made by private mining interests, and not as a matter of public policy.²⁰ This in turn has led to selection of mining sites that are not necessarily in the best interest of the state, government, or generally the environment as a whole.

2. Hardrock Act and the "Right to Mine" Have Since Become Outdated

The right to mine is a fundamentally traditional American idea and conjures images of the old western miner ready to discover gold in the mountainous regions of the West. However as Wilkinson and other experts recognize, "the old-time prospector with pickax and burrow has virtually ceased to exist as a serious market participant." Today, very few individuals set out to discover new mining sites, and instead large companies have taken over the industry. Additionally, most mining regions have already been worked over and there are little resources left for the small, independent miner to discover and excavate.

Therefore Wilkinson suggests, "the miner's way of life ought to be preserved, but that goal can be achieved without tying up millions of acres of public property by the outmoded "right to mine" system." Additionally, many of the miners who obtained mining rights to sites are no longer alive and as a consequence there are many abandoned mines in the West with no official owner. Even the few miners who are still active and possessory of their rights, do not contribute enough to the mining industry to keep this kind of system afloat.

Consequently, large companies and corporations under the Hardrock Act can acquire these claims, extract any lingering mineral deposits without a tax or royalty cost, and abandon the areas, without being held

¹⁷ *Id.* at 48.

¹⁸ *Id.* at 49.

¹⁹ *Id*.

²⁰ *Id.* at 65.

²¹ *Id.* at 70.

²² Id.

²³ *Id*.

²⁴ *Id.* at 71.

liable for cleanup or any further environmental protections.²⁵ The absence of government regulation on these public domain lands is an incentive for mining companies to develop the lands, at very little cost to the company.

3. Environmental Concerns of the Hardrock Act

However, the gravest problem with the Hardrock Act is its effect on the environment. Because the Hardrock Act has no environmental provisions or safeguards in the statute, the toxic waste²⁶ left behind at mining sites has continued to spread into the groundwater and leak into rivers, lakes, and aquifers.²⁷ Acid mine drainage, a process in which minerals found in mining waste combine with oxygen-rich water to form sulfuric acid is common.²⁸ Sulfuric acid is both highly corrosive and can dissolve other underground heavy metals in the land or water.²⁹ When this drainage flows downstream and into water sources, "aquatic life virtually disappears and the river bottom becomes covered with a layer of reddish slime that often contains heavy metals."30 This can cause substantial damage to species, such as fish and plants located in the waters, as well as damage to the wildlife that may rely on the affected rivers and streams.³¹ This can be especially damaging, as "acid mine drainage water can be 20 to 300 times more acidic than acid rain". 32 When such large quantities are released into the environment, as in the Animas River spill, entire species can become affected and even extinguished.³³

B. The Gold King Mine

The Gold King Mine, located in Silverton, Colorado, and the site of the spill into the Animas River, is just one of the many abandoned mining sites that has been neglected due to the failures of the Hardrock Act. Historically, Gold King Mine was commissioned in the late1880s and became a site to extract silver, gold, copper, and lead.³⁴ Olaf Nelson, a local miner who worked at the nearby Samson mine, originally discovered and claimed the mine in 1887.³⁵ When Nelson died a few years later, Willis

²⁵ *Id*.

²⁶ See id. Typical minerals used in mining, such as pyrite and other metal sulfide ores, combine with water to form toxic waste.

²⁷ *Id.* at 49.

²⁸ *Id*.

²⁹ *Id*.

³⁰ *Id*.

³¹ *Id*.

³² *Id*.

³³ Id.

³⁴ Colorado Department of Public Health & Environment, *Gold King Mine background*, https://www.colorado.gov/pacific/cdphe/gold-king-mine-background.

³⁵ Colorado Public Radio Staff, The Gold King Mine: From An 1887 Claim,

Z. Kinney, along with two investors, bought Nelson's claim and created what became the Gold King Mining and Milling Company, in 1894.³⁶ The Gold King Mining and Milling Company then patented their claim and developed the area.³⁷ Although business was booming at the time, inspiring the Gold King Mining and Milling Company to build an aerial tramway and functioning mill, the process slowed during the twentieth century and production eventually stopped in 1923.³⁸ Ownership of Gold King Mine changed hands over the years, but eventually the mine was decommissioned in 1991 and consequently abandoned.³⁹

However, the waste from the former mining operations was left behind and has been consequently leaking into the groundwater over the years. Gold King Mine is located near various other abandoned mines in the San Juan Mountains, including the Red, Bonita, and Sunnyside Mines. ⁴⁰ The tunnel connecting these mines is a source of controversy related to the extent of contamination in the groundwater, and was a factor in why the Environmental Protection Agency (EPA) decided to clean up the Gold King Mine, which led to the eventual spill into the Animas River. ⁴¹

1. What Was Going On?

The "American Tunnel", a new access point that the owner of Sunnyside Mine dug, may have affected the groundwater surrounding Gold King Mine and the other mines in the area, causing a shift in water flow. Although the American Tunnel has since been plugged due to the shut down of Sunnyside Mine, it remains a controversial factor in the blame-game of the Animas River disaster. According to an internal review summary report conducted by the EPA, "since closure of the American Tunnel, the water quality in the Animas River has degraded progressively due to the impact of drainage from the American Tunnel and other newly draining adits."

Private Profits and Social Costs, COLORADO PUBLIC RADIO (Aug. 17, 2015), http://www.cpr.org/news/story/gold-king-mine-1887-claim-private-profits-and-social-costs.

³⁶ *Id*.

³⁷ *Id*.

³⁸ *Id*.

³⁹ Colorado Department of Public Health & Environment, *supra* note 34.

⁴⁰ Colorado Public Radio, supra note 35.

⁴¹ *Id*.

⁴² *Id*.

⁴³ *Id*.

⁴⁴ An adit is a horizontal opening by which a mine is entered, or drained. *See* The Oxford English Dictionary I 155 (2nd ed. 1989); Environmental Protection Agency, Summary Report, *EPA Internal Review of the August 5, 2015 Gold*

As discussed above, when groundwater combines with oxygen and iron sulfide, which is found naturally in the area, it forms sulfuric acid, which both contaminates the waters and also eats heavily at underground materials, such as copper, lead, arsenic, and zinc, in turn further contaminating the surrounding waters. While this "sludge" is damaging, it usually remains underground and although it may seep into the groundwater, it does so in extremely small quantities. However, as in this situation, one small mistake can lead to a spring, which ultimately forces all of the sludge to gush into the waters surrounding the mines.

2. Why Were They Cleaning Up?

According to their summary report, the EPA was planning on plugging the Red and Bonita Mines, but decided to try and stabilize Gold King Mine first, to prevent any increased water or mineral flow through the connected tunnel. In a press release from the EPA's website, they stated that the EPA was conducting an investigation of Gold King Mine on August 5, 2015, to "assess the on-going water releases from the mine, treat mine water, and assess the feasibility of further mine remediation." The release went on to say, "While excavating above the old adit, pressurized water began leaking above the mine tunnel, spilling about three million gallons of water stored behind the collapsed material into Cement Creek, a tributary of the Animas River. Apparently the goal of the EPA team at Gold King Mine was to install a pump to draw out the toxic water and then plug the mine to prevent any future leaks of contaminated water.

C. The Accident

On August 4th, the EPA team began excavation on the Gold King Mine adit. According to their summary report, the EPA states, "the goal was to find competent bedrock within which to anchor a support structure for the [a]dit."⁵⁰ On August 5th, the team then evidently hit a blockage, which caused the pressurized water to start pouring out at uncontrollable rates.⁵¹ The EPA stated, "during the excavation, the lower portion of the

King Mine Blowout, 5, http://www2.epa.gov/sites/production/files/2015-08/documents/new_epa_nmt_gold_king_internal_review_report_aug_24_2015f nldated_redacted.pdf.

⁴⁷ Environmental Protection Agency, *Emergency Response to August 2015 Release from Gold King Mine*, http://www2.epa.gov/goldkingmine.

⁴⁵ Colorado Public Radio, *supra* note 35.

⁴⁶ *Id*

⁴⁹ Colorado Public Radio, *supra* note 35.

⁵⁰ Environmental Protection Agency, *supra* note 44 at 5.

⁵¹ *Id*.

bedrock face crumbled away and there was a spurt of water from the area in the lower part of the excavation area."⁵² Pressurized water from the spurt continued to heavily flow for the next hour and although at first clear, soon became a red/orange color.⁵³ The EPA was surprised at the high pressure of the water in the adit, stating it was unexpected and unanticipated, and thus the work plan was ultimately insufficient.⁵⁴ The team speculates as to why the actual pressure of the water could not be determined, but it remains unclear.⁵⁵

The EPA suggests that a drilling process could have been used to determine the pressure of the water behind the asset, but would likely have been very costly and would have required significantly more resources and time. The summary report emphasizes that although the team was qualified, experienced, and followed all standard procedures, "the underestimation of the water pressure in the Gold King Mine workings is believed to be the most significant factor relating to the blowout." 57

Over the next few days following the spill, the EPA claimed responsibility and assessed that 3,043,067 gallons of water were discharged from the Gold King Mine and were now flowing into the Animas River and surrounding waters.⁵⁸ The water then turned a bright mustard yellow color, causing alarm throughout the area and garnering attention from the media. The media reported high levels of lead, arsenic, beryllium, cadmium, and mercury, as well as iron, zinc, and copper, in the river and commented on concerns for the rivers ecosystems and fish populations.⁵⁹ The spill affected areas in Colorado, New Mexico, and Utah, as well as affecting areas of the Navajo Reservation.⁶⁰

D. The Long-Term Effects

In the days following the accident, the EPA claimed responsibility and regularly updated their website with daily developments concerning the spill and the Animas River. On August 10, 2015, just five days after the spill, the EPA stated their primary objectives which included, "working with federal, state, tribal and local authorities to make sure that

⁵⁴ *Id*. at 7.

⁵⁶ *Id.* at 9.

⁵² Environmental Protection Agency, *supra* note 44 at 5.

⁵³ *Id*

⁵⁵ *Id*.

⁵⁷ Id

⁵⁸ Environmental Protection Agency, *How Did the August 2015 Release from the Gold King Mine Happen?*, http://www2.epa.gov/goldkingmine.

⁵⁹ Mariano Castillo, *Pollution Flowing Faster than Facts in EPA Spill*, CNN (Aug. 10, 2015, 10:20 PM), http://www.cnn.com/2015/08/10/us/colorado-epamine-river-spill/.

⁶⁰ Brumfield, *supra* note 1.

people continue to have access to safe drinking water, ensure appropriate precautions are in place for recreational use and contact with river water, evaluate impacts to aquatic life and fish populations, and stop the flow of contaminated water into the watershed at the Gold King Mine site."⁶¹ The EPA emphasized that they were regularly collecting and assessing the water quality and assessing the impact to wildlife.⁶² They also suggested for the community to take precautions after any contact with the river water.⁶³

On August 14, 2015, the ban on recreational use of the Animas River had been lifted.⁶⁴ By September 2, 2015, the EPA released data results declaring that the metal concentration levels were back to, and maintaining, pre-event levels.⁶⁵ The EPA collected samples regularly in various locations to screen for unsafe conditions.⁶⁶ Additionally, the Colorado Department of Public Health and Environment issued a press release, also on September 2, 2015, stating that trout from the Animas River were safe to eat.⁶⁷

Through a series of regular website updates, the EPA informed the public that they were working with the State of Colorado Division of Parks and Wildlife, the New Mexico Department of Game Fish, the Navajo Nation, and the U.S. Fish and Wildlife Service to determine any additional impacts on wildlife in and around the river. ⁶⁸ Together, they assessed the wildlife in the river and determined that no fish had died due to the spill, ducks had returned to the river, and no other wildlife seemed to be affected. ⁶⁹ While encouraging, all agencies noted that there could be unforeseen long-term effects and will thus continue regular testing. ⁷⁰

Various updates on the EPA's website provide information regarding the metallic levels in the water and any affect on wildlife, fish, and

⁶¹ Environmental Protection Agency, August 10, 2015 Press Release, (Aug. 10, 2015), http://www2.epa.gov/goldkingmine/press-releases-and-updates-gold-king-mine-response.

⁶² *Id*.

⁶³ *Id*.

⁶⁴ Colorado Public Radio, *supra* note 35.

⁶⁵ Environmental Protection Agency, *Data from Gold King Mine Response*, http://www2.epa.gov/goldkingmine/data-gold-king-mine-response.

⁶⁷ Colorado Department of Public Health & Environment, *Trout from the Animas River safe to eat, tests show,* Press Release (Sept. 2, 2015), https://www.colorado.gov/pacific/cdphe/News/Animas-trout.

⁶⁸ Environmental Protection Agency, *Frequent Questions Related to Gold King Mine Response*, http://www2.epa.gov/goldkingmine/frequent-questions-related-gold-king-mine-response#impacts.

⁶⁹ *Id*.

⁷⁰ *Id*.

drinking water. An update on October 28, 2015 reported, "Surface water and sediment concentrations are now below recreational screening levels" and "the river system as a while is being maintained at pre-event conditions." However, almost every previous press release informed the public that the metal concentrations in water and sediment can fluctuate. The EPA stated their long-term concern is "the effect on the entire watershed of metals deposited in sediments and their release during highwater events and from recreation use over time," as the sediments can cause risk to aquatic life and fish. Thus although the water levels and present aquatic life are currently unharmed as a result of this spill, the metallic levels may be buried in the sediment on the bottom of the river and could be stirred up over time. The EPA maintains that they will continue to monitor the levels of the river and continue to update the public on their findings.

On February 5, 2016, the EPA declared that researchers conducted a preliminary analysis of the fate and transport of the metals in the Animas River. 75 Through a series of monitored sites located down the length of the river, the EPA states, "monitored data showed significant decline in dissolved concentrations with increasing distance from mine" and the Gold King Mine "dissolved metal concentrations returned to background within hours after the plume passed at all sites." Essentially, this release appears consistent with reports of the spill at the time. The EPA does suggest that there could be continual cumulative effects that are difficult to distinguish at the moment, and there are suggestions that the metals could be stirred up once again due to the snowmelt in the spring and consequent runoff into the river.⁷⁷ As this is an on-going project, close monitoring will continue on the river. Additionally, the EPA has released numerous other updates concerning their future plan of action to prevent an occurrence such as the Animas River spill from happening again, and in regard to other mines in the area.⁷⁸

⁷¹ Environmental Protection Agency, *Gold King Mine Data, October 28, 2015* (Oct. 28, 2015). http://www2.epa.gov/goldkingmine/gold-king-mine-data-october-28-2015.

⁷² *Id*.

⁷³ Environmental Protection Agency, *supra* note 68.

 $^{^{74}}$ Id

⁷⁵ Environmental Protection Agency, *Gold King Mine Acid Drainage Release: Draft Analysis of Fate & Transport of Metals in the Animas & San Juan Rivers* (Feb. 5, 2016), http://www.epa.gov/sites/production/files/2016-02/documents/analysisfatetransportmetals.pdf.

⁷⁶ The EPA defines plume as the section of river containing contaminants released from the Gold King Mine. The plume moves downstream over time. *Id.* ⁷⁷ *Id.*

⁷⁸ Environmental Protection Agency, *Press Releases and Updates for Gold King*

III. HOW WILL THE ANIMAS RIVER SPILL BE ADDRESSED NOW?

Although the Animas River and related waters are currently back to normal levels and the spill proved to be not as devastating as originally believed, the long-term lasting effects could prove to be quite damaging. The Gold King Mine spill into the Animas River is just one example of the severe impact toxins located in abandoned mines can have on the environment. The lack of cleanup of these mines in the western United States has led to similar incidents like this occurring throughout the country, and has proven to be extremely harmful and dangerous for the environment.

This spill, which gained notoriety through the media, opened up the political conversation about what to do with these abandoned mining sites and how to best take care of them. After the Animas River spill, the Colorado Department of Public Health and Environment "identified the worst 230 leaking mines draining into creeks and rivers." Of the 230 mines, 148 have yet to be evaluated. The most prominent issue seems to revolve around the outdated Hardrock Act and the liability requirements for those who are willing to clean up the areas, as well as the lack of funding. While there are some safeguards and provisions currently in play to help the environment and prevent this kind of incident from occurring, they are falling woefully short of adequacy.

A. Clean Water Act

The *Hydro Resources III* majority improperly concluded that the "Although the Hardrock Act does not contain environmental protections or provisions, the Clean Water Act is the federal law in the United States, which governs water pollution. The objective of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."⁸¹ The Clean Water Act provides that a permit is required for any kind of discharge of a pollutant from a point source into

Mine Response, http://www.epa.gov/goldkingmine/press-releases-and-updates-gold-king-mine-response.

⁷⁹ Bruce Finley, *Colorado Counts on Gold King to Spur Cleanup of Leaking Old Mines*, THE DENVER POST (Feb. 14, 2016, 12:01 AM),

http://www.denverpost.com/animas-river/ci_29514933/colorado-counts-gold-king-spur-cleanup-leaking-old.

⁸⁰ *Id*.

⁸¹ 33 U.S.C.A. § 1251.

the navigable waters of the United States.⁸²

However, sections 1319(c)(1) & 1319(c)(2) of the Clean Water Act provide that "any person who negligently (or knowingly) introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substance which such person knew or reasonably should have know could cause personal injury or property damage..." shall be subject to a penalty of a fine or imprisonment. Thus in the case of the Gold King Mine, the EPA could be held liable for their cleanup efforts due to the misfortune of the accident, if they are found to have negligently or knowingly released pollutants into the waters of the United States. This liability loophole in the Clean Water Act is a significant impediment to cleanup efforts for abandoned mines such as the Gold King Mine. While the Clean Water Act typically provides exemptions for federal agencies and the EPA, who would normally obtain permits, their potentially "negligent or knowing" mishap here, can render them liable. The second state of the Clean Water Act the potentially "negligent or knowing" mishap here, can render them liable.

Furthermore, the statute defines the term "person" as "an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body." Therefore the EPA, although a federal government agency, could still be liable for the penalties as addressed in the statute. This has the effect of discouraging both federal agencies, like the EPA, as well as ordinary citizens from attempting to salvage these abandoned waste sites. In an interview with the EPA on-scene coordinator at the site of the spill, Grace Hood, Colorado Public Radio's Energy and Environment Reporter, identified the main issue, stating, "[r]ight now, a primary determinant to voluntary cleanup efforts involve the ongoing liability that groups would have if they attempt cleanup under the Clean Water Act." Therefore the Clean Water

^{82 33} U.S.C.A. § 1344.

^{83 33} U.S.C.A. § 1319(c)(1)-(2).

^{84 33} U.S.C.A. § 1319(c)(1).

⁸⁵ On October 6, 2016, the U.S. Attorney's Office in Colorado declined to prosecute any Environmental Protection Agency workers involved with the spill. This decision was made based on information submitted by the EPA's Office of Inspector General to federal prosecutors after a year-long probe. The EPA will now be responsible for determining any administrative action against any employees. Several Republican Congress members are unhappy with this decision and are demanding a briefing to provide an explanation for the Department of Justice's decision. Grace Hood, *US Prosecutors Pass on Criminal Charges for EPA Worker in Gold King Spill*, COLORADO PUBLIC RADIO (Oct, 13, 2016), https://www.cpr.org/news/story/us-prosecutors-pass-on-criminal-charges-for-epa-worker-in-gold-king-spill.

^{86 33} U.S.C.A. § 1362.

⁸⁷ Grace Hood, *Colo. Gold King Mine Continues to Leak Waste as Winter Sets In*, COLORADO PUBLIC RADIO broadcast, NPR (Oct. 27, 2015, 8:50 AM),

Act is, in a way, not a solution, but rather a deterrent, for cleanup efforts.

B. Superfund

To address environmental pollution Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as a way to clean up the nation's worst hazardous waste sites and to respond to local and nationally significant environmental emergencies. Rederal Superfund, CERCLA provides a Federal Superfund' to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Additionally, through CERCLA, EPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup.

While the Superfund is a satisfactory way to clean up hazardous sites, and hold those responsible liable, it fails to cover every circumstance. In the case of the Gold King Mine, and thousands of other abandoned mines across the western United States, the EPA can be held solely liable for any catastrophes that may occur from attempting to clean up the mines. Because so many mining sites are no longer operating, the owners are often unable to be found or – in the case of corporate owners – have long since dissolved. The outdated Hardrock Act, which protected the rights of the private miners and corporations, has left the EPA and the United States with abandoned and ownerless mines that continue to leak toxic chemicals into the environment.

Thus if the EPA decides to go in and clean up a site, as they did with the Gold King Mine, they can, and likely will, be held liable for any spillage or further damage. This in turn will be paid for either by the Superfund itself, or most likely from taxpayers. In the case of the Gold King Mine, cleanup efforts pushed beyond \$14.5 million, which will come from the EPA and the taxpayers, letting the mining industry, the industry actually responsible for the waste at the sites, completely off the hook. 91 Hence the hesitation of many to clean up these hazardous sites, due to the

http://www.npr.org/2015/10/27/452163693/colo-gold-king-mine-continues-to-leak-waste-as-winter-sets-in.

⁸⁸ 42 U.S.C. §9601; Environmental Protection Agency, *Superfund History*, http://www2.epa.gov/superfund/superfund-history.

⁸⁹ Environmental Protection Agency, Summary of the Comprehensive Environmental Response, Compensation, and Liability Act,

http://www2.epa.gov/laws-regulations/summary-comprehensive-environmental response-compensation-and-liability-act.

⁹⁰ *Id*.

⁹¹ Hood, supra note 87.

potential liability.

In short, the Superfund is a great way to curb current environmental disasters but is not far-reaching enough to account for past pollution. Additionally, in order to receive funding from the Superfund, the site must be on the Superfund list. Therefore areas which haven't made yet it on to the "worst of the worst" list would not be eligible for funding to help the cleanup effort.

On February 22, 2016, the town of Silverton unanimously voted to seek Superfund status for the Gold King Mine area, which would include forty-six mines. ⁹² While the town has been hesitant about pursuing Superfund status in the past, largely due to concerns of creating a permanent bar on the mining industry, as well as the risk of bad publicity, the Animas River spill influenced the residents and town officials to change their minds. ⁹³ The town officials believe that seeking Superfund status is the best way to both expedite the cleanup of the Animas River and also to prevent future disasters in this specific area, now coined the "Bonita Peak Mining District." ⁹⁴

In order to decide whether to place Gold King Mine and the Bonita Peak Mining District on their Superfund list, the EPA must determine the states' position on sites the EPA is considering placing on the National Priorities List (NPL). ⁹⁵ The NPL, financed under the Superfund, is a "list of high-priority sites that have releases of hazardous substances, pollutants or contaminants that warrant remedial evaluation and response." ⁹⁶ The EPA thus sent a letter to Governor John Hickenlooper ⁹⁷, on behalf of the state of Colorado, as well as letters to the state of Utah, the Ten Tribes Partnership, the Southern Ute Indian Tribe, and the Ute Mountain Tribe on February 19, 2016, seeking all of their concurrences. ⁹⁸ On February 29,

⁹² Grace Hood, *After Years of Opposition, Silverton OKs Superfund Plan,* COLORADO PUBLIC RADIO (Feb. 23, 2016, 11:43 AM),

https://www.cpr.org/news/newsbeat/after-years-opposition-silverton-oks-superfund-plan.

⁹³ *Id*.

⁹⁴ Bruce Finley, Silverton, San Juan County Vote Yes for Superfund Cleanup of Old Mines, THE DENVER POST (Feb. 22, 2016, 2:11:59 PM),

http://www.denverpost.com/news/ci_29547638/silverton-san-juan-county-vote-possible-superfund-cleanup.

⁹⁵ Environmental Protection Agency, Colorado Governor John Hickenlooper's Letter in Support of Bonita Peak Mining District NPL Listing,

https://www.epa.gov/goldkingmine/colorado-governor-john-hickenloopers-letter-support-bonita-peak-mining-district-npl.

⁹⁶ *Id*.

⁹⁷ *Id*.

⁹⁸ See Environmental Protection Agency, Letters to the State of Utah, the Ten Tribes Partnership, the Southern Ute Indian Tribe and the Ute Mountain Tribe

2016, Governor Hickenlooper sent a letter back to the EPA, affirming Colorado's support for adding the Bonita Peak Mining District to the National Priorities List. ⁹⁹ Additionally, the EPA sent letters to the state of New Mexico on March 17, 2016, regarding the same matter. ¹⁰⁰

If placed on the NPL and identified as a Superfund site, the EPA would begin initial cleanup on the area and close monitoring of the site, until it is determined to no longer be a threat to people or the environment. Currently, Colorado has twenty-three Superfund sites and the EPA has only declared three to no longer be a threat. Nationally, out of 1,767 Superfund sites, only 391 have been completed. Clearly, the process takes a very long time and funding continues to be an issue, with recent slashes by Congress to the budgets of the Superfund program and remedial cleanup projects. As of early September 2016, Gold King Mine was added to the EPA's Superfund National Priorities List. This step will pave the way for a multimillion-dollar clean-up, if Congress approves the Superfund listing. However, it is also clear that past pollution still remains a problem.

IV. GOOD SAMARITAN LEGISLATION

As this Note has illustrated, the current environmental legislation in place is not extremely effective in addressing situations such as the Gold King Mine spill. As a way to address this type of problem, the state of Pennsylvania passed the Environmental Good Samaritan Act, and is

About Potentially Adding the Bonita Peak Mining District to the Superfund National Priorities List, https://www.epa.gov/goldkingmine/letters-state-utahten-tribes-partnership-southern-ute-indian-tribe-and-ute-mountain.

⁹⁹ Environmental Protection Agency, *supra* note 95.

¹⁰⁰ Environmental Protection Agency, Letters to the New Mexico Congressional Delegation Regarding the Long-Term Monitoring Activities and Claims for Reimbursement, https://www.epa.gov/goldkingmine/letters-new-mexico-congressional-delegation-regarding-long-term-monitoring-activities.

¹⁰¹ Bruce Finley, *EPA: "Nowhere Near" Needed Funds to Clean Up Colorado's Toxic Mines*, THE DENVER POST (Dec. 8, 2015, 6:48:39 PM), http://www.denverpost.com/news/ci_29220612/epa:-%22nowhere-near%22-

needed-funds-to-clean-up-colorados-toxic-mines.

¹⁰² *Id*.

¹⁰³ *Id*.

¹⁰⁴ *Id*.

¹⁰⁵ Darryl Fears, *Colorado Gold Mine is One of the EPA'S New Superfund Pollution Sites*, THE WASHINGTON POST (Sept. 7, 2016) https://www.washingtonpost.com/news/energy-environment/wp/2016/09/07/colorado-gold-mine-is-one-of-the-epas-new-superfund-pollution-sites/?utm term=.a515f12b57d0.

currently the only state with environmental Good Samaritan legislation. 106

A. Background

Traditionally, Good Samaritan laws have been used to protect ordinary citizens from liability when providing aid in emergency situations. Initially, Good Samaritan laws referred solely to medical professionals and emergency personnel, depending on the state, and essentially "offer[ed] immunity from civil liability to any party who volunteers his services to an imperiled person without having the legal duty to do so." Since 1959 every state has now adopted some kind of Good Samaritan law, as a way to encourage citizens to aid in certain situations, with thirty-seven states having laws granting immunity to anyone who provides assistance. Good Samaritan laws seek to shield altruistic rescuers from possible liability for any negligent acts or omissions arising out of their rescue attempts. Although Good Samaritan laws almost unanimously relate to emergency medical situations, the basic principle behind the law should extend to all "rescue" situations, not just those involving human care.

While each state statute varies, there are five components that are usually found in Good Samaritan laws, with each statute comprising at least two of the five. ¹¹⁰ The five components are:

1) each statute must enumerate the class or classes of persons to which the immunity is offered, 2) there must be a good faith state of mind on the part of the rescuers rendering emergency assistance, 3) the care must be rendered gratuitously, 4) there may be a limit to the places in which the emergency aid must be given to qualify for immunity, and 5) there may be a minimum acceptable standard of conduct other than the common law "reasonable man" standard.¹¹¹

The Colorado Good Samaritan Statute, C.R.S.A. § 13-21-108, entitled "Persons Rendering Emergency Assistance Exempt from Civil Liability," for example, contains components one through four and covers any person who in good faith renders emergency care, gratuitously, at the place of the emergency or accident. In Importantly, Good Samaritan laws

^{106 27} Pa. C.S.A. §8101.

¹⁰⁷ Eric A. Brandt, *Good Samaritan Laws – The Legal Placebo: A Current Analysis*, 17 AKRON L. REV. 303 (1983-1984).

¹⁰⁸ *Id.* at 309.

¹⁰⁹ *Id.* at 304.

¹¹⁰ *Id.* at 308.

¹¹¹ Id. at 308-309.

¹¹² Colo. Rev. Stat. § 13-21-108 (Supp. 1982).

are enacted to *shield* altruistic rescuers, who do not have a duty to aid, and not *create* an affirmative duty for all citizens to provide aid.¹¹³

Critics of the laws have suggested that the Good Samaritan statutes do not in fact encourage citizens to provide aid in emergency situations and that lawsuits can occur regardless, due to the vague and often ambiguous language of the statutes. He ease the "good faith" and "reasonable man" standards, as well as what constitutes as the "emergency site," can be interpreted in a variety of ways, the language of the statutes themselves become critical.

B. Pennsylvania Environmental Good Samaritan Act

Passed in December 1999, Pennsylvania is currently the only state that has enacted Good Samaritan legislation in an environmental context. The Environmental Good Samaritan Act protects citizens, landowners, agencies, and organizations who are interested in in reclaiming abandoned lands and addressing water pollution issues, but are reluctant and hesitant to do so because of potential liabilities. 115 Essentially, this statute provides that any person or organization who attempts a reclamation project or a water pollution abatement project is immune from liability from any injury or pollution resulting from such project, as well as operating, maintaining, or repairing the water treatment facilities. Additionally, such persons shall not be liable for any civil or environmental penalties resulting from such actions. 116 The statute states its purpose "to improve water quality and to control and eliminate water pollution resulting from mining or oil or gas extraction or exploration by limiting the liability which could arise as a result of the voluntary reclamation of abandoned lands or the reduction and abatement of water pollution."117

The Environmental Good Samaritan Act also provides that any landowner is eligible for protection under the act, as well as any person, corporation, nonprofit organization, or government entity that participates in the project.¹¹⁸ While the Environmental Good Samaritan Act is principally concerned with abandoned mine sites, it also addresses

¹¹³ Brandt, *supra* note 107 at 330.

¹¹⁴ Dov Waisman, Negligence, Responsibility, and the Clumsy Samaritan: Is there a Fairness Rationale for the Good Samaritan Immunity?, 29 GEORGIA STATE UNIVERSITY L. REV. 608, 635-636 (2013).

¹¹⁵ 27 Pa. C.S.A. § 8102 (1999).

¹¹⁶ 27 Pa. C.S.A. § 8107 (1999).

¹¹⁷ Id

¹¹⁸ Department of Environmental Protection, *Environmental Good Samaritan*

http://www.amrclearinghouse.org/Sub/LEGAL/GoodSamaritanFactsheet.pdf.

unplugged oil and gas wells.119

Unlike the Clean Water Act, the Environmental Good Samaritan Act provides that it is not applicable only if landowners "deliberately or recklessly cause injury or property damage." This is a far more lenient standard for the person or organization performing the cleanup effort, compared to the "negligently or knowingly" standard as in the Clean Water Act. Thus if Colorado enacted similar legislation, the EPA would likely not be held liable for the Gold King Mine spill, as they did not deliberately or recklessly cause property damage. The Environmental Good Samaritan Act provides not only a more straightforward standard for reclamation and water pollution projects, but also encourages landowners, companies, and agencies to take on such projects without fear of liability.

C. Current Efforts to Implement

While Pennsylvania is currently the only state to enact Environmental Good Samaritan legislation, Colorado and local state politicians have been actively working to pass a similar statute, as a way to both address the issue of abandoned mines in the western United States and to prevent watersheds, like the Animas River spill, from occurring. One such proposed bill is United States Representative Raul Grijalva's Hardrock Mining Reform and Reclamation Act of 2015. The bill would mandate royalties for hardrock mining operations on public lands, created a fund for cleanup of abandoned mines, and include a Good Samaritan provision. Data of the control of the cont

However, supporters of the bill assert that Good Samaritan legislation alone will not solve the problem, as nonprofit groups and local governments, let alone ordinary citizens, simply do not have the funds to even attempt to clean up the abandoned mines. While Good Samaritan

¹¹⁹ *Id*.

¹²⁰ *Id*.

¹²¹ Black's Law Dictionary defines reckless as "characterized by the creation of a substantial and unjustifiable risk of harm to others and by a conscious (and sometimes deliberate) disregard for or indifference to that risk; heedless; rash. Reckless conduct is much more than mere negligence: it is a gross deviation from what a reasonable person would do." Although it could be argued that the EPA was careless in its handling of the Gold King Mine, it might be going too far to label them as reckless in this context, especially because they were setting out with positive intentions to fix the mine. BLACK'S LAW DICTIONARY 1462 (10th ed. 2009).

¹²² David O. Williams, *Colorado Dems Back Mining Reform, GOP Focused on Good Samaritan Law,* THE COLORADO STATESMEN (Aug. 21, 2015), http://www.coloradostatesman.com/content/996047-colorado-dems-back-mining-reform-gop-focused-good-samaritan-law.

¹²³ *Id.*

legislation may encourage altruistic citizens to clean up the areas, they simply cannot afford it without some kind of funding.

Republican representatives, who propose Good Samaritan legislation, but are averse to requiring royalties for mining operation to pay for cleanup, strongly resist Representative Grijalva's bill, as well as other similar proposed reforms.¹²⁴ These representatives argue that Grijalva's bill, which would require 8% royalties for new hardrock mines and 4% royalties for existing mines, would discourage all mining on public lands, as royalties were never charged before, and significantly affect the profitable mining industry.¹²⁵ Additionally, the representatives argue that companies would be discouraged to reclaim any of the mines because of the impending liabilities that could potentially attach if mistakes are made or accidents occur.¹²⁶ Other critics have further argued that new legislation could weaken current environmental laws, such as the Clean Water Act and Superfund, which were put into place to directly address the same environmental concerns.

Although proposed Good Samaritan legislation has failed at least ten times previously, former Colorado Senator Mark Udall proposed a more simplified bill in 2013 as a way to resolve the past, current, and future environmental problems without meeting such resistance from opposing parties. ¹²⁷ Udall's proposed legislation was to simply amend section 402 of the Clean Water Act, which specifically states the requirements for a permit in order to discharge any pollutants into United States waters, and add a Good Samaritan provision. ¹²⁸ By simply amending an already enforceable statute, Udall believed the bill could gain more support and be a first step in the right direction. ¹²⁹

The proposed Act, entitled the "Good Samaritan Cleanup of Abandoned Hardrock Mines Act of 2013" (S.1443) (Good Samaritan Cleanup Act), would allow for individuals to obtain Good Samaritan discharge permits to "propose a project, the purpose of which is to remediate, in whole or in part, actual or threatened pollution caused by historic mine residue at an inactive or abandoned mine site." The

¹²⁴ Williams, *supra* note 122.

¹²⁵ *Id*.

¹²⁶ Id

¹²⁷ Aaron Mintzes, Sen. Udall and Rep. Tipton Introduce Good Samaritan Bill to Encourage Mine Cleanup, EARTHWORKS (Aug. 2, 2013),

 $https://www.earthworksaction.org/earthblog/detail/sen._udall_and_rep._tipton_introduce_good_samaritan_bill_to_encourage_mine\#.VuzPJMf4vvk.$

¹²⁸ 33 U.S.C.A. § 1342.

¹²⁹ Mintzes, *supra* note 127.

¹³⁰ S. 1443, 113th Cong., 1st Sess. (2013-2014),

https://www.congress.gov/bill/113th-congress/senate-bill/1443/text.

procedure of requiring a permit would ensure that only qualified, experienced individuals would be pursuing these cleanup efforts, not just anyone. Additionally, the Good Samaritan Cleanup Act would require that the Good Samaritan(s) made no contribution to the "mine residue" at the site, that the site does not have an "identifiable owner or operator," and that the site is currently inactive. The Good Samaritan Cleanup Act also calls for the eligible applicant to propose a detailed remediation plan in order to even apply for the permit. Most importantly however, the Good Samaritan Cleanup Act states that the holder of the permit "shall not be subject to enforcement under any provision of this for liability for any past, present, or future discharges at or from the abandoned or inactive mining site…" Finally, the permit, if granted, would terminate ten years after the enactment date. The same states are the enactment date.

The purpose of the Good Samaritan Cleanup Act is solely to encourage citizens, private corporations, and non-profit organizations to clean up the abandoned mines and prevent future pollution from occurring, with incurring liability should anything go wrong. Although former Senator Udall, Senator Gardner, and other representatives have been pushing for this kind of legislation to be passed, and the Good Samaritan Cleanup Act has made it to the Senate's Environment and Public Works Committee, no further action has yet been taken. In the wake of the Animas River spill however, it is essential that new legislation be heard and eventually passed to both address previous and current environmental concerns, and to prevent future disasters.

V. PROPOSED LEGISLATION

While Senator Udall's Good Samaritan Cleanup Act is certainly a step in the right direction, it is simply a *first* step, which does not encompass all of the issues at hand. The two major issues facing these abandoned mines and the resulting environmental disasters are liability concerns and funding. While enacting a type of Good Samaritan legislation could solve the liability concerns, it also has the potential to create more incentive for the mining industries to take advantage of the land and leave all of the cleanup work for those altruistic, willing citizens or organizations. This could lead to even more damage than before.

Additionally, leaving everything up to Good Samaritans is unrealistic, as most citizens, nonprofit organizations, local governments,

¹³¹ *Id*.

¹³² *Id*.

¹³³ *Id*.

¹³⁴ *Id*.

and even state governments simply do not have the funds to enact such remediation at these sites, let alone funds to cover any potential mishaps that may occur. Requiring the mining companies to pay royalties on new and previous mining sites could create a source of funding, but would likely be met with significant resistance from the mining industry and furthermore disincentivize the industry, if they would also be responsible for any potential liabilities.

This paper seeks to propose a workable solution that addresses both of these issues through a combination of the current proposed bills and acts. This new law would be divided into and address two significant sections: the Good Samaritan provision and the source of funding.

A. Good Samaritan Provision

The Good Samaritan provision of this proposed legislation would build off of Senator Udall's proposal, in that it would require eligible applicants to apply for a permit to address the cleanup or alteration of abandoned mine sites. Like the proposed Good Samaritan Cleanup Act, eligible applicants would have no connection to the site's former pollution and would need to propose a detailed remediation plan to the EPA before beginning. The EPA, if it approves, would grant the permit to the Good Samaritans and would need regular information and updates about the progress of such cleanups.

If granted, the Samaritans would be required to use their own funding for such cleanup efforts (an issue which will be addressed in section (b)), but would have the freedom under their approved plan to address the land as they wish, without further government or agency interference. The permit would also terminate after ten years, but would not chain the Samaritans to the site for the entire ten years if the process failed, was abandoned, or simply finished. Essentially, the permit would act as a temporary access to the land and not a title of ownership or further rights. Most importantly, this act would provide that the Samaritans are not liable in any way for past, present, or future discharges of pollution from the site into the ground or waters of the United States

While this proposed provision seems to give the Samaritans a significant amount of leeway, this is essential to encouraging ordinary citizens, as well as nonprofit groups, local governments, and state governments to get involved. With this legislation, the Samaritans have almost nothing to lose. Dedicated organizations who are willing to clean up abandoned mine sites, would have the freedom to construct their own plans and carry them out the way they see fit. Requiring a permit would satisfy the Clean Water Act requirements and would make sure that the EPA (and Government) is involved in overseeing the process, but in a non-interfering way. Through the permit process the EPA would be able to

grant permits to only specifically qualified individuals. The liability provision would also exempt the EPA and the Samaritans from any liability provision from potential disasters.

B. Funding

While this satisfies liability concerns, funding remains an issue. Ordinary citizens and nonprofit groups simply do not have the funds needed to address the abandoned mine sites. Even the EPA and other governmental agencies do not necessarily have enough funds and instead would need to rely on the taxpayers. Therefore, a royalty fee must be enforced to all current and future miners and mining companies, similar to the royalties used for oil and gas resources. Currently, royalties are required for the oil and gas industries, and has become a uniform rule, although it has been overlooked in the mining industry. A blanket percentage would thus be applied to all mining sites, which would keep the playing field balanced in terms of competition amongst the industry. These royalty fees would then be solely placed in a Good Samaritan fund, managed by the EPA, which would then be accessed and distributed to the Samaritans with approved permits, to fund the cleanup of sites and any potential mishaps.

Because this solution would likely incite resistance from the mining industry, there would need to be incentives for the mining companies to participate in this royalty program, aside from just being required to participate. One such incentive could be to enact a reduction in royalties, or provide a reimbursement program, which would be triggered once a mining company abandons or finishes with their site, provided they leave the site in a reasonable condition. This would encourage the large mining companies to clean up after themselves and reduce the amount of toxins and chemicals left in the groundwater and area. The reduction in royalties could be applied at the company's next mining site, where they could receive a lower percentage that they would be required to pay. Or, if the company was not planning on moving to a new site, they could receive a reimbursement from the Good Samaritan fund for leaving the environment in a reasonable condition upon their departure.

Another incentive to increase funding could be to remove the mining company from future liability, by requiring a larger royalty fee but releasing the company from responsibility once they depart. Therefore, once the company decides to close or move on from the site, the royalty money in the Good Samaritan fund would provide enough funding to go in and address the site as is. However, there would need to be a strict

¹³⁵ See Finley, supra note 101.

¹³⁶ See Allen, infra note 138.

contract tying the company to the site for a specified period of time and they would need to be held to those agreed upon terms. Otherwise the same problems would arise from companies simply going out of business, or moving on without passing the site to another company.

While these options may decrease the funds available for cleanup, they would also hopefully decrease the amount of abandoned mining sites that need to be addressed for environmental concerns. Additionally, if the industry continues to perform, the royalty requirement would add to the fund periodically. Furthermore, the EPA would monitor the fund closely. Because funding for Superfund sites remains an issue, the Good Samaritan fund would work in conjunction with the Superfund program. With a base amount of funding and the proposed royalty fees from the mining industry, the Good Samaritan fund would be available for the lesser sites that have not yet made it onto the NPL or Superfund list. For example, rather than declaring the Gold King Mine area as a Superfund site (or, if the current status fails), the Good Samaritan fund could take care of this location and leave the Superfund program for even worse off sites. So while it may seem as though it is taking away money from the Superfund program, it would really be working in conjunction with it.

C. A Rock-Hard Solution

This proposed legislation would serve to satisfy both the liability and funding concerns that are currently at issue. The Good Samaritan provision of the legislation would allow towns, cities, and states, to become involved with the cleanup sites, and not simply turn them over to the federal government. That way citizens would be able to have a say in how their environment is treated and handled from the inside, rather than solely being controlled by outsiders, a common concern of the people of Silverton, for example. ¹³⁷ Because the EPA and the Government would still be involved with the permitting process, as well as the funding, this legislation would bridge the gap between the local and federal government and encourage them to work together. The monitoring from the EPA would also ensure that the right remedies and procedures are taking place, but at the hands of others, and not the EPA. This would also free the EPA to pursue other Superfund sites and possibly accelerate their processes in those locations.

While the mining industry would likely not favor this proposal, royalty enforcement is extremely common in similar industries, and is the only way to provide a decent source of funding.¹³⁸ A blanket percentage

¹³⁷ See Hood, *supra* note 92.

¹³⁸ See W.W. Allen, 4 A.L.R. 2d 492 (1949) (discussing the use and importance of royalties in the oil and gas industries).

would be applied to all mining companies, to keep the playing field balanced and fair. The additional breaks or exceptions in royalties would provide incentives for the mining industry and would provide them with options. By removing liability concerns, the mining industry would likely not be significantly impacted, and the royalty fees could act as a tradeoff for liability. Additionally, if Congress allocated a small amount to the Good Samaritan Fund, it would help alleviate some of the pressure from the Superfund, as well as work in conjunction with it, again, all under the umbrella of the EPA and Government. Ultimately, funding for these sites is of the utmost importance, and needs to be pushed to the forefront.

VI. CONCLUSION

On August 5, 2015, three million gallons of toxic mining waste spilled into the Animas River, creating one of the most memorable yet disturbing images of a beautiful flowing Colorado river, turned instantly into a sludgy, mustard-yellow environmental nightmare. Luckily, this was a huge wake-up call for not only the mining industry, but the EPA, the local and federal governments, and ordinary citizens. It alerted the country to how many similar disasters occur on a daily basis, although almost always unseen and undetected until it is far too late.

Because the current mining laws in the United States date back to 1872, they are extremely outdated and simply unsuccessful in addressing these types of disasters. There are hundreds of mines across the western United States that have been either abandoned or inactive for years, and are potentially harming the environment in numerous ways, through slow leaking damage, or gushing flows of toxic waste, as seen from the Gold King Mine.

There is significant resistance to even approach these sites to clean or restore them because of liability concerns. At Gold King Mine, the EPA was attempting to fix a leak, and mistakenly triggered a deluge of toxic waste into the water, placing the EPA in the spotlight for causing the damage, even though they were initially trying to remedy it. Finally, funding to even attempt to address these sites is scarce and continues to deplete.

This proposed legislation, to enact a Good Samaritan provision as well as enforce a royalty requirement on the mining industry, would solve the two main problems of liability and funding, and encourage the clean up of these abandoned mining sites throughout the United States. With this legislation, the states have an opportunity to protect the environment and

prevent future damage from occurring. While the Animas River returns to normal, the memory of that mustard yellow water must remain a reminder that these disasters *can* be prevented, but only if the country acts now.