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SULFIDE MINING IN NORTHERN MINNESOTA: A REVIEW OF POSSIBLE LEGAL REcourse FOR ENVIRONMENTAL HARM TO INDIVIDUALS

By: Jamison L. Tessneer

I. Background

Minnesota has an extensive history of mining. Beginning in the nineteenth century, mining in Minnesota focused on limestone and to a limited extent, gold.¹ However, Minnesota is predominantly known for its iron ore mining.² In the late nineteenth and early twentieth century, three iron ranges in northern Minnesota became the underpinning of a mining economy that would provide hundreds of jobs and tons of iron ore to be processed into steel.³

During this mining boom, the Mesabi Range, the largest in Minnesota, produced approximately sixty percent of the nation’s iron ore.⁴ By the middle of the twentieth century, the supply of iron ore began to decline.⁵ Researchers at the University of Minnesota developed a process in which low grade iron ore, known as taconite, could be compressed into pellets and used to make steel.⁶ Today, taconite mining continues in northern Minnesota, albeit on a much smaller scale.⁷

Recently, there has been a renewed interest in mining in the region. There have been several multinational mining companies conducting mineral exploration projects in northern Minnesota and there are currently two major mining projects that have been proposed. The Northmet Project, which was proposed by Polymet Mining Corporation, has already begun the State of Minnesota’s permitting process. The proposed “Northmet Project” is different and potentially more destructive than the traditional iron ore mines familiar to northern Minnesota. This proposed mine would focus on extracting sulfide-bearing ore which would then be finished into copper, nickel, and cobalt.⁸ The sulfide mine proposal includes mineral processing of approximately 228 million tons of copper-nickel-platinum group over the next twenty years.⁹ The location

² Id.
³ Id.
⁴ Id.
⁵ Id.
⁶ Id.
⁷ Id.
⁹ Id. at 6.
of the Northmet Project is between Babbitt and Hoyt Lakes, Minnesota, within the boundaries of the Superior National Forest.\textsuperscript{10}

A second project has been proposed by Twin Metals Minnesota LLC, and this project is expected to be the largest underground mine in Minnesota history.\textsuperscript{11} The mining operation site that has been proposed is just a few miles from the Boundary Waters Canoe Area Wilderness. Twin Metals Minnesota LLC plans to begin the permitting process in 2014.\textsuperscript{12} These two projects represent the beginning of what some expect to be a new wave of mining in northeastern Minnesota.

Support for the proposed mines exists primarily because of the potential to create desperately needed jobs and economic stimulation in the region, but there is also public concern over the impact these mines could have on northern Minnesota’s natural environment. One major concern is that sulfide waste rock contains heavy metals such as arsenic, cadmium, chromium, copper, lead, nickel, silver and zinc.\textsuperscript{13} When sulfide waste rock is exposed to rain and snow, these metals leach into surface water and groundwater.\textsuperscript{14} According to the U.S. Environmental Protection Agency, “[t]he resulting fluids may be highly toxic and, when mixed with groundwater, surface water and soil, may have harmful effects on humans, animals and plants.”\textsuperscript{15} This leaching is commonly known as acid mine drainage.\textsuperscript{16} The EPA states that acid mine drainage “disrupts the growth and reproduction of aquatic plants and animals, diminishes valued recreational fish species, degrades outdoor recreation and tourism, contaminates surface and groundwater drinking supplies, and causes acid corrosion of infrastructure like wastewater pipes.”\textsuperscript{17}

For example, the Gilt Edge Mine, a mine in South Dakota similar to the proposed mines in Minnesota, is a designated superfund site that requires constant monitoring by the EPA.\textsuperscript{18} According to the EPA, the mine is contaminating the Strawberry and Bear Butte Creeks with cadmium, copper, and zinc.\textsuperscript{19} Currently, the Gilt Edge mine does not pose an immediate threat to human health.\textsuperscript{20} If the site was not controlled, the large

\begin{thebibliography}{99}
\item Id. at 1
\item Id.
\item Id.
\item Id.
\item Gilt Edge Mine, supra note 13.
\item Id.
\item Id.
\end{thebibliography}
volumes of contaminated water could threaten well-water supplies of people living up and down stream. Likewise, fourteen years after the Flambeau Mine near Ladysmith, Wisconsin ended its operations, its water continues to contain zinc and copper in excess of state toxicity standards for surface waters. This contamination potentially threatens fish and aquatic life in the area. There are similar mines in New Mexico, Nevada, and Montana.

In Minnesota, there are hundreds of outfitters, resorts, homeowners, restaurants, lodges, and other businesses that surround the Boundary Waters Canoe Area Wilderness, Lake Superior, and the Superior National Forest. These landowners rely heavily on the pristine wilderness of northern Minnesota for the value of their businesses and their land. The contamination of public and private land and water from similar mines in other states should lead people in Minnesota to consider whether current Minnesota law adequately protects them from potential harm to their land, their livelihood, and their families if these sulfide mining projects become a reality. Landowners in northern Minnesota could consider state law, federal law, and common law causes of action to either stop the mines before they begin, stop them once they have caused damage, collect monetary damages for damage to their property, or a combination of these relief options.

II. State Law

Minnesota is one of a few states that have established a private statutory cause of action for harm to the natural environment. The Minnesota Environmental Rights Act (MERA) was passed in 1971. It states that “it is in the public interest to provide an adequate civil remedy to protect air, water, land, and other natural resources located within the state from pollution, impairment, and destruction.” The statute provides declaratory relief, temporary and permanent equitable relief, and may impose conditions on a party that are necessary to protect the environment.

There are five main components of the statute that must be examined when considering the causes of action landowners in northern Minnesota might have against sulfide mining companies responsible for damage to the landowners’ property. It must first be determined whether the landowners would fall under the statute’s definition of a person. Second, it must be determined whether the land or property in question meets the

21 Id.
23 Id.
26 § 116B.01.
27 Id. § 116B.07.
28 Id. § 116B.02, subdiv. 2.
statute’s definition of natural resource.\textsuperscript{29} Third, it must be determined if the potential harm that sulfide mines pose to the land and water is the particular type of harm that the statute is meant to protect against.\textsuperscript{30} Next, the landowners need to consider the defenses that the mining companies would potentially have against a prima facie case under MERA.\textsuperscript{31} Finally, landowners would need to consider whether there would be any exemptions for those against whom they could bring a cause of action.\textsuperscript{32} There is an expansive number of cases in Minnesota that outline the scope and limitations of MERA. When read in conjunction with the plain language of the statute, these cases help illustrate the strengths and potential shortcomings that the statute may have in protecting private landowners from potential harm from sulfide mines.

A. Statutory Definitions

The statute broadly defines what it means to be a person in order to bring a cause of action.\textsuperscript{33} The statute defines a person as “any natural person, any state, municipality or other governmental or political subdivision or other public agency or instrumentality, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, and any other entity.”\textsuperscript{34} The statute provides an exception to family farms, family farm corporations, and bona fide farmer corporations.\textsuperscript{35} The statute also broadly defines natural resources to include mineral, animal, botanical, air, water, land, timber, soil, quietude, recreational and historical resources, as well as scenic and aesthetic resources when owned by a government unit or agency.\textsuperscript{36}

The statute broadly defines what is considered pollution, impairment, or destruction. Subdivision five of the statute includes any conduct that:

\begin{quote}
Violates, or is likely to violate, any environmental quality standard, limitation, rule, order, license, stipulation agreement, or permit of the state or any instrumentality, agency, or political subdivision thereof which was issued prior to the date the alleged violation occurred or is likely to occur or any conduct which materially adversely affects or is likely to materially adversely affect the environment
\end{quote}

The language focuses on conduct that violates a codified rule as the way to determine pollution, impairment, or destruction of the environment. However, the statute also leaves discretion when determining whether additional conduct is pollution, impairment, or destruction of the environment by using the ambiguous

\textsuperscript{29} Id. § 116B.02, subdiv. 4.

\textsuperscript{30} Id. § 116B.02, subdiv. 5.

\textsuperscript{31} See Cnty. of Freeborn \textit{ex rel} Tuveson v. Bryson, 210 N.W.2d 290, 297 (Minn. 1973).

\textsuperscript{32} § 116B.03, subdiv. 1.

\textsuperscript{33} Id. § 116B.02, subdiv. 2.

\textsuperscript{34} Id.

\textsuperscript{35} Id.

\textsuperscript{36} Id. § 116B.02, subdiv. 4.

\textsuperscript{37} Id. § 116B.02, subdiv. 5.
language, “or any conduct which materially adversely affects or is likely to adversely affect the environment.” The language of the statute must be applied to real situations in order to understand how the courts have interpreted the law.

**B. Establishing a Cause of Action**

In *Freeborn County v. Bryson*, the court established a two-prong test to establish a prima facie cause of action under MERA. The plaintiff must first establish a protectable natural resource, and second, establish pollution, impairment, or destruction of that resource. In this case, farmers whose land was condemned by the county in order to construct a new highway successfully showed that the highway would adversely affect a natural marsh. The court found that the highway would divide the natural marsh, the natural marsh was an ecological unit, the construction would eliminate some of the natural physical assets, the highway’s high speed would increase animal fatalities, and the highway would disturb the quietness and the solitude of the marsh.

One of the difficulties in these causes of actions can be establishing harm. *Minnesota Public Interest Research Group v. White Bear Rod and Gun Club* is one of the seminal cases in Minnesota that established the means the plaintiff has to prove harm to the environment. In this case, a nonprofit organization sought declaratory and injunctive relief under MERA because the operation of a trap-and-skeet shooting facility would adversely affect the environment. The proposed site of the trap-and-skeet shooting facility included a lake that provided shelter and food to migratory waterfowl. The facility threatened deer, muskrat, fox, porcupines, raccoons, badgers, and other animals that lived in the woods and wetlands surrounding the lake. The case established two means a plaintiff has to prove harm under MERA.

First, the court states that the plaintiff can prove “that the conduct in question violates, or may violate, any environmental quality standard, rule, or regulation of the state or any political subdivision thereof.” The

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38 *Id.*

39 Cnty. of Freeborn *ex rel* Tuveson v. Bryson, 210 N.W.2d 290, 297 (Minn. 1973).

40 *Id.*

41 *Id.*

42 *Id.*

43 257 N.W.2d 762 (Minn. 1977).

44 *Id.* at 764.

45 *Id.* at 765.

46 *Id.* at 768.

47 *Id.*
plaintiff in this case did not attempt to show that the facility violated any rules or standards. The plaintiff instead relied on the second means the court identified in MERA to prove harm. The court stated that the plaintiff could prove “that the conduct complained of materially, adversely affects or is likely to affect the environment.” In addition, the plaintiff also claimed that the lead shot deposits in the surrounding wetlands would cause destruction to wildlife. Because quietude and wildlife fall under the statute’s definition of a natural resource and the plaintiff was able to show adverse effect to the environment, the statute applied.

The court further clarified how to interpret the language of “adversely affecting the environment” in State ex rel. Wacouta Township v. Brunkow Hardwood Corp. In that case the court established a four-part test to determine whether conduct would adversely affect the environment. First, the court must determine whether the natural resource involved is rare, endangered, or has historical significance. Second, the court must determine whether the resource in question is easily replaceable. Third, the court must decide if the proposed conduct will have a significant consequential effect on other natural resources. Finally, the court must decide whether the direct or consequential impact will affect a critical number of the wildlife affected.

These cases established the basic rules for bringing a prima facie cause of action under MERA. First, the plaintiff must demonstrate that the resource is a protectable natural resource within the broad definition of the statute. Second, the plaintiff must demonstrate pollution, impairment, or destruction of that resource. Harm can then be shown by either a violation of a codified rule, standard, or regulation, or by a more discretionary test of showing that the conduct in question adversely affects, or will adversely affect, the protectable natural resource.

48 Id.
49 Id.
50 Id.
51 Id.
52 Id.
53 Id. at 770; see also Minn. Stat. § 116B.02, subdiv. 4 (2013).
54 510 N.W.2d 27 (Minn. Ct. App. 1993).
55 Id. at 31.
56 Id. at 30.
57 Id.
58 Id.
59 Id.
C. Defenses

MERA sets out a balancing test to weigh potential economic benefits and public necessity with harm or potential harm to the environment. Section 116B.04 of the statute provides the defendants in an action the opportunity to rebut the plaintiff’s prima facie case establishing the defendant’s conduct will cause or is likely to cause harm to the environment.\(^6\)\(^0\) It allows the defendant to submit evidence contrary to the plaintiff’s evidence establishing harm.\(^6\)\(^1\) In \textit{Wacouta}, a logging operation was enjoined because it was discovered that the site for the operation was the largest bald eagle nesting site in the state.\(^6\)\(^2\) The court determined that the defendant failed to rebut any of the evidence presented by the biologists.\(^6\)\(^3\)

In addition, under section 116B.04 of MERA, the statute also allows the defendant to show, as an affirmative defense, that there is no feasible or prudent alternative and that the conduct at issue is consistent with the promotion of public health, safety, and welfare of the state’s interest in protecting the environment.\(^6\)\(^4\) Again, in \textit{Wacouta}, the court determined that the defendant failed to show any “evidence that the enjoined conduct will promote the public health, safety, or welfare in any noneconomic fashion.”\(^6\)\(^5\) In \textit{State ex rel Archabal v. County of Hennepin}, the court determined that there is “an extremely high standard for defendants to meet in establishing an affirmative defense” under MERA.\(^6\)\(^6\)

Finally, section 116B.04 of MERA expressly prohibits economic considerations as the sole defense under this section.\(^6\)\(^7\) In \textit{State ex rel Drabik v. Martz}, the Minnesota Court of Appeals upheld a temporary injunction for construction of a radio tower because it would be in view of the Boundary Waters Canoe Area Wilderness and state park land.\(^6\)\(^8\) The defendant argued that the planned project would contribute capital and jobs to the local economy.\(^6\)\(^9\) The court, citing section 116B.04 of MERA, explained that economic considerations alone were not superior to the state’s interest in protecting the natural environment.\(^7\)\(^0\)

\(^{60}\) Minn. Stat. § 116B.04 (2013).

\(^{61}\) \textit{Id.}

\(^{62}\) \textit{Wacouta}, 510 N.W.2d at 31.

\(^{63}\) \textit{Id.}

\(^{64}\) § 116B.04.

\(^{65}\) \textit{Wacouta}, 510 N.W.2d at 31.

\(^{66}\) \textit{State ex rel Archabal v. Cnty. of Hennepin}, 495 N.W.2d 416, 423 (Minn. 1993).

\(^{67}\) § 116B.04.

\(^{68}\) \textit{State ex rel Drabik v. Martz}, 451 N.W.2d 893, 896–97 (Minn. 1990).

\(^{69}\) \textit{Id.} at 897.

\(^{70}\) \textit{Id.}

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D. Exemptions

Conduct that has undergone the permitting process and been permitted by the Pollution Control Agency, the Department of Natural Resources, the Department of Health, or the Department of Agriculture is exempt from civil actions under MERA.\(^1\) The statute states in relevant part, “no action shall be allowable under this section for conduct taken by a person pursuant to any environmental quality standard, limitation, rule, order, license, stipulation agreement or permit issued by the Pollution Control Agency, Department of Natural Resources, Department of Health or Department of Agriculture.”\(^2\) Both Polymet Mining Corporation and Twin Metals Minnesota LLC are pursuing permits through the Department of Natural Resources. Polymet’s Northmet Project has already completed a Draft Environmental Impact Statement and completed a Supplemental Environmental Impact Statement. Twin Metals Minnesota LLC is working to complete a Draft Environmental Impact Statement in 2014 for its proposed project near the Boundary Waters Canoe Area Wilderness.\(^3\) If these mining projects are given a permit to operate by the appropriate state agency, then landowners whose land has been harmed by the sulfide mines will be unable to file a cause of action against the mining companies.

E. Analysis

It could be said that MERA would sufficiently protect landowners in northern Minnesota from any potential damage that could occur to their land if the new sulfide mining operations began. The landowners would fall under the broad definition of persons defined in section 116B.02.\(^4\) In addition, the landowners’ property would likely fall under the statute’s broad definition of natural resources.\(^5\) The issue of harm requires a more complicated analysis.

If the harm that has occurred in other states with similar mines occurred to the land and water belonging to the landowners in northern Minnesota, the landowners would likely be able to demonstrate harm. With proper expert testimony, the landowners could show that the acid mine drainage would likely violate rules and standards for land and water pollution designated by the Minnesota Pollution Control Agency, Department of Natural Resources, or other state or local law.

The potential harm to the land could also fall within the discretionary scope of conduct that materially adversely affects the environment. Under the four-part test in \textit{Wacouta}, the landowners would likely be able to show that the wilderness area in northern Minnesota is rare because the Boundary Waters Canoe Area Wilderness contains more than 1 million acres of primitive wilderness, 1,200 miles of canoe routes, and more than 2,000 designated campsites.\(^6\) It is likely that they would also be able to show that the

\(^{1}\) \textsection 116B.03, subdiv. 1.

\(^{2}\) \textit{Id}.


\(^{4}\) \textsection 116B.02, subdiv. 2.

\(^{5}\) \textit{Id}. \textsection 116B.02, subdiv. 4.
wilderness in Northern Minnesota is not easily replaceable by providing examples of the effects sulfide mining has had on other natural areas and their continued contamination. With the help of biologists, ecologists, and other experts, it is likely that the landowners would also be able to demonstrate that the sulfide mines would have a consequential affect on other natural resources and that it would be a critical amount.

It is likely that the landowners would be able to sufficiently demonstrate that their land is a natural resource and that there will be harm. That harm will be determined either by violating a standard or regulation, or through the Wacouta test. It seems unlikely that the mining companies would be able to rebut the evidence based on the effects sulfide mining has had in other states. It also seems unlikely that the mining companies would be able to show how the sulfide mines promote public health, safety, and welfare beyond an economic interest. There remains concern, however, that if these mines are permitted by the State of Minnesota, they will be exempt from a cause of action under MERA.

The language of the statute does contain a section that allows for civil actions to be maintained against the state or agency that sets environmental standards or promulgates permits for conduct that would be subject to the statute. Section 116B.10 states in relevant part:

ANY natural person residing within the state; the attorney general; any political subdivision of the state; any instrumentality or agency of the state or of a political subdivision thereof; or any partnership, corporation, association, organization, or other legal entity having shareholders, members, partners or employees residing within the state may maintain a civil action in the district court for declaratory or equitable relief against the state or any agency or instrumentality thereof where the nature of the action is a challenge to an environmental quality standard, limitation, rule, order, license, stipulation agreement, or permit promulgated or issued by the state or any agency or instrumentality thereof for which the applicable statutory appeal period has elapsed.77

This section of Chapter 116B allows private landowners to file suit against the State of Minnesota or the Department of Natural Resources. In order to maintain this action, the landowners would have the burden of proving that permits issued by the Department of Natural Resources were inadequate in protecting the environment from the sulfide mines.78

Furthermore, the statute contains language that would allow private landowners to intervene in the permitting process. In relevant part, section 116B.09 states that any natural person residing in the state “shall be permitted to intervene as a party upon the filing of a verified pleading asserting that the proceeding or action for judicial review involves conduct that has caused or is likely to cause pollution, impairment, or destruction of the air, water, land or other natural resources located within the state.”79 The statute also requires that the agency consider the “alleged impairment, pollution, or destruction of the air, water, land, or other natural resources located within the state,” and that any conduct that negatively affects the environment is prohibited so long as there is a reasonably prudent alternative.80 In application, the court in


77 § 116B.10, subdiv. 1.

78 Id. § 116B.10, subdiv. 2.

79 Id. § 116B.09, subdiv. 1.

80 Id. § 116B.09, subdiv. 2.
Reserve Mining Co. v. Herbst\(^81\) determined that the agency erroneously concluded that a second tailings disposal site in a national forest was reasonable and prudent when the evidence demonstrated that the impact on natural resources would not be significantly different than the site initially proposed. Finally, section 116B.09 continues to maintain that economic considerations alone are not sufficient in order to justify the conduct that would adversely affect the environment.\(^82\)

Overall, the statute is relatively strong with regard to allowing for private causes of action to protect the environment in Minnesota. On the issue of sulfide mines and other large scale projects that will almost certainly seek permitting from state agencies, the law would be more effective in giving landowners a cause of action if the language in section 116B.03, exempting permitted projects, was excluded. Absent that, if the sulfide mines are permitted, then the landowners could work together with local governments and local organizations to bring a cause of action against the state agencies. However, if that cause of action occurs after the mines are in operation and the damage to the landowners’ property has already transpired, then the state agencies and state government are not the “deep pocket” that can provide the landowners with the equitable relief that they would likely be seeking.

### III. Federal Law

There are three major federal laws that allow citizens to bring private suits against polluters, which can result in penalties.\(^83\) These federal laws do not allow the plaintiffs to receive compensation for damage to their property. In cases involving water pollution and solid waste, the penalty awards go to the federal treasury.\(^84\) In cases involving air pollution, the court has the discretion to award some of the money to a mitigation project at the recommendation of the U.S. Environmental Protection Agency, but the rest of the money then goes to the treasury.\(^85\) Because these federal laws do not directly benefit landowners in northern Minnesota through compensation for damages, they should briefly be examined as a possible way to enjoin mining activities and as additional penalties that the government could impose on the mining companies.

#### A. Clean Water Act

Under 33 U.S.C. § 1365, any citizen has the ability to pursue a cause of action against any person, including the U.S. government or relevant agency or entity, for violation of a standard or limitation of the Clean Water Act.\(^86\) In Natural Resources Defense Council, Inc. v. Watkins,\(^87\) the court determined that in order to have standing for redress of environmental harm, the plaintiffs need not show that absent the defendant’s

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\(^{81}\) 256 N.W.2d 808 (Minn. 1977).

\(^{82}\) § 116B.09, subdiv. 2.


\(^{84}\) Id.

\(^{85}\) Id.


\(^{87}\) 954 F.2d 974, 980 (4th Cir. 1992).
conduct, the plaintiffs would enjoy an undisturbed use of their land. Under the language of the statute and the application in Watkins, it is likely that the landowners who are negatively affected by the sulfide mines would have the ability to file a citizen suit under the Clean Water Act. Despite the federal law’s inability to provide compensatory relief for the potential damage to the plaintiff’s land, the law can provide injunctive relief which would halt the operation of the sulfide mines.

B. Resource Conservation and Recovery Act

This area of federal law is focused largely on managing hazardous waste and ensuring that the waste is properly stored. Similar to the provisions outlined in the Clean Water Act, 42 U.S.C. § 6972 broadly allows any citizen to bring suit against anyone, including the United States government, “who is alleged to be in violation of any permit, standard, regulation, condition, requirement, prohibition, or order which has become effective pursuant to this chapter.” 88 In applying this statute, the court in Aiello v. Town of Brookhaven, 89 the district court for the Eastern District of New York determined that the environmental and health interests of people in the general vicinity of a landfill had sufficient standing to bring a citizen suit under the Resource Conservation and Recovery Act (RCRA). On the issue of relief, the court can require a polluter to cleanup and dispose of toxic waste properly. In City of Waukesha v. Viacom International Inc., 90 the court determined that “[u]nder RCRA, a citizen may seek a mandatory injunction that orders a responsible party to take action by attending to the cleanup and proper disposal of toxic waste.”

The landowners in northern Minnesota that are in the vicinity would meet the standard discussed in Aiello v. Town of Brookhaven 91 and therefore have the ability to bring a cause of action. Under the ruling in City of Waukesha v. Viacom International Inc., the landowners could seek similar relief in requiring mining companies to clean up the acid mine drainage leached from their mining operations and to properly dispose of waste rock from the mine. 92

C. Clean Air Act

In Covington v. Jefferson County, 93 the Ninth Circuit Court of Appeals concluded that landowners who lived near a county landfill had Article III standing in order to bring a citizen suit under the Clean Air Act as long as the landowners could show injury-in-fact that landowners feared that contamination from the landfill would diminish their enjoyment of their property. Although the citizen suits under the Clean Air Act cannot provide compensatory damages, in Sierra Club v. Franklin County Power of Illinois, L.L.C., 94

90 362 F. Supp. 2d 1025, 1029 (E.D. Wis. 2005).
91 Aiello, 136 F. Supp. 2d at 105-106.
92 Viacom, 362 F. Supp. 2d at 1029.
93 358 F.3d 626, 638 (9th Cir. 2004).
the court issued an injunction on the construction of a new coal-fired power plant based on the citizen suit filed by the nonprofit organization.

Based on the outcomes of sulfide mining in other states, most of the focus on damage to the environment has centered on water and wildlife. However, in the case that there are violations of the Clean Air Act, the landowners would likely have standing to bring suit. Despite the inability of the federal law to provide compensatory damages for the landowners, the Clean Air Act does have the ability to enjoin the mining operations if the mining activities violate standards set forth in the law.\textsuperscript{95}

### IV. Common Law Causes of Action

Common law causes of action regarding exposure to chemicals or damage to property from an industrial site has become its own area of law known as toxic torts.\textsuperscript{96} Toxic torts typically involve common law causes of actions including trespass, nuisance, negligence, negligence per se, strict liability, intentional infliction of emotional distress, and in some cases, assault and battery.\textsuperscript{97} Routinely, one or more of these causes of actions will be brought in the same suit and are often coupled with statutory causes of action from the state and federal level. While many of these causes of action may be applicable to landowners in northern Minnesota, trespass and nuisance are the most pertinent.

There are a number of common obstacles associated with toxic tort causes of action. First, the plaintiff must prove that the defendant met the requisite liability standard.\textsuperscript{98} Second, the plaintiff must establish a link between the defendant and the release of the substance.\textsuperscript{99} Third, the plaintiff must establish that the chemical can cause the harm the plaintiff suffers.\textsuperscript{100} Finally, the plaintiff must establish that the harm experienced is a result of exposure to the chemical.\textsuperscript{101} Toxic tort causes of action must be viewed with these complexities in mind in order to adequately analyze the sufficiency of the law’s ability to protect or compensate landowners.

#### A. Trespass

The tort of trespass includes three mainstay elements. First, the landowner must have a legal interest in the property or a possessory interest. Second, the tort of trespass requires intent. Finally, synonymous with all torts, trespass requires the element of legally cognizable harm. Trespass causes of actions can have a variety

\textsuperscript{94} 546 F.3d 918, 936 (7th Cir. 2008).

\textsuperscript{95} 42 U.S.C.A. § 7413 (West 2013).

\textsuperscript{96} 20A1 Brent A. Olson, Minnesota Practice series: Business Law Deskbook § 25:7 (2013).

\textsuperscript{97} Id. § 25:8.

\textsuperscript{98} Daniel A. Farber, \textit{Toxic Causation}, 71 Minn. L. Rev. 1219, 1222 (1987).

\textsuperscript{99} Id. at 1225.

\textsuperscript{100} Id. at 1227.

\textsuperscript{101} Id. at 1228.
of forms of relief including monetary damages, injunctive relief, and punitive damages. While the element of possessory interest is relatively straightforward, the elements of intent and harm should be more carefully examined to determine how they apply to landowners who could be negatively impacted by sulfide mines.

Modern trespass theory encompasses both intentional and unintentional or negligent physical invasion of another person’s property.\textsuperscript{102} Intentional trespass is when the defendant knows that its conduct is likely to result in harm to the plaintiff or the plaintiff’s property or is substantially certain the harm will occur.\textsuperscript{103} Unintentional trespass is usually rooted in negligence. Unintentional trespass is when the defendant has reason to know that its conduct is likely to result in harm to the plaintiff or the plaintiff’s property.\textsuperscript{104} Having the knowledge that an industrial site is leaching toxic chemicals and having the knowledge that the toxic chemicals are leaching into the groundwater of the adjacent property is generally enough to show intent.\textsuperscript{105}

Typically, harm is required in a cause of action for trespass, but it is possible to succeed in a cause of action for trespass without showing harm. Generally, if the trespass action does not include harm, the damages will only be nominal.\textsuperscript{106} Damages can be measured in a variety of ways, but the harm cannot be speculative.\textsuperscript{107} Most jurisdictions divide harm into temporary harm and permanent harm.\textsuperscript{108} Temporary harm occurs when the defendant’s tortious activity is ongoing with recurring instances of harm to the landowner’s property.\textsuperscript{109} Each instance is a separate recoverable action.\textsuperscript{110} Permanent harm occurs when the defendant’s conduct causes irreparable harm to the plaintiff’s property.\textsuperscript{111} Permanent harms are recoverable for damages past, present, and prospective.\textsuperscript{112} Because of the loss of property market value, some courts have also awarded stigma damages when there is permanent damage to a property.\textsuperscript{113} Stigma damages are awarded to compensate a plaintiff whose property begins to have a negative public perception resulting from the pollution or contamination.\textsuperscript{114}

Courts tend to limit damages in cases of temporary harm to the cost to repair or restore the property after the damage and damages for any loss of use of the property during the temporary harm. Courts limit

\textsuperscript{102} Olson, \textit{supra} note 102, § 25:2.
\textsuperscript{103} O’Reilly, \textit{supra} note 83, § 6:8.
\textsuperscript{104} \textit{Id}.
\textsuperscript{105} \textit{Id}.
\textsuperscript{106} \textit{Id}.
\textsuperscript{107} See Olson, \textit{supra} note 102.
\textsuperscript{108} \textit{Id}.
\textsuperscript{109} \textit{Id}.
\textsuperscript{110} \textit{Id}.
\textsuperscript{111} \textit{Id}.
\textsuperscript{112} \textit{Id}.
\textsuperscript{113} See O’Reilly, \textit{supra} note 83, § 6:8.
\textsuperscript{114} Olson, \textit{supra} note 102, § 25:10.
damages for permanent harm to the loss in market value or the diminution in the value of the property. Generally, most courts do not award stigma damages and if a court does award stigma damages, there must be physical harm from the contamination to the property.  

Under this trespass framework, landowners in northern Minnesota could file a trespass cause of action against sulfide mining companies if, for example, acid mine drainage from one of the mines leaked into the landowner’s groundwater causing it to be contaminated. The landowner would certainly have a possessory interest in the property. The landowner would likely be able to show unintentional trespass embedded in a theory of negligence. The landowner might also be able to show intentional trespass if it can show that the mining company had knowledge that similar mines in other states have caused the same type of contamination. Furthermore, the landowner may be able to show that the mining company’s conduct is abnormally dangerous and that can qualify as an unintentional trespass action as well. The landowner may be able to show temporary harm which could result in getting the mining activities enjoined, forcing the mining company to repair the landowner’s property, compensating the landowner for the damage, or any combination of these types of relief. The landowner may be able to show permanent trespass resulting in some or all of the previous types of relief and could also result in punitive damages.

The overarching problems associated with toxic torts apply to the tort of trespass as well. The standard of liability is a relatively easy burden to meet in a trespass case. If the defendant’s substance invades the property of the plaintiff then the defendant is liable. However, it might be difficult to determine if the substance on plaintiff’s land came from the defendant. Expert testimony would be required to show, for example, that absent the mining operations there would not be an elevated level of sulfuric acid in the plaintiff’s groundwater. It also might be difficult to establish that the harm experienced by the plaintiff is a result of the sulfide mines. Again, expert testimony would be required to show, for example, that acid mine drainage killed aquatic insects in a lake near the mining operation and that that aquatic insect was the primary food for a species of migratory birds whose population has now dramatically decreased. Case law can help demonstrate how trespass, as it relates to toxic torts, is applied in Minnesota and how it potentially could be applied in Minnesota.

In *Citizens for a Safe Grant v. Lone Oak Sportsmen’s Club, Inc.*, a neighborhood organization brought a suit against a gun club alleging trespass among other causes of actions. The Minnesota Court of Appeals stated, “Trespass encompasses any unlawful interference with one's person, property, or rights, and requires only two essential elements: a rightful possession in the plaintiff and unlawful entry upon such possession by the defendant.” The court further stated that trespass is not limited to human interference and can occur when someone places an object on another person’s property. The court concluded that the entry of bullets onto the property of another person without the property owner’s permission constitutes trespass.

In an action against 3M, plaintiffs alleged that perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid

115 *Id.*

116 624 N.W.2d 796 (Minn. Ct. App. 2001).

117 *Id.* at 805 (quoting Special Force Ministries v. WCCO Television, 584 N.W.2d 789, 792–93 (Minn. Ct. App. 1998)).

118 *Id.*

119 *Id.*
(PFOA), released from 3M’s facility, landed on their property after traveling through the air, surface water, and ground water, and continue to remain on their property in detectable quantities. According to the U.S. EPA, PFOS and PFOA are emerging contaminants characterized as a “potential or real threat” to human health and the environment. The court rejected the defendant’s motion to dismiss the claim of trespass.

In contrast, in Johnson v. Paynesville Farmers Union Co-op. Oil Co., an organic farmer brought a trespass action against a neighboring farm. The plaintiff alleged that the neighboring farmer’s pesticide drifted onto the plaintiff’s property and negatively affected the plaintiff’s organic crops. After a lengthy discussion, the court concluded that the particulate matter of the pesticide was not tangible and further, that the pesticide did not interfere with the plaintiff’s exclusive possession of the land. The court determined that allowing a trespass action based on damage to property from particulate matter would blur the line between trespass and nuisance. The court maintained that landowners have a right “to exclude others through the ability to maintain an action in trespass even when no damages are provable.” The court concluded by saying that requiring a landowner to show damage for invasion to the landowner’s property before that landowner could seek redress “offends the traditional principles of ownership.”

The court’s decision in Johnson potentially limits a cause of action that a landowner affected by the acid mine drainage from the sulfide mines might have. The court’s opinion could be interpreted to bar a cause of action for trespass if the trespassing object is contaminated water and the contaminant is considered particulate matter. The U.S. Environmental Protection Agency defines particulate matter as “a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles.” Under this definition, it is possible that courts would conclude that contaminated water, such as acid mine drainage, exceeds the small particles and liquid droplets defining particulate matter. Under this interpretation, acid mine drainage could constitute trespass.

The Johnson decision was the Minnesota Supreme Court’s reversal of a decision from the lower court. The


122 Palmer, 2005 WL 5891911.

123 817 N.W.2d 693, 696 (Minn. 2012).

124 Id.

125 Id. at 702.

126 Id. at 705.

127 Id. at 704.

128 Id.

129 Id.

Minnesota Court of Appeals concluded that trespass could occur even though particulate matter is intangible. The court of appeals relied on two cases outside of Minnesota. In *Bradley v. American Smelting & Refining Co.*, the Supreme Court of Washington concluded that a copper smelting company’s intentional release of arsenic and cadmium as particulate matter constituted trespass. The court stated that in order to give rise to a cause of action in trespass, the plaintiff must show an invasion affecting interest and exclusion of her property, intentional doing of the act which resulted in the invasion, it was reasonably foreseeable that the conduct could result in the invasion of the plaintiff’s possessory interest, and there were substantial damages to the plaintiff’s property. In *Borland v. Sanders Lead Co., Inc.*, the Supreme Court of Alabama applied the same test when the plaintiff sued a lead company for dangerous accumulation of lead particulates and sulfoxide deposits on the plaintiff’s property.

Under the Minnesota Supreme Court’s contemporary view, particulate matter is intangible and therefore unable to give rise to a cause of action for trespass. It is possible that the leaching of acid mine drainage from sulfide mines onto another’s property would not constitute trespass under the current view. Further examination by the court of what exactly constitutes particulate matter is needed before this issue can be resolved. However, if the court were to apply the standard outlined in *Bradley* or *Borland*, then the landowners who have acid mine drainage on their property may have a higher likelihood of success in a trespass cause of action.

A landowner whose property has been contaminated with acid mine drainage may be able to show that the contamination affected his interest and exclusive control of the property. The landowner may be able to show that intentionally mining for precious metals resulted in the acid mine drainage leaching onto her property. The landowner may also be able to show that, based on the impact of sulfide mining in other states, the mining company should have reasonably foreseen that the conduct would invade the landowner’s possessory interest in the property. Finally, providing that the acid mine drainage did contaminate groundwater or kill aquatic species, the landowner would be able to demonstrate damage to her property. Under the Minnesota Court of Appeals application of the *Bradley* and *Borland* standard, a landowner whose property was affected by acid mine drainage would have the ability to bring a cause of action for trespass to the landowner’s property. Under the current Minnesota Supreme Court’s ruling in *Johnson*, it is difficult to definitively determine whether landowners would be able to demonstrate an invasion of their possessory interest which is one of only two essential elements the court has identified in order to give rise to a cause of action in trespass.

**B. Nuisance**

Nuisance is one of the most common toxic tort causes of action. It arises out of harm, injury, inconvenience, or annoyance from a wide variety of conduct. Nuisance is divided into two categories:

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131 709 P.2d 782, 789 (Wash. 1985).

132 *Id.* at 790.

133 369 So. 2d 523, 527–29 (Ala. 1979).

134 817 N.W.2d 693 700 (Minn. 2012).

public nuisance and private nuisance. Public nuisance actions can be brought by public officials or by private individuals, and private nuisance actions can be brought by private individuals. In Minnesota, there are also statutory public nuisance and private nuisance causes of action. The overarching common law public nuisance and private nuisance causes of action, the statutory causes of action, and Minnesota case law must be examined and applied to the potential cause of action landowners in northern Minnesota may have against sulfide mining companies in order to understand the law’s ability to protect and compensate landowners.

1. Public Nuisance

According to the Restatement (Second) of Torts section 821B, a public nuisance is an unreasonable interference with a right common to the general public. There are three main questions to consider when analyzing a public nuisance cause of action. First, consider whether the defendant interfered with a public as opposed to a private right. A public right is a right that is common to all members of the general public. Second, consider whether the interference was unreasonable. Third, consider whether the plaintiff seeking remedy has suffered a harm that is different from the harm suffered by the general public.

Subsection 821B(2) further clarifies the scope of the unreasonableness of the interference. Unreasonable interference constitutes conduct that “involves a significant interference with the public health, the public safety, the public peace, the public comfort or the public convenience.” The conduct could also be deemed unreasonable if it violated a statute, ordinance, or administrative regulation. Finally, the conduct could also be judged unreasonable if it has a continuing effect or has produced permanent or long-lasting damage and the actor knows or has reason to know that the conduct has a significant effect on the public right.

Public nuisance causes of action can be brought by public officials, private citizens, or a combination of the two. The theory of the public nuisance case is that the defendant is causing some harm to the

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136 Id.

137 Id.

138 Restatement (Second) of Torts § 821B (1979).


140 Id. at 57.

141 Id.

142 Id.

143 Restatement, supra note 138.

144 Id. § 821B(2)(a).

145 Id. § 821B(2)(b).

146 Id. § 821B(2)(c).
community or that public health or safety is threatened.\textsuperscript{148} It is important to note that in a public nuisance cause of action, harm is not required and that the threat of potential harm is sufficient for the cause of action to move forward.\textsuperscript{149} It is also important to reiterate that the private plaintiff in a public nuisance cause of action must experience a harm that is different from the harm experienced by the general public.\textsuperscript{150} The common law application of public nuisance differs immensely from the statutory application. Under Minnesota law, public nuisance is a misdemeanor offense.\textsuperscript{151} Minnesota Statutes section 609.74 criminalizes conduct that unreasonably injures or endangers the health, safety, or morals of a considerable number of members of the public.\textsuperscript{152} It also criminalizes conduct that interferes with, obstructs, or endangers the passage of a public highway, right of way, or waters used by the public, and any conduct that violates a law declaring the conduct a public nuisance.\textsuperscript{153} The major difference is that common law causes of action focus on relief such as pecuniary damages, whereas statutory public nuisance causes of action look at criminal penalties. By default, this means that statutory public nuisance causes of action must be prosecuted by the state, whereas common law causes of action can be pursued by public officials and private individuals.

Under the common law framework that is established in the \textit{Restatement (Second) of Torts}, landowners in northern Minnesota could have a cause of action in public nuisance. For example, the mining companies polluted a nearby lake in the Superior National Forest or Boundary Waters Canoe Area Wilderness with acid mine drainage effectively desecrating the aquatic life and specifically killing the sport fishing populations. If a resort owner on the lake files a public nuisance cause of action, an argument could be made that the mining company interfered with a public right.

The next question is whether that interference was unreasonable. Consider the factors presented in the \textit{Restatement (Second) of Torts} section 821B(2).\textsuperscript{154} Contaminating a lake with acid mine drainage to such a degree that killed the fish and other aquatic life would be considered a significant interference with public health, public safety, the public peace, the public comfort, or the public convenience. It is also possible that contamination to this degree would violate a local, state, or federal statute, ordinance, or administrative regulation. The leaching of acid mine drainage has a continuous effect or could even be permanent damage. It could be further argued that the mining company, based on this type of mining in other states, knew or should have known the mining would have a significant impact on the public right.

Finally, the resort owner is the plaintiff seeking a monetary remedy. The resort suffered a particular harm that is different from the harm experienced by the general public. The general public may not be able to fish that contaminated lake. The resort owner is likely to lose business as a result of the contamination if people decide to go to resorts on other lakes that are not contaminated. This would likely be considered a special harm in the sense of a common law cause of action for public nuisance.

\textsuperscript{147} O’Reily, \textit{supra} note 83, § 6:4.

\textsuperscript{148} \textit{Id}.

\textsuperscript{149} \textit{Id}.

\textsuperscript{150} \textit{Id}.

\textsuperscript{151} Minn. Stat. § 609.74 (2013).

\textsuperscript{152} \textit{Id}.

\textsuperscript{153} \textit{Id}.

\textsuperscript{154} \textit{Restatement, supra} note 138.
The public nuisance common law cause of action could be an effective legal measure to protect landowners in northern Minnesota. It would allow landowners to file public nuisance causes of action for harm to public resources that they may derive their business and livelihood from. The law in Minnesota is applied a little differently. The public nuisance statute would allow a local government or the state to prosecute the mining companies for damage to public land, but the misdemeanor penalties are unlikely to deter future contamination or even deter the mining operations before they begin. The landowners may be better served by pursuing action through the common law private nuisance cause of action and the state’s statutory private nuisance cause of action. In *Hill v. Stokely-Van Camp, Inc.*, the court stated, “A nuisance may be at the same time both public and private, public in its general effect upon the public, and private as to those who suffer a special or particular damage therefrom, apart from the common injury. The public wrong must be redressed by a prosecution in the name of the state; the private injury by private action.”

2. Private Nuisance

Common law private nuisance is the interference with the use and enjoyment of real property that the plaintiff has a possessory interest in. The *Restatement (Second) of Torts* section 821D simply states, “A private nuisance is a nontrespassory invasion of another’s interest in the private use and enjoyment of land.” The goal of the private nuisance claim is to protect the landowner’s private property rather than the public interest.

The *Restatement (Second) of Torts* further explains who is liable in actions for private nuisance. It states that the defendant’s conduct must be the legal cause of the invasion of another person’s interest in the private use and enjoyment of that person’s land. The defendant’s invasion must also be intentional or unreasonable, both of which require further clarification. The defendant can also be liable if the defendant’s conduct is the legal cause of the invasion of another person’s interest in the private use and enjoyment of that person’s land and that conduct violates rules controlling negligent or reckless conduct, or the conduct is abnormally dangerous.

According to the *Restatement*, the defendant’s conduct is intentional if the defendant acted with purpose when invading another person’s interest in the private use and enjoyment of that person’s land or the defendant knew that his conduct would cause the interference or was substantially certain the conduct would cause the interference. Further, the *Restatement* clarifies what constitutes unreasonable intentional invasion. The intention is unreasonable if the gravity of the harm outweighs the utility of the defendant’s conduct. If the harm caused by the defendant’s conduct is serious and the financial compensation for this

155 109 N.W.2d 749, 753 (Minn. 1961).
156 Restatement, supra note 138, § 821D.
157 Id. § 822.
158 Id. § 822(a).
159 Id. § 822(b).
160 Id. § 825.
161 Id. § 826(a).
conduct and similar conduct makes defendant’s conduct no longer feasible then it is also unreasonable.\textsuperscript{162}

The weighing test prescribed in the \textit{Restatement (Second) of Torts} section 826(a) is further clarified in section 827. It suggests that in determining the gravity of harm from the defendant’s conduct, five factors should be considered. First, the extent of harm should be considered.\textsuperscript{163} Second, the character of harm should be considered.\textsuperscript{164} Third, the social value that the law attached to the type of use or enjoyment that has been invaded should be considered.\textsuperscript{165} Next, the suitability of the particular use or the enjoyment invaded to the character of the locality should be considered.\textsuperscript{166} Finally, the burden on the person harmed in avoiding the harm should be considered.\textsuperscript{167} These factors will help determine whether the utility of the sulfide mines, most notably their economic benefit, will outweigh the potential harm caused to the landowners.

Similar to public nuisance causes of action, private nuisance causes of action have a statutory analogue. Minnesota law states:

Anything which is injurious to health, or indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, is a nuisance. An action may be brought by any person whose property is injuriously affected or whose personal enjoyment is lessened by the nuisance, and by the judgment the nuisance may be enjoined or abated, as well as damages recovered.\textsuperscript{168}

This statute differs significantly from the public nuisance statute because it allows private individuals to bring an action and it specifically allows for injunctive and equitable relief. Minnesota case law illustrates how this statute has been applied

In \textit{Citizens for a Safe Grant v. Lone Oak Sportsmen's Club, Inc.},\textsuperscript{169} the court presents a synopsis of case law that defines the basic scope of the private nuisance law in Minnesota. In relevant part the court states that “[n]uisance is defined as ‘anything which is . . . indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.’”\textsuperscript{170} In order to constitute a nuisance, the interference with the use and enjoyment must be material and substantial.\textsuperscript{171} The standard to which the court measures discomfort is the standard to which ordinary people in the area

\begin{footnotes}
\footnotetext{162}{\textit{Id.} \textsection{} 826(b).}
\footnotetext{163}{\textit{Id.} \textsection{} 827(a).}
\footnotetext{164}{\textit{Id.} \textsection{} 827(b).}
\footnotetext{165}{\textit{Id.} \textsection{} 827(c).}
\footnotetext{166}{\textit{Id.} \textsection{} 827(d).}
\footnotetext{167}{\textit{Id.} \textsection{} 827(e).}
\footnotetext{168}{Minn. Stat. \textsection{} 561.01 (2013).}
\footnotetext{169}{624 N.W.2d 796, 803 (Minn. Ct. App. 2001).}
\footnotetext{170}{\textit{Id.} (citing Minn. Stat. \textsection{} 561.01 (2000)).}
\footnotetext{171}{\textit{Id}.}
In response to the defendant’s argument that its conduct was unintentional, the court explained that the statute does not contain language requiring the element of intent and instead held that the conduct resulting in a nuisance can be established from negligence, ultra hazardous activity, or the violation of a statute.\textsuperscript{173}

The court further clarified the scope of the private nuisance statute in Wendinger v. Forst Farms, Inc.\textsuperscript{174} In that case, the plaintiffs sued defendants because the defendants were operating a confined-animal feeding lot and the plaintiffs claimed that the invasive odors emanating from the feedlot constituted a nuisance.\textsuperscript{175} In this case, the court made note that the conduct was wrongful if the conduct was the fault of the defendant.\textsuperscript{176} The conduct is the defendant’s fault if it is the result of intentional conduct or conduct resulting from negligent, reckless, or ultra hazardous activity.\textsuperscript{177} In this case, evidence of the defendant’s awareness that the conduct was interfering with the plaintiff’s use and enjoyment of the property was enough to establish that it was intentional conduct.\textsuperscript{178} Further clarifying the statute in Johnson v. Paynesville Farmers Union Co-op. Oil Co.,\textsuperscript{179} the court applied the statute and essentially adopted the Restatement (Second) of Torts’ test that weighs the harm to the plaintiff against the social utility of the defendant’s conduct. The common law action established in the Restatement (Second) of Torts seems to be a strong legal measure that landowners in northern Minnesota could use to protect their interests. For example, the mining company’s operation site leaches acid mine drainage into the landowner’s groundwater. This is likely to be considered an invasion of the landowner’s possessory interest in the private use or enjoyment of his or her land. It is likely that the conduct would be considered intentional because the mining company would know or have reason to know that the contamination is likely to occur based on the effect this mining has had in other states.

The leaching of acid mine drainage may not be unreasonable by the definition of the Restatement (Second) of Torts section 826 because the balancing test in section 827 may weigh in the defendant’s favor if it is only one landowner bringing the action.\textsuperscript{180} If the landowner works with several other landowners who are also negatively affected by acid mine drainage, then the weighing test could look very different. Depending on the number of landowners affected, the harm could be extensive. The character of the harm involved could be considered grave if it is a drinking water supply. It is likely that the social value of drinking water is extremely high and the locality rule will likely consider water and drinking water to be of great concern. Finally, the burden to the landowner or landowners to avoid the harm is also likely to be considered too burdensome.

\begin{thebibliography}{9}
\bibitem{172} Id.
\bibitem{173} Id. at 804.
\bibitem{174} 662 N.W.2d 546 (Minn. Ct. App. 2003).
\bibitem{175} Id. at 549.
\bibitem{176} Id. at 551.
\bibitem{177} Id.
\bibitem{178} Id. at 552.
\bibitem{179} 817 N.W.2d 693 (Minn. 2012).
\bibitem{180} Restatement, supra note 138, §§ 826–27.
\end{thebibliography}
The statutory cause of action is also a strong tool that landowners could use to protect themselves from potential damage to their property from sulfide mining pollution. Acid mine drainage could be injurious to landowners’ health if it is leached into groundwater. It could also interfere with the comfortable use of the property if it leaches into an adjacent lake and kills the fish. The affected landowner would certainly fall into the category of people the statute intended to bring a cause of action. Similar to section 827 of the Restatement (Second) of Torts’ balancing test, the court’s balancing test established in Johnson would need to be considered. It is clear that under a private nuisance cause of action, whether the action is in common law or under state statute, landowners would benefit by organizing several private nuisance causes of action in order to outweigh the economic benefit of the mines. If the court applies the balancing test, the economic benefits of the mines are likely to be considered a strong social utility.

3. Federal Common Law Nuisance

There are also common law claims under federal law; however, the federal common law nuisance claim is unlikely to apply to landowners in northern Minnesota affected by sulfide mining operations. In Reserve Mining Co. v. Environmental Protection Agency, the U.S. government and the State of Minnesota jointly filed actions against Reserve Mining because the company was leaching asbestos-like fibers from taconite mining waste into Lake Superior and contaminating the drinking water for the citizens of Duluth, Minnesota. One of the claims that the government filed was a federal common law nuisance claim. The court stated that while federal common law nuisance claims require pollution of interstate waters, in this case Lake Superior, the government was arguing that harm was only affecting the people in Minnesota. Therefore, the federal common law nuisance claim would not apply because people from Michigan and Wisconsin were not affected. The federal court did, however, defer to the state public nuisance law.

More than a decade after Reserve Mining Co., the Ninth Circuit Court of Appeals further limited the application of the federal common law nuisance claim. In National Audubon Society v. Department of Water, there was an action against the Los Angeles Department of Water because it had diverted four freshwater streams from Mono Lake to the City of Los Angeles. The plaintiffs raised a federal common law nuisance claim that the court rejected. The court, following the decision of the United States Supreme Court in Middlesex County Sewerage Authority v. National Sea Clammers Association, stated that the

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182 Id.
183 Id. at 520–21.
184 Id. at 520–22.
185 Id. at 524.
186 869 F.2d 1196, 1198 (9th Cir. 1988).
187 Id. at 1200.
more comprehensive scope of the Federal Water and Pollution Control Act superseded a federal common law nuisance claim and therefore the claim was denied.\textsuperscript{189}

Based on these two cases it is unlikely that landowners in northern Minnesota would be successful with a federal common law nuisance claim. There are several lakes in the Boundary Waters Canoe Area Wilderness that share a border between the United States and Canada. It is unclear whether this would constitute interstate waters for purposes of the federal common law, or whether the lakes would be considered international waters. Regardless, the land is mostly managed by the United States federal government and Ontario’s provincial government which would leave the landowners largely absent from any legal proceedings. Furthermore, the court’s subsequent ruling in \textit{National Audubon Society v. Department of Water} clearly established that in the case of federal common law claims regarding water, federal water policy supersedes and would render the federal common law nuisance claim inapplicable. The landowners in northern Minnesota would be more successful filing a claim under state law.

\textbf{V. Conclusion}

There are a number of laws attempting to address environmental harms at the state and federal level. Generally, these laws are written expansively in order to apply to the broadest number of possible environmental harms. The question of whether these laws are adequate for landowners in northern Minnesota or whether they are inadequate is not simple. A lot of the laws’ effectiveness is dependent on how the mining companies conduct their operations, how the landowners are affected, and how landowners who have been harmed want to pursue legal action. It is sufficed to say that some of these laws are helpful in protecting landowners’ property while others are less helpful.

The environmental statutes at the state and federal level are not adequately designed to provide compensatory damages to individuals who experience environmental harms resulting from large-scale industrial operations. The federal statutes provide no compensatory damages, while the Minnesota Environmental Rights Act only provides for damages when the project is not permitted by one of the state agencies. This means that, at the state level, compensatory damages can be sought in actions against a company responsible for an environmental harm that has not completed a state agency’s review process. If a company has completed the requisite review process for its project and receives a permit to operate, the company effectively becomes exempt from claims under MERA. The only recourse for private landowners would be to file suit against the agency that permitted the project. The relief is likely to be limited to enjoinment of the mining operations.

Injunctive relief is the best relief that the environmental statutory causes of action can provide. While injunctive relief would be an exceptional outcome to a sulfide mining project that is causing grave environmental harm, it does little to help a landowner whose land is damaged, or to the business owner who suffers a loss of business due to the contamination of the land or water.

The common law actions are likely to be the most beneficial when considering compensation for environmental harms to landowners’ property. However, the codified versions in Minnesota law and court interpretations are not necessarily the most useful. It is difficult to determine whether the Minnesota Supreme Court would consider acid mine drainage to be an invasion of a landowner’s property for an action in trespass. Arguments could be made either way on whether acid mine drainage constitutes particulate

\textsuperscript{189} \textit{Nat’l Audubon Soc.}, 869 F.2d at 1200.
matter. It would be advantageous for the landowners pursing any cause of action to pair an action in trespass with it.

The public nuisance statute that criminalizes a public nuisance completely strips the effectiveness of the common law public nuisance cause of action. The common law cause of action in public nuisance would specifically allow landowners who are negatively impacted by acid mine drainage to bring a cause of action individually and on behalf of the public who use the land and water. In addition, public officials can bring the cause of action and can do so in conjunction with private landowners. The statutory public nuisance cause of action limits the government to prosecuting the polluter for a misdemeanor offense. In contrast, the common law private nuisance cause of action and the codified version in Minnesota law could both be effective tools for the landowners whose property has been damaged by the sulfide mining operations. The main issue is that the balancing test required by the Restatement (Second) of Torts and the court’s adoption of a similar test would require the landowners to work together in a class action style law suit in order to demonstrate that environmental harm to the landowners’ property outweighs harm to the mining company’s and the region’s economic interest.

Again, the effectiveness of these statutory and common law causes of action depends largely on what happens in the future. All of the laws allow some sort of injunctive relief which is a large part of limiting the environmental harm that these mines could potentially inflict. Injunctive relief, however, falls short of repairing a tourism industry that is reliant upon the pristine wilderness of northern Minnesota when that wilderness has been contaminated. Lawmakers in St. Paul could work with landowners in northern Minnesota to strengthen existing laws to ensure that they can protect the landowners and the environment from the potential type of damage to land and water that sulfide mines have been responsible for in other states.