Back in 2009, as attorney Paula Maccabee waded into the brewing fight over plans to mine copper, nickel and other metals from public lands near the Boundary Waters, she was worried that the state’s mainline environmental organizations weren’t taking a hard enough stand. That concern prompted Maccabee and some like-minded activists to form the nonprofit WaterLegacy with the goal of upending the proposal from the PolyMet Mining Company. The Toronto-based PolyMet — with financial backing of Swiss commodities giant Glencore — wants permission to become the first company to get the OK to tap the nonferrous mineral wealth of a huge geological formation, the Duluth Complex, which holds estimated 4 billion tons of copper, nickel and other metals.

Over the last six years, as Maccabee immersed herself in scientific particulars like the effects of sulfate discharges on wild rice beds and the regulatory arcana of environmental law, PolyMet has, arguably, morphed into the biggest environmental controversy Minnesota has seen in a generation. By one measure, it’s the biggest ever. The more than 50,000 public comments submitted to state regulators were the most for any project in state history. From the Capitol to the courts to the op-ed pages, Maccabee has pressed the case against the proposal, as it slogs through the regulatory and permitting process.

In seemingly endless tit for tat over PolyMet, it is sometimes hard to believe the two sides are even talking about the same project. Is the threat of water pollution so dire it would be crazy to permit such mining anywhere, let alone in the pristine, water-rich wilds of northeastern Minnesota? Can technological advances and careful regulation prevent the sort of environmental catastrophes that have blackened the reputation of the hard rock mining industry — and provide plenty of well-paying jobs to boot?

PolyMet’s critics go to great lengths to emphasize that they’re not against all mining — and certainly not the region’s long-established iron and taconite industries; they’re against this particular type of mining. From a political perspective, it makes sense to draw a bright-line distinction between the mining of iron ore (an industry that fundamentally shaped the Arrowhead’s economy and history) and the mining of copper and nickel (an industry with no history in Minnesota and a bleak track record elsewhere).
In her search for a toehold to beat back PolyMet, Maccabee has turned some of those assumptions sideways. In the latest legal salvo — a petition filed with the U.S. Environmental Protection Agency in July — Maccabee essentially argues that Minnesota has done a rotten job of controlling water pollution flowing from existing taconite operations. In fact, she contends the state has done such a bad job that the feds should strip its authority to regulate mining.

Those arguments may not be a surprise, but Maccabee backed up the complaint with a raft of supporting documents. Among the revelations, the documents show the struggles of the Minnesota Pollution Control Agency to address a big backlog of outdated and expired water pollution permits for taconite operations. Although the MPCA and the EPA entered into agreement a few years ago to begin cleaning up that backlog, progress has been scant — a problem the MPCA has attributed to staffing and money issues. Maccabee sees it as product of the "the undue influence of mining interests in both the regulatory and legislative process."

Is the petition a fourth quarter Hail Mary?

Under the Clean Water Act, the EPA can strip a state of its regulatory authority to issue pollution permits. But Maccabee concedes that's probably a long shot and acknowledges that she doesn't know of any instances where that has happened. Still, the EPA has "some pretty serious clubs" at its disposal, says Maccabee, who thinks the petition can become the EPA's tool to make the state enforce water quality standards more rigorously.

For much of her three-decade legal career, Maccabee has focused on environmental issues, but not without a few detours. After getting her JD at Yale, Maccabee put in a couple of years as an associate at Robins Kaplan, where she second-chaired depositions for the firm's successful Dalkon Shield class action suit and learned that she had a limited appetite for grueling 90-hour work weeks. Following a stint as an assistant attorney general (she worked on law and policy issues related to sexual violence under Norm Coleman) and on the St. Paul City Council, Maccabee, 58, decided to hang up a shingle after the birth of her third child.

Minnesota Lawyer recently caught up with Maccabee for a conversation about PolyMet, environmental law and what she loves about details. This interview has been edited for purposes of length and clarity.

**Minnesota Lawyer:** What's the status of the EPA petition?

**Paula Maccabee:** When we submitted it, my hunch was we wouldn't hear anything for years. That had been the track record. I got a phone call from an EPA attorney in Region 5 within three weeks, so it seems really clear the EPA is taking this seriously.

In part, I think, that's because they have their own misgivings about the way in which the Pollution Control Agency handles mining pollution. Over the last six weeks, we've spent a lot of time documenting the inadequacies in controlling pollutants at the Dunka mine. When I mentioned that to the EPA, they said, "As soon as you can, put together all that information for us as a supplement to your petition."

**ML:** So what are the likely scenarios going forward?

**Maccabee:** The EPA wants to start with the easiest part to review. Is the Pollution Control Agency allowing permits to be violated? The second level of the review will look at the permits that are out there — are they old, expired, or outdated? And do those permits even really require compliance with water quality standards?

**ML:** Is there any precedent for the EPA to yank away a state's regulatory authority? In Arkansas a couple of years ago, the Legislature repealed a water bill that the EPA and others thought violated the Clean Water Act.

**Maccabee:** Yes, they had to go back and fix it. That's an important issue because the [Minnesota] Legislature did some things last session that, I think, are clear violations of the Clean Water Act.

**ML:** Such as?

**Maccabee:** The Legislature said even though there is a wild rice sulfate standard, you cannot limit sulfate emissions if it costs any money until, theoretically, the rule-making process is finished. Well, that's not the way the Clean Water Act works. If you have a legal standard — and our standard was approved by the EPA — it has to be included in the permits until it is stricken or changed or amended in law.

**ML:** In the petition, you quote a remark from Gov. Dayton in which he said that U.S. Steel "wouldn't agree" to the wild rice sulfate standard and might lay off workers if the standard is enforced.

**Maccabee:** Yes, that was at the beginning of this legislative session. It shows how pervasive the influence of the mining industry is. It shows that U.S. Steel is under economic pressures. But that has nothing to do with Minnesota's regulatory environment or the wild rice sulfate standard. It's a market fact. Worldwide, there are many high quality sources of iron that are cheaper than pelletizing taconite. The threat of job cuts has been held over the head of the governor and legislators and regulators, which has led to some really bad policies.
ML: This year’s wild rice sulfate standard legislation means ultimately there won’t be a universal standard but instead the limits will be set on a lake-by-lake basis. Do I have that right?

Maccabee: After the political pressure got so extreme, the Pollution Control Agency came up with a formula that basically eliminates any numeric standard, which is scientifically indefensible and legally impractical.

Basically, it means that the mining companies won’t have to worry about controlling sulfate. When you sample for sulfide, it’s not consistent from one part of the lake to the other. It’s not consistent during different parts of the season. It’s not consistent year to year. So no matter what number you come up with, the industry could challenge it.

As an attorney, I think, the PCA just shifted the burden of proof from the industry to its own very small, underfunded staff. The mining industry has exerted its influence to undermine a standard that, just one year ago, the regulatory agencies, as well as the tribes, the environmental groups and the EPA, agreed is needed and reasonable.

ML: How does PolyMet differ from other environmental causes you’ve been involved with?

Maccabee: Every other issue I have worked on — every other issue — there have been allies in the state agencies. With the Gardens of Eagan [where Maccabee represented the owners of an organic farm fighting a pipeline proposal], we got support from the Minnesota Department of Agriculture. We weren’t just a lone wolf, or a lone wolf with a couple of environmental supporters. It was the same thing when I worked with Keith Ellison and Environmental Justice Advocates of Minnesota on reducing mercury emissions from coal plants. Staff and regulators from the Pollution Control Agency helped us.

This is the first time in my 35-year career where I just don’t see anybody in the regulatory agencies who has the scientific independence, or enough support from the administration or the Legislature, to do a good job. And that’s terrifying to me.

ML: During the debate over the wild rice sulfate standards at the Legislature, some witnesses said the rule would hurt cities financially because they’d be forced to beef up treatment at their wastewater treatment plants to comply. Your response?

Maccabee: This is an exaggerated concern because the goal of the standard is to protect wild rice, not simply to limit sulfate. Yes, sometimes there are high levels of sulfate in waste water treatment plants. But that’s because industry sends untreated junk to public facilities and aren’t charged to clean it up. In Duluth, they get a lot of high sulfate effluent from the paper mill. It looks like it’s the public’s problem when it really is not. It’s an industrial problem and they’re externalizing their costs.

ML: Your petition to the EPA seems to say Minnesota can’t control water pollution from its taconite operations, which are supposed to be so much more benign than copper-nickel mining.

Maccabee: The risks from taconite mining are much less than sulfide mining. The level of sulfur is much lower and there are far fewer releases of toxic metals. WaterLegacy thinks problems with taconite mining are manageable. And if our regulators were to require treatment [at the shuttered taconite facilities], that would create construction jobs and long term jobs.

ML: What are the biggest misconceptions about PolyMet?

Maccabee: People who don’t know a lot about this issue say, “Minnesota is good place to do this dangerous kind of mining because we have such strong regulations.” When you look closer, you see we may have regulations but the agencies are not enforcing them, or they’re gutting them. Before we even think about allowing sulfide mining, let’s get in control of our taconite mining.

I’ve spent a horrible amount of time on the preliminary environmental impact draft PolyMet rolled out this summer. I think it is intentionally misleading. It’s not just that it’s incomplete. There are 3,000 pages and tens of thousands of pages of underlying documents. But there are some basic lies in there. [Editor’s note: PolyMet declined to respond to Maccabee’s comments.]

They say, “Don’t worry about all the toxic metals and the acids and sulfates in the tailings seepage because we’re going to catch 99.5 percent.” Now that has never happened anywhere. The agencies agree it’s never happened anywhere. And here they just assume it — and it’s all based on PolyMet’s modeling.
If I were to tell you that I assume my kid can run a two-minute mile based on his modeling, you'd laugh at me. Here's the most fundamental question: We all know the seepage in the tailings is going to be contaminated. It will have high levels of mercury, and lead and arsenic and copper and sulfates — nasty stuff.

If you talk to anyone who supports PolyMet, they'll say, everything is going to be fine because we're going to use reverse osmosis to treat all the pollution in the tailings basin. How do we know it will work? PolyMet says because we did a pilot study. But I went back and read the pilot study. Guess what? They never did a pilot study of any of the pollution that would come from sulfide mining. They did a reverse osmosis test on a taconite tailings dump. It's just not the same. Not the same chemistry. Not the same physics. Not the same anything. I'm not telling you I know, as a fact, that reverse osmosis won't work. I'm saying I know, as a fact, that they haven't shown that it will. And, damn it, it's their job to prove that.

ML: Does publicity over the recent mine waste spill on the Animus River have an effect on PolyMet?

Maccabee: I think the Mount Polley spill in Canada, which just had a one-year anniversary, is a better comparison. There were six billion gallons of polluted water spilled that will cost hundreds of millions of dollars to clean up.

PolyMet's plan is to put this tailings dump on top of an existing tailings dump, which is itself on top of peat and loose sediments. Mount Polley had a very similar dam, with sulfide mine tailings on top of unstable glacial sediments. An independent scientific panel concluded the spill wasn't caused by operator error, it was caused by the basic design flaw of wet tailings disposal. They recommend best available technology of dry tailings for any new project.

PolyMet hasn't even been required to compare the cost of their current plan and the long term water treatment vs. getting a clean site with a liner and dry tailings. We're assuming they'll be able to collect 99.5 percent of the pollution, so there's no environmental reason to look at another alternative. It's just one example of the nonsense that's being used to reassure people.

ML: In terms of the legal talent and money arrayed, how is the PolyMet fight shaping up?

Maccabee: I don't have a clue how much money and power is on the other side. But they talk about having already spent $54 million. The resources are so vast, so politically entrenched. But on our side, we have a good, strong community of nonprofits — the Minnesota Center for Environmental Advocacy, Friends of the Boundary Waters, WaterLegacy — and we're all collaborating. The tribal resources have been critical. Their experts and scientists, I think, have been more important than the lawyers. They've been an invaluable source of excellent, high quality science. If we have any chance of protecting Minnesota water from sulfide mining, it's because of the tribal scientists.

ML: How does this compare to other environmental issues you've worked on?

Maccabee: This is the most complicated and difficult and risky effort with which I've ever been associated. There is an enormous amount at stake because the site is upstream of reservations, of fishing areas, of wild rice, of drinking water. It has a huge and terrifying potential to effect human health.

ML: How were you drawn into this work? Do you have a personal connection to northeast Minnesota?

Maccabee: I've been to the Boundary Waters and there are many people at Water Legacy whose main connection is the threat to the pristine wilderness. But thing that caught me is the potential for poisoning the food chain. I'm passionate about is the effects of pollutants on environmental health and environmental justice. I've been working on mercury for 15 years. One out of 10 babies in Lake Superior region is born with unsafe level of mercury and this project is going to release more mercury into the air and into water.

ML: Why did you form WaterLegacy? There are lots of other groups out there.

Maccabee: At the time, some of the leading environmental organizations were not willing to say sulfide mining is too risky for Minnesota. That was too precarious, even for environmentalists. From WaterLegacy's perspective, we didn't think sulfide mining should ever happen in Minnesota.

ML: There is incredible amount of minutia with PolyMet — scientific stuff, political stuff, legal stuff. Do you ever get sick of all the details?

Maccabee: I think the level of scientific and technical detail is God's gift. I've been in practice for 35 years. For many people at this stage of their career, it's just same old same old. This is fascinating, it's engaging, it's challenging. Every day I learn something new.
And I believe it’s extremely meaningful work — even if our progress is sometimes incremental and we don’t know what the ultimate outcome. The complexity and the technical difficulty, I think, are the gold. That’s the precious part of the work. That’s pure joy. How many people after being in a career for several decades can say I learn something new every day? It’s such a gift.