

# Online Comment

**Permit Portal:** Air

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**Comment:**

Regarding "restoration" when the PolyMet DOES in the future contaminate and destroy the environment....remind yourself what is happening today...and supposedly the science at the time was "god!" BAD will only come from what may happen if the permits are allowed....and most important, there is NO guarantee after PolyMet or any similar company destroys the safety and quality of the water, they will EVER have the money to pay for it...LET ALONE IT MAY NOT BE FIXABLE!!!! WE OPPOSE ANY TYPE OF COPPER-SULFIDE MINING.... \_\_\_\_\_ Below is the article about the toxic problems trying to be paid for due to contamination by 3M...you know how bad it WILL be if PolyMet is allowed to mine, or any copper-sulfide mining company. This was in the Duluth News Tribune, Sunday, February 11, 2018 Minnesota vs. 3M: A guide to the \$5B trial: State's biggest environmental lawsuit, over company's PFCs in groundwater, starts this month By Bob Shaw / St. Paul Pioneer Press on Feb 10, 2018 at 4:25 p.m. ST. PAUL — Call it the \$5 billion Teflon trial — Minnesota's biggest environmental lawsuit ever. When the trial of the State of Minnesota vs. 3M Co. starts Feb. 20, it will pit the state against what may be its most-loved company. The state attorney general will be taking on a \$145 billion corporate behemoth and charging it with fouling the state's water. The lawsuit hinges on the alleged damage caused by chemicals found in household items such as nonstick cookware and stain repellent. The state says the chemicals were made by 3M, dumped by 3M and consumed by 67,000 local water-drinkers and have now spread around the world. 3M, according to Attorney General Lori Swanson, should abide by the Pottery Barn rule: "If you break it, you pay for it." 3M says the chemicals are indeed widespread — but harmless. Ultra-high concentrations do cause diseases in laboratory animals, it says, but it's not possible that the parts-per-trillion traces in water have hurt humans, fish or even plants. The trial, says 3M, is about a bogus health scare. A key element of the trial will be the alleged 3M cover-up. The state says 3M knew the chemicals caused cancer and didn't tell health officials. 3M says it did tell officials — and for more than 50 years kept them informed about every aspect of its chemical testing and disposal. The trial is expected to last six weeks. How big is this case? "This is huge. This is about as high-profile as it gets," said Jeremy Greenhouse, partner in the Environmental Law Group of Mendota Heights, which handles environmental lawsuits. At \$5 billion, it is one of the largest in U.S. history. Other mega-suits have involved environmental catastrophes, including: The Deepwater Horizon disaster. The 2010 explosion of an offshore oil rig in the Gulf of Mexico led to more than \$19 billion in state and federal lawsuits — not including billions more in cleanup costs and other lawsuits. Eleven workers were killed, and oil was spewed along the coastline of five states. In 1989, the Exxon Valdez ran aground and spilled 11 million gallons of oil in a bay in Alaska, resulting in \$507 million in damages. The oil eventually spread to 1,300 miles of shoreline. Were those cases similar to 3M's? Not really. In those cases, there was no debate about whether harm had occurred. In the 3M case, there is. The state says the environment was harmed by a 15-mile plume of groundwater pollution in Washington County. The virtually indestructible chemicals have spread to people and animals around the world. 3M agrees with most of that — but it says that those chemicals at those amounts are harmless. What is this stuff?

These are chemicals used to make nonstick cookware, firefighting foam and stain repellent. They are called perfluorochemicals, or PFCs. Did they come from 3M? Yes. 3M admits this, although there are other companies that also make PFCs. Did 3M dump the chemicals? Yes. 3M admits it put the chemicals into dump sites — legally — ending in 1975. In 2004, pollution was discovered in drinking water from Lake Elmo to Hastings. The PFCs had apparently seeped down from the dump sites. Hasn't 3M already won in court? Only in a very different case. In 2009, a group of residents sued 3M, claiming the pollution hurt their property values. Joining them in the suit were about 1,000 residents who claimed that the PFCs had caused them health problems, although none of them claimed personal injury in the trial. In that case, a jury sided with 3M. Do the chemicals hurt people? The 2009 trial did not make that charge, and neither will the coming \$5 billion trial. The trial is about damage to the environment, not personal injury. 3M says there are no known studies proving that PFCs are dangerous at parts-per-trillion levels in local water. Indeed, 3M says there are no studies proving harm to people at any dose. The state says PFCs are indeed harmful. It will point out findings by the federal Environmental Protection Agency calling the chemicals a "probable" or "likely" cause of various diseases. To win the case, said attorney general spokesman Ben Wogoland, the state doesn't have to prove the PFCs are harmful. It has to show only that 3M knew the PFCs had the potential to cause harm, or "may" cause harm. How can 3M be so sure they are harmless? Scientists knew that massive doses of PFCs caused diseases in mice. So they kept repeating the experiments until they found a dose that caused no effects. They then calculated what the no-harm dose would be for a 110-pound human — 500,000 8-ounce glasses of the polluted water every day. 3M scientists made that calculation in 2007. The safety limit at that time was 420,000 times smaller than the calculated no-harm dose. That sounds like guessing. It is, but it's the best estimate that can be made. Of course, a more accurate method would be to give human subjects gradually increasing amounts of a chemical to make them sick. Ethically, that can't be done. Has anyone tested the effects of ultra-low levels? No. No one can prove the impact of a micro-dose of anything. It's like assessing the health impact of a single cigarette or cookie. But 3M argues that if large doses are found to be harmless, then smaller amounts are even more likely to be. The state says that even low doses have been declared dangerous by the EPA. Minnesota officials cited those recommendations when it set the limit for one type of PFC at 27 parts per trillion. Did you say "trillion?" Yes. A part-per-trillion is a stupendously small amount. A trillion inches would circle the planet more than 600 times. Can't small amounts build up in the body? Yes. One type of PFC has a half-life — the time it takes to cut the content in half — of five years. That means if a person stopped consuming PFCs, it would take five years to cut the level of the chemicals in half. If PFCs build up, wouldn't that make a person sick? Theoretically, yes. The state says that the potential for illness is there. But 3M says this has never happened. 3M monitored the health of employees who worked for years in factories and had PFCs in their bodies that were up to 20 times higher than in residents drinking the polluted water. No adverse health effects were reported from the PFCs. This includes harm to fetuses, birth defects, cancer and other ailments. Doesn't the state imply that people were harmed? This is a bit confusing. The state is claiming damages for harm to the environment, and not for personal injuries to any individual person. But as background material, it will cite the health impact of PFCs in Oakdale. A professor of the University of California, Berkley will testify that PFCs caused increases in cancers of the bladder, breast, kidney and prostate between 2001 and 2016. To argue that Oakdale residents were not harmed, 3M might cite a 2007 finding by the Minnesota Department of Health. It said that there were no increases in the rate of any ailment — including cancer, thyroid problems or birth defects — in the area. This was echoed as recently as Wednesday. In a news release, the state health department reported that PFCs

"pose a risk to human health" but said that there were no increases in the rate cancer or low birth weights in Washington County. Did 3M cover up the dangers of these chemicals? Both sides agree that 3M continually tested PFCs, and found they can cause harm to laboratory animals. 3M says it shared this information with state officials, as well as the disposal locations and methods. The state said 3M concealed known health hazards from officials. Following the Pottery Barn rule, has 3M done anything to "pay for it"? It stopped making the most worrisome types of PFCs in 2002 — two years before they were discovered in groundwater. 3M has spent more than \$100 million on a filtration system for Oakdale city water, hook-ups to city water supplies in Oakdale and Lake Elmo, bottled water and home filters for residents, and a system to pump out and filter groundwater in Woodbury. Have there been similar lawsuits in other states? Yes. DuPont manufactured and disposed of the same chemicals, which were found in the groundwater of Ohio and West Virginia. As of January, DuPont had paid almost \$1 billion in various settlements for personal injury, punitive damages and health-monitoring costs. If the state wins, how will the \$5 billion be spent? The attorney general's office says it doesn't yet know. It has hired Covington & Burling LLP, based in Washington, D.C., on a contingency-fee basis.

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**Attachments:**