

PFAS Water Contamination, Rhetoric, and 3M

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ABSTRACT

This research assesses the rhetorical strategies employed by 3M in the PFAS litigation of *Hardwick V 3M* as well as the rhetorical strategies employed by 3M on their website. In my research I found a stark contrast in rhetorical strategies employed by 3M in the courtroom and that of their website. My findings suggest that 3M's flowery, utopian language on their website is a false depiction of the true reality of how they conduct themselves in the courtroom.

INTRODUCTION

I have always been fascinated with water not only is it beautiful, but its abundant in its life-giving properties. Roughly "71%" (USGS, 2019) of our planet is covered by water, and "60%" (USGS, 2019) of our bodies are composed of it. Water brings nutrients to our cells, gets rid of waste, protects our joints and organs, regulates body temperature, breaks down minerals and nutrients, and so much more! According to *Gundersen Health System*, the daily water intake recommendation for women is "9.5 cups" and "11.5 cups" for men. Despite the high importance that water plays to our planet and our bodies water is a scarce commodity in many places in the world. Due to dangerous products and improper waste management systems the amount of safe drinking water is drastically decreasing as well.

In this paper I focused on one water contamination issue that has affected my neighboring community, Polyfluoroalkyl Substance (PFAS) contamination. PFAS is a combination of two synthetic chemicals, Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS). PFAS is commonly referred to as a 'forever chemical' because it never breaks down. PFAS is in a wide variety of products such as non-stick cookware, food wrappers, and firefighting foam.

Exposure to PFAS has been identified by the *National Toxicology Program* as an immune hazard based upon "the high confidence that exposure to PFOS is associated with the suppression of the antibody response in animals based on consistent suppression of the primary antibody response from experimental studies in mice" (National Toxicology Program, 2016), and there is a "moderate confidence that exposure to PFOA is associated with suppression of the antibody". The *Environmental Protection Agency* (EPA) has also found that exposure to certain levels of PFAS may lead to decreased fertility, high blood pressure in pregnant women, developmental effects or delays in children, as well as it increases your risk of getting prostate cancer, kidney cancer, testicular cancer (Environmental Protection Agency, 2023). Due to its many potential harmful effects in April of 2024, the EPA issued the very first national, and legally enforceable drinking water standard. The EPA says that the "final rule will reduce PFAS exposure for approximately 100 million people, prevent thousands of deaths, and reduce tens of thousands of serious illnesses".

Due to my fascination with water, and my future aspirations of entering into the field of law I decided that I wanted to look at a PFAS related court case for my Capstone research project, and in particular I wanted to focus on the rhetorical strategies employed by the Defendant.

LITERATURE REVIEW

PFAS and its health effects

The Agency for Toxic Substances and Disease Registry has found that PFAS can cause an increase in cholesterol levels, lower antibody response to some vaccines, cause a change in liver enzymes, cause pregnancy-induced hypertension and preeclampsia, cause small decrease in birth weight as well as cause kidney and testicular cancer. The Agency for Toxic Substance and Disease Registry also has found that levels of exposure both in dose, frequency, route, and duration to PFAS can increase your likelihood of developing an illness. Preexisting health issues, and other determinants of health like access to clean drinking water and quality healthcare can also increase your likelihood of exposure to PFAS causing adverse health effects.

The American Cancer Society reiterates many of the diseases that PFAS can cause and introduces the PFAS recommended health advisory levels for humans. The EPA notes that these advisories are not legally enforceable and are meant to provide people with information so that they can best protect themselves. This causes a huge issue in the court case that I assess because until April 2023, there was no way to legally enforce the PFAS advisory levels, and so the judges had no law to point to in the court room when it came to regulating the PFAS producing corporations.

The Environmental Protection Agency lays out where PFAS chemicals are commonly used such as in non-stick kitchen products and explains that a major concern of PFAS is that they build up in people, animals and the environment over time. The EPA also explains how PFAS has been more widely studied than many synthetic chemicals which has led to a majority of corporations to phase them out and replace them. The National Toxicology Program has a very thorough research paper that tested the immunotoxicity of PFAS. From this source I understand how 3M has claimed in court cases that PFAS does not cause cancer.

The National Toxicology Program studied lab rats and their response to exposure of PFAS. From their studies they found that there are high levels of confidence that PFOA, and PFOS exposure are associated with suppression of the antibody response in animals due to their results with lab rats. From this knowledge they are able to suggest with moderate confidence that PFOA, and PFOS exposure are associated with “suppression of the antibody response in humans.” Through these studies with lab rats, they are able to say that exposure to PFAS increases your likelihood of getting cancer, but further research needs to be conducted to confirm that indeed it is the PFAS that is directly linked to causing cancer. Through this information corporations like 3M have been telling their customers that PFAS does not cause cancer when in reality scientists are saying that there is a very high likelihood that it does.

Legislature

In reviewing the Wisconsin state legislature statues and administrative codes I was very disappointed to find no Wisconsin law that outlined, enforced, regulated, or guided people or corporations as how to how much PFAS is safe in to be in drinking water, or in products.

PFAS Cases, and Headlines

The three different articles from AP News “3M reaches \$10.3 billion settlement over contamination of water systems with ‘forever chemicals’”, “Residents of PFAS-polluted island file \$42.4 million in claims against Wisconsin city”, and “PFAS Pollution Claims Mount on French Island Near La Crosse”, as well as the article by Danielle Kaesong demonstrate how in some cases 3M wants to settle lawsuits, but communities feel that they are being offered a deal that is too small to cover the costs that are associated with the aftermath of PFAS water contamination. The Article from News 8000 “City of La Crosse served \$42.4 million in claims related to PFAS contamination on French Island”, and AP New article “Residents of PFAS-polluted island file \$42.4 million in claims against Wisconsin city” claim that La Crosse knew of the PFAS contamination in the drinking wells years before telling the public, which makes the PFAS litigations even stickier when that very city is refusing money from 3M saying that its not enough to cover the damages that have occurred over the years- some years which they spent not telling the public about the damages that were occurring. Overall these articles demonstrate the large sum of money that is at play in the PFAS court cases and they also reveal that there may be some shady things occurring from both parties.

METHODS

My findings are based on 3M’s website, and the court case of *Hardwick V 3M*. I began my research by analyzing newspaper articles in the University La-Crosse Wisconsin Archives pertaining to Polyfluoroalkyl substance (PFAS) contamination on French Island. From there I was able to see the unfolding of PFAS on French Island and the angry outpour of emotions from the locals, mayor, Governor Evers, and Attorney General Kaul. As I began rhetorically analyzing these newspaper articles, I found that the narrative from the company 3M was completely left out. I found this gap in knowledge very interesting, because I only had half the picture of the extensive issue of PFAS water pollution. I grew increasingly curious about what 3M had to say about one of their products contaminating water in my neighboring community. From there I started researching court cases involving 3M and PFAS contamination. The first statement from 3M that I was able to find was from *The Associated Press News* where they said that 3M’s participation in the settlement “is not an admission of liability”, and they also said that “if it was rejected in court, ‘3M is prepared to continue to defend itself.’” This statement is very ambiguous as it

at first offers an olive branch to help, but in the same breath the company denies any accountability and makes it clear that they will fight back if taken to court. There is a lot to analyze within this statement alone so I thought it would be interesting to see what 3M's environmental policies are, and how that compares to language that they use in the court room. I started researching the court cases that 3M was tied up in and discovered that there are currently 4,000 lawsuits against 3M for PFAS contamination! Due to my researching time constraint I chose to focus on one court case that has been settled so that I would have access to everything that was said in the court room.

RESULTS

In my analysis of 3M, both on 3M's website and in the courtroom proceedings of *Hardwick V 3M Co.* I discovered a stark split in usage of rhetorical strategies. The main themes that I identified were denial of injury and significance in the courtroom, a split in "us" Vs "them", and a dramatic shift in tone and word choice from accusatory and dismissive to bubbly and utopian.

Denial of injury, and significance

In the Courtroom there was a strong denial of both significance and injury of Mr. Hardwick. 3M denied any significance and said that "any scientific study, research, testing, or other work of any kind has been performed that is sufficient to suggest to plaintiff or any class member that the presence of any PFAS material in their blood, at any level, is of any legal, toxicological, medical, or other significance" *Hardwick v. 3M Co.*, Case No. 2:18-cv-1185, 6 (S.D. Ohio Sep. 30, 2019). Later on, 3M denied Mr. Hardwick's standing and stated that "Hardwick's alleged injury- the mere presence of an unidentified level of some type of PFAS in his blood-does not constitute currently existing or future injury in fact." (Defs' Mot. to Dismiss at I, ECF No. 67-1.). 3M reiterates this point again and said that "allegations of exposure and potential injury do not give rise to a viable tort claim under Ohio law because they are not actual injuries." *Hardwick v. 3M Co.*, Case No. 2:18-cv-1185, 12 (S.D. Ohio Sep. 30, 2019). And in case it wasn't made clear the first two times 3M again stated that "[u]nder Ohio law, exposure to a toxic substance does not create an 'injury' unless identifiable 'conditions' results." (Defs' Mot. to Dismiss at 13) (citing the law on constitutional standing set out by this Court *supra*, and *Bouchard v. Am. Home Prods. Corp.*, 213 F. Supp. 2d 802, 807 (N.D. Ohio 2002)). After denying that PFAS being present in the bloodstream does indeed count as an injury 3M once again denied Mr. Hardwick's standing and said that "all three of Hardwick's substantive claims under Ohio law-negligence, battery, and conspiracy" fail. *Id.* at 13. *Hardwick v. 3M Co.*, Case No. 2:18-cv-1185, 35 (S.D. Ohio Sep. 30, 2019)

Divide in "Us" VS "Them"

In the Courtroom 3M never used "we", "us", or "our", instead they removed themselves from the situation as much as possible by not referring to themselves and instead fixating on Mr. Hardwick. This is polar opposite from the website which used "we", "us", and "our" ad nauseam.

Accusatory and Dismissive VS Bubbly and Utopian

In the Courtroom the language used by 3M was both accusatory and dismissive. 3M stated "The fact that they have asked for a science panel, even if they were to withdraw that request today, the fact that they have asked for a science panel, it's what that substitutes for in the complaint that is fatal here with regard to the 12(b)(6). It substitutes for any allegation that there is a harmful substance in the plaintiff." *Hardwick v. 3M Co.*, Case No. 2:18-cv-1185, 10 (S.D. Ohio Sep. 30, 2019). The repetition of "the fact that" is repetitively accusative of Mr. Hardwick. While being dismissive of Mr. Hardwick and any standing that he has 3M dismisses the possibility of a scientific panel stating that it "was not 'traditionally accorded by courts of equity' and thus cannot be accorded now either." 3M continues to dismiss Mr. Hardwick and the possibility of a scientific panel and even goes as far to say that 3M's rights would be violated in the awarding of a scientific panel, "even if this relief were generally available, awarding it in this case would violate the Seventh Amendment, Article III, and due process." *Hardwick v. 3M Co.*, Case No. 2:18-cv-1185, 9 (S.D. Ohio Sep. 30, 2019). 3M continues to dismiss the Court's ability to award a scientific review panel and then accuses the hypothetical panel claiming that the role of a science panel would not be bound by the rules of evidence. Moving to 3M's website and the Global Impact Report on their website there is a clear shift in language from accusatory and dismissive to bubbly and utopian. 3M uses very vague, utopian sentences such as "our purpose is clear" (3M), and "We're committed to innovate to accelerate global climate solutions, decarbonize industry, and do

more with less to strengthen the circular economy” (3M). 3M cites the UN’s Sustainable Development Goals (SDGs), Meetings that they have attended, and there is a repetition of the word “committed” to demonstrate 3M’s commitment to the global community. On 3M’s website they talk about their employees as if they were a proud parent, “Our employees are driven to pursue these goals and make a difference in the world — and we’re proud of the recognition their efforts have earned for 3M” (3M). The utopian tone is continued with the repetition of “circular economy” which means sharing, reusing, repairing, returning, and recycling. The utopian pinnacle of 3M’s website is in their corporate call to action on their environmental page which states: “The impacts of global climate change have never been clearer. Extreme weather events, rising sea levels, urban heat islands, poor air quality, and scarce resources have underscored how urgently corporations must act to try to slow these harmful effects to both our natural and built ecosystems. Corporations have an opportunity to embrace new circular business models — ones that are regenerative and that replenish rather than deplete natural resources. We believe it’s our responsibility to design circularity into 3M.” Out of all the bubbly, utopian rhetoric on 3M’s website there was only a brief mentioning of the PFAS litigation to be found where there was a dramatic contrast in language from the rest of the website. In addressing the PFAS litigation 3M stated that “We’ll continue to address PFAS litigation as appropriate. In concert with our exit from PFAS manufacturing, which is on track for the end of 2025, these actions are positioning 3M for a tomorrow of growth, resilience, opportunity, and accelerated innovation” (3M).

Sustainability priorities (cont.)

Science for Circular




Tier	Topic	Our actions	Policies & context	Goals & commitments	Related SDG
2	Water quality	In 2021, 3M joined the Water Resilience Coalition leadership committee. Led by the CEO Water Mandate, coalition members work toward a positive impact in water-stressed basins. Members also aim to develop and implement resilient practices across their industry and to provide leadership and advocacy in the field of water resilience.	3M commits to achieving carbon neutrality, reducing water use, and improving water quality	Reduce global water usage by the following amounts: 10% by 2022, 20% by 2025, and 25% by 2030, indexed to sales ²	 6.3, 6.4, 6.b
3	Water usage and availability	3M's 2023 global manufacturing locations were evaluated using the Aqueduct™ Water Risk Atlas stress-level screening tool, Aqueduct 3.0.	3M joins Water Resilience Coalition, CEO Water Mandate	For 3M's global manufacturing operations, help enhance the quality of water returned to the environment from industrial processes by 2030. ^{3,4} Our initial focus is on implementing state-of-the-art water purification technology at the largest water use locations globally and having them fully operational by the end of 2024	
3	Access to safe and affordable drinking water	During World Water Week in September, the Water Resilience Coalition (WRC) hosted a workshop at 3M Stockholm focusing on the ambition of net positive water impact, and 3M participated in the first pilot program. Later in 2023 the WRC held another workshop at 3M on how to scale basinwide collective action in 100 priority basins worldwide.		Engage 100% of water-stressed/scarce communities where 3M manufactures on communitywide approaches to water management by 2025	
2	Plastic and packaging waste	We're innovating new product and packaging solutions that use less virgin fossil-based plastic and increase the use of recycled or bio-based plastic where appropriate. Our Packaging Sustainability Roadmap prioritizes product protection, efficient packaging, and — especially — circular package design. In 2023, our package engineers continued to use the roadmap to help them make key design decisions that reduce or eliminate packaging where possible and improve our packaging circularity.	3M innovates to reduce plastic use, improve environmental footprint	Require a Sustainability Value Commitment (SVC) for every new product ¹ Reduce manufacturing waste by 10%, indexed to sales, by 2025 Reduce dependence on virgin fossil-based plastic by 125 million pounds by the end of 2025 ⁵	 12.5
2	Manufacturing waste	As our sites identify opportunities to divert material streams, we continue to carefully manage waste. Our contracts with our waste management vendors confirm that our material is handled appropriately. Within each geographic area of our operations, we regularly review waste-reduction results against goals and tracking metrics.		Reduce manufacturing waste by 10%, indexed to sales, by 2025 Achieve zero landfill status at more than 30% of manufacturing sites by 2025	 12.5

Figure 1: The Sustainability priorities of 3M “Science for Circular”

Sustainability priorities (cont.)

Science for Climate





Tier	Topic	Our actions	Policies & context	Goals & commitments	Related SDG
1	Climate change and GHG emissions	<p>3M takes industry-leading actions to measure and reduce our greenhouse gas (GHG) emissions, and we offer our customers a wide range of innovative products that help them improve energy efficiency and reduce their own GHG emissions.</p> <p>3M reduces GHG emissions through methods such as improving efficiency across our facilities, including our manufacturing equipment and processes; upgrading technologies; reducing energy demand; increasing use of renewable electricity; managing our product portfolio; and working across our supply chain to reduce emissions.</p> <p>In 2023, we committed to near-term reduction targets for scopes 1, 2, and 3 greenhouse gas emissions. We look forward to progressing through the Science Based Targets initiative (SBTi) process in 2024.</p>	<p>3M commits to achieving carbon neutrality, reducing water use, and improving water quality</p> <p>3M and UN Climate Change start new strategic partnership</p> <p>3M Invests in TPG Rise Climate Fund</p>	<p>Reduce scope 1 and 2 market-based GHG emissions by at least 50% by 2030, 80% by 2040, and achieve carbon neutrality in our operations by 2050*</p> <p>Help our customers reduce their GHGs by 250 million tons of CO₂ equivalent emissions through the use of 3M products by 2025</p>	 <p>13.1</p>
1	Energy usage and use of renewables	<p>Our approach to managing our energy footprint includes evaluating and continually improving the impact of our products, manufacturing processes, equipment, and sites (including upgrading and modernizing infrastructure).</p> <p>We continue to convert our sites around the world to be powered by 100% renewable energy.</p> <p>We continue to seek alternative energy sources at all 3M sites, including solar, wind, and projects like utilized excess steam.</p>	<p>3M Corporate Energy Policy</p>	<p>Improve energy efficiency, indexed to net sales, by 30% by 2025</p> <p>Increase renewable energy to 50% of total electricity use by 2025 and to 100% by 2050</p>	 <p>7.3</p>
3	Air quality	<p>Where required or not, we track volatile organic compounds (VOC) usage and significant source emissions to identify the best opportunities for our reduction efforts. We track and report emissions based on raw material usage, engineering estimates, published emission factors, continuous emission monitoring systems, and stack test data.</p> <p>Where we can't reduce emissions at the source, we install and maintain air emission control equipment as required by federal, state, and local regulations.</p>	<p>EHS Management Standard</p>	<p>Require a Sustainability Value Commitment (SVC) for every new product†</p>	 <p>3.9</p>  <p>11.6</p>

Figure 2: The Sustainability priorities “Science for Climate”

Sustainability priorities (cont.)

Science for Community




Tier	Topic	Our actions	Policies & context	Goals & commitments	Related SDG
1	Health and safety of employees and contractors	3M's approach to managing and ensuring workplace safety and human rights within our own business is guided by the 3M Code of Conduct. We implement our human rights and workplace safety programs through our global policies, management system, assessments, audits, training, and metrics tracking.	Human Rights Policy Safety and Health Policy EHS Management Standard 3M's Code of Conduct Responsible Minerals Policy Supplier Responsibility Code Sustainable Forestry 3M named as one of the World's Most Ethical Companies by Ethisphere Institute in 2023 for 10th consecutive year Supplier Diversity	Drive supply chain sustainability through targeted raw material traceability and supplier performance assurance by 2025 Provide training to 5 million people globally on worker and patient safety by 2025	 8.7, 8.8  16.5, 16.7
2	Human rights and labor practices in the supply chain	We expect our suppliers to share our commitment to complying with labor and human resource laws and upholding the human rights of workers. We expect our suppliers to be transparent about their practices around environmental and social governance, including for employment, diversity, community-building, and risk mitigation, and to work with us to transform our shared value chain. Through our policies, processes, and programs, we continually work with suppliers to minimize negative effects on the community, environment, and natural resources while protecting the health and safety of workers and the public.			
2	Responsible sourcing and supplier sustainability				
3	Supplier diversity				
2	Community health, safety, and well-being	We identify potential risks to the environment and to the health and safety of our employees and communities, and we take steps to update processes, product design, and standards to address these risks.	EHS Management Standard Our partnership with Clean Air Asia Mitigating the Risk of Infectious Disease Spread Through Contamination Prevention	Invest cash and products for education, community, and environmental programs by 2025 Provide training to 5 million people globally on worker and patient safety by 2025 Provide 300,000 work hours of skills-based volunteerism by 3M employees to improve lives and help solve society's toughest challenges by the end of 2025 ⁶	 3.c, 3.8
2	Infectious disease and public health issues	For the global health care industry, we take a patient-centered approach to innovation and develop reliable, quality products and solutions.			
3	Employee training, development, and well-being	3M invests in our people's success by fostering a culture of continual learning to help employees develop the skills of tomorrow. We reinforce behaviors that foster an inclusive workplace, and we provide competitive benefits and recognition programs to support employees throughout their career. Work Your Way is our trust-based flexible work model that enables well-being and productivity. 3M promotes a culture of health and well-being for our employees through disease prevention programs, on-site clinical services, employee assistance programs, and comprehensive health care benefits.			

Figure 3: The Sustainability priorities “Science for Community”

DISCUSSION

On 3M’s website they state that “More than ever, we need science to create a more positive future where everyone can thrive. The resilience of our planet, our people, and our economy depends on it” (3M), this orders 3M’s priorities as planet first, then people, and then economy. These priorities were demonstrated to be completely flipped during the proceedings of *3M V Hardwick*. 3M sees no issue with the synthetic chemical PFAS being in a water source because they claim that it isn’t of any “legal, toxicological, medical, or other significance” *Hardwick v. 3M Co.*, Case No. 2:18-cv-1185, 6 (S.D. Ohio Sep. 30, 2019). This demonstrates that 3M does not care if there is PFAS in the water, and therefore they are not putting the planet first. 3M also ignores the findings of scientists and doctors from the Environmental Protection Agency (EPA), the Center for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), VA Public Health, medical schools across the United States such as Harvard and Michigan, Hospitals such as Mayo, and the Food and Drug Administration (FDA). By ignoring the vast amounts of researchers that have found PFAS to be an immune hazard to humans 3M is ignoring science and not prioritizing people. In the case of Mr. Hardwick, 3M repeatedly dismissed his claim for injury, which the Court concluded was “a significant overstatement of what Ohio law requires.” *Hardwick v. 3M Co.*, Case No. 2:18-cv-1185, 11 (S.D. Ohio Sep. 30, 2019), and they stated that “physical injury is not required to demonstrate damages” *Hardwick v. 3M Co.*, Case No. 2:18-cv-1185, 12 (S.D. Ohio Sep. 30, 2019). 3M also fought against the Court in awarding Mr. Hardwick a scientific panel to study his health, claiming that it “was not ‘traditionally accorded by courts of equity’ and thus cannot be accorded now either.” *Hardwick v. 3M Co.*, Case No. 2:18-cv-1185, 9 (S.D. Ohio Sep. 30, 2019). The Court did not take well to 3M’s arguments against the scientific panel and cited both *Day V NLO*, and *Hansen V Mountain Fuel Supply* stating that they could in fact award a scientific panel if Mr. Hardwick was able to “to show by expert medical testimony that [he] [has] increased risk of disease which would warrant a reasonable physician to order monitoring” *Hardwick v. 3M Co.*, Case No. 2:18-cv-1185, 12 (S.D. Ohio Sep. 30, 2019). The dramatic outcry against the appointing of a scientific panel and 3M’s shift to victimizing themselves shows that 3M

does not care for Mr. Hardwick's health, and they are in fact scared of what a scientific panel could find. Despite the fact that 3M denies the hazard that PFAS presents, they have stated their intent to pull PFAS from the market by 2025. If it wasn't a dangerous substance as they so claim, then why spend extra money replacing PFAS, and removing it from the market? 3M's behavior in the courtroom shows that they do not care about the planet or the people who they claim on their website to be committed to serving.

LIMITATIONS

My research time frame was limited to one school semester, so the scope of my research was very narrow to fit this time constraint. I selected only one court case, which leaves 3,999 other 3-M PFAS court cases to examine. The research outcomes from analyzing 3M in the other court cases would show a larger picture of 3M as a company, and in totality could very well change my initial conclusion and the gravity of the current facts. However, if this case is indicative of the other 3,999 cases, then we as consumers need to be holding 3M accountable for their empty words and harmful actions. Other research could be conducted to analyze more corporations as 3M is not the only corporation currently being sued for PFAS water contamination. Research could also be conducted with a shift in focus from the defendants to the plaintiff's rhetorical strategies in PFAS court cases to understand the similarities and difference between the two.

CONCLUSION

This research has demonstrated the importance of not taking a corporation's word for face-value even when they claim to be following a plethora of Sustainable Development Goals. This research also shows that we as consumers need to hold corporations accountable so that we can all have access to clean, safe drinking water. This research also offers insight into the methods of defendants in water contamination cases and for that reason would serve current lawyers, those who plan to be lawyers, and even plaintiffs who are about to enter into a water contamination law suit.

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