UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION

IN RE: E. I. DU PONT DE NEMOURS AND COMPANY C-8 PERSONAL INJURY LITIGATION,

Civil Action 2:13-md-2433
JUDGE EDMUND A. SARGUS, JR.
Magistrate Judge Elizabeth P. Deavers

This document relates to: ALL CASES.

EVIDENTIARY MOTIONS ORDER NO. 6

Defendant's Motion to Exclude Opinion of Carrie Redlich Related Corporate Conduct

This matter is before the Court on Defendant's Motion to Exclude the Opinions and Testimony of Carrie Redlich Based on Extra-Legal Standards of Care, Her Improper Legal Conclusions, and DuPont's State of Mind ("Motion to Exclude Redlich Opinions") (ECF No. 4315), Plaintiff's Memorandum in Opposition to Defendant's Motion (ECF No. 4333), and Defendant's Reply in Support of its Motion (ECF No. 4346). For the reasons that follow, the Court **GRANTS IN PART AND DENIES IN PART** Defendant's Motion in accordance with this Opinion and Order.

I.

Plaintiff David Freeman's case is scheduled for trial on May 31, 2016, and is the second bellwether case to be tried in this multidistrict litigation ("MDL"). Carla Marie Bartlett was the first bellwether plaintiff, and her case was tried in September 2015. It is not disputed that Mr. Freeman is a member of a class ("*Leach* Class") of approximately 3,500 individuals who are permitted under a contractual agreement ("*Leach* Settlement Agreement") to file claims against

Defendant E. I. du Pont de Nemours and Company ("DuPont") based on six human diseases ("Linked Diseases") that they believe were caused by their exposure to ammonium perfluorooctanoate ("C-8" or "PFOA") discharged from DuPont's Washington Works plant. (*Leach* Settlement Agreement ("S.A."); ECF No. 820-8.) C-8 is an organic fluorinated compound that DuPont utilized as a manufacturing aid in the production of Teflon™.

It is undisputed that since it first began using C-8 in the 1950s, DuPont has released C-8 directly into surface waters and unlined landfills. DuPont characterizes the amount released as "relatively low" and maintains that it had no reason to believe that C-8 was harmful to humans; that it demonstrated sound environmental stewardship practices with respect to C-8. (DuPont's Reply in Support of Post Trial Motion at 6, Bartlett ECF No. 159.) "DuPont [posits that it] has always acted responsibly based on the health and environmental information that was available to the industry and regulators about PFOA at the time of its usage." (DuPont's Position Statement on PFOA, http://www.dupont.com/corporate-functions/our-company/insights/article/position-statements/articles/pfoa.html?src=google_search_OctDec2015.)

Mr. Freeman disagrees with DuPont's characterization of the amount of C-8 it released as "relatively low," citing to evidence that DuPont released the C-8 directly into surface waters and unlined landfills since the 1950s, knowing (from the scientific and medical information available) that C-8 is biopersistent and bioaccumulative such that its slow degradation in the human body and in the environment cause a small amount of the chemical to accumulate to a large amount. Mr. Freeman's position is that because DuPont knew or should have known that C-8 was harmful, it should have stopped using C-8 as a processing aid or disposed of it through incineration or in specially lined chemical landfills.

In 2000, Mr. Freeman was diagnosed with testicular cancer, which is a Linked Disease. (http://www.c8sciencepanel.org/study.html) ("[T]he Probable Link reports [are] presented in detail in scientific articles (follow link [on the C-8 Science Panel website to the] Study Publications."). Mr. Freeman's oncologic surgeon performed a "right radical orchiectomy" ("surgical extraction of his right testis and teratoma") and Mr. Freeman "underwent a ten-year follow-up protocol which involved frequent observation via x-rays, CAT scans, and tumor markers." (Expert Report of Robert Bahnson, M.D., F.A.C.S. at 3, ECF No. 4311-1.)

Because Mr. Freeman is a member of the *Leach* Class and he suffered from a Linked Disease, the *Leach* Settlement Agreement permits him to pursue the claims "for personal injury and wrongful death, including but not limited to any claims for injunctive relief and special, general and punitive and any other damages whatsoever associated with such claims, that . . . relate to exposure to C-8 of Class Members." *Id.* In the *Leach* Settlement Agreement, DuPont agreed not to contest that "it is probable that exposure to C-8 is capable of causing a" Linked Disease in the defined group of individuals that constitutes the *Leach* Class. (S.A. § 1.25.) Thus, DuPont concedes that C-8 is capable of causing Mr. Freeman's testicular cancer. *Id.* at § 3.3. It is Mr. Freeman's burden to show that C-8 did in fact cause his testicular cancer. *Id.*

Mr. Freeman filed claims against DuPont for negligence and for punitive damages. To prove his negligence claim, Mr. Freeman must show that (1) DuPont owed him a duty of care; (2) DuPont breached its duty of care to him; and (3) he suffered an injury as a proximate result of DuPont's breach of the duty of care. *Menifee v. Ohio Welding Prods., Inc.*, 15 Ohio St.3d 75 (1984). To prove the existence of a duty, Mr. Freeman must show that a reasonably prudent person would have foreseen that injury was likely to result to someone in Mr. Freeman's position

from DuPont's conduct. *Id.* at 77. Mr. Freeman alleges that any reasonably prudent person would have foreseen that injury would likely result from the release of C-8 in the amount and for the duration of time that DuPont released the chemical directly into surface waters and unlined landfills.

In its defense, DuPont asserts, *inter alia*, that it owed no duty to Mr. Freeman. DuPont maintains that it "neither knew, nor should have known, that any of the substances to which [the *Leach* Class was] exposed were hazardous or constituted a reasonable or foreseeable risk of physical harm by virtue of the prevailing state of the medical, scientific and/or industrial knowledge available to DuPont at all times relevant to the claims or causes of action asserted by [the *Leach* Class]." (DuPont's First Amended Answer to Freeman Compl. at 4; ECF No. 124-1.)

The parties hotly dispute what health and environmental information that was available to the industry and regulators about PFOA, what the toxicological and epidemiological studies on C-8 showed, and whether DuPont demonstrated sound environmental stewardship practices with regard to C-8, or whether DuPont instead purposefully utilized scientific testing methods that would provide inaccurate results so that it could continue using C-8 even though it was known to be harmful. DuPont and Mr. Freeman have retained experts to opine on whether DuPont conformed to the industry standards based upon the state of the medical, scientific, and/or industrial knowledge that was available to DuPont at all times relevant to the claims or causes of action asserted by the *Leach* Class. The Court refers to these witnesses as "corporate conduct" experts.

A. DuPont's Corporate Conduct Experts

For context, the Court reviews DuPont's corporate conduct experts' opinions and testimony relevant to the issues currently before the Court.

Shane A. Snyder, Ph.D.,[1] provides:

1. "From before the 1980s and forward, DuPont has been proactive in continuously pursuing increasingly robust, sensitive, accurate, precise, and reproducible analytical methods for measuring PFOA in media, including water."

2. DuPont's actions in sampling community drinking water for C-8 in 1984 were "logical and sensible, and demonstrate[] their continued attempts to obtain better sensitivity and reliability."

3. DuPont C-8 water sampling data "show the continued desire from DuPont for the most accurate, reliable, and sensitive analytical methods possible for identifying and quantifying PFOA in water."

4. "DuPont's decision to work with CH2M Hill was logical and demonstrates good stewardship in addressing concerns regarding PFOA in the environment."

5. "DuPont was diligent in looking for and developing the best methods available to analyze for low levels of PFOA in various media. The methods that DuPont used over the years were appropriate for the periods of their use, and gave reasonably accurate results within the limits of the technology available at the time. DuPont switched laboratories over the years for good reasons, in efforts to get more accurate, more specific and less variable results, with lower levels of detection. DuPont repeatedly was active in developing better technology to improve analytical methods and get more accurate results. DuPont insisted on good QA/QC methods, above what DuPont was required to do by EPA methods."

6. "DuPont was highly proactive in continually seeking improved methodologies for measuring PFOA."

(Snyder Report at 11–31, ECF No. 2807-5.)

Thomas C. Voltaggio[2] states:

---

[1] Dr. Snyder holds a Bachelor of Arts degree in Chemistry and a Doctor of Philosophy in Zoology and Environmental Toxicology. (Snyder Report at 6.) Dr. Snyder is the Vice-President and Director of Total Environmental Solutions, Inc. He has "conducted environmental research for more than 20 years and has acted as an environmental consultant for over 15 years." (Snyder Report at 6.) He has lectured and published extensively in those areas.

[2] Mr. Voltaggio has a B.A. in Chemical Engineering and a M.A. in Management Science. He worked as a federal environmental regulator, with over thirty years of experience in the United States Environmental Protection Agency in compliance and enforcement, hazardous waste remediation and regulation, and air and water pollution programs. (Voltaggio Report at 2, 6.)

1. "In the 1970s, 1980s and 1990s, without any regulatory requirements or actions, and despite not being the manufacturer of PFOA, DuPont was proactive and implemented its own plan for environmental stewardship of PFOA. This included voluntarily communicating with regulatory agencies about PFOA although not specifically required under then-existing regulations, and implementing a number of measures designed to substantially reduce exposure to PFOA in the workplace and in the community. DuPont took these actions despite recognition that available scientific literature on human health effects did not establish any causal connection to any human disease."

2. "DuPont has voluntarily entered into agreements with regulatory agencies to study PFOA and to take extensive measures to reduce human exposure. The Company's voluntary actions have been proactive and consistent with good stewardship and leadership principles."

3. "DuPont's effluent discharges of PFOA at Washington Works have been lawful and permissible under applicable regulatory permits."

4. "Since PFOA was not a hazardous waste within the meaning of [the Resource Conservation and Recovery Act] RCRA, no regulatory control for that compound was required, and DuPont had no regulatory or statutory requirement to identify PFOA as needing to meet RCRA requirements."

5. "DuPont exhibited a diligent process in working with EPA under RCRA. Moreover, DuPont voluntarily provided information about PFOA and its presence in the environment at Washington Works even though PFOA was not regulated under RCRA. DuPont's actions were proactive, and demonstrated sound environmental stewardship practices with respect to PFOA."

6. "Based upon my decades of experience with hundreds of companies in analogous situations, it is my opinion as a former regulator that DuPont was proactive and much more active and diligent than the majority of companies in terms of devoting resources to understanding and furthering the available science regarding potential effects of PFOA on human health and the environment, implementing controls, and reducing exposures. Contemporaneous records demonstrate that DuPont has endeavored to apply the best science at its disposal to understand and minimize exposures to PFOA at the plant and in the community . . . DuPont has shown leadership and gone beyond the regulatory requirements and the typical conduct of most companies in efforts to develop a safe environment for its workers and the community. DuPont's efforts are far more proactive than most of the companies with which I have dealt."

7. "DuPont was also proactive in responding as new information was received relating to PFOA."

8. "DuPont acted quickly, proactively, and beyond what was required under the regulations."

9. "Additionally, as the regulatory interest in emerging science on PFOA increased, DuPont demonstrated leadership in voluntary commitments for global environmental stewardship for PFOA, furthering scientific understanding of all aspects of the compound, and worked with the regulatory agencies to not only understand the sources of PFOA that have entered the environment from multiple processes by multiple companies, but also took measures to reduce community exposure in in the areas surrounding DuPont's Washington Works facility."

(Voltaggio Report at 5, 16, 19, 22, 24 – 25, 28, 31, 32, ECF 2807-7.)

Robert W. Rickard, Ph.D., D.A.B.T.[3] offers:

1. "[T]here were no data prior to 2011 that demonstrated PFOA caused any disease in humans at community levels of exposure."

2. "DuPont has been proactive in looking at potential adverse human health effects from the chemicals it uses, including PFOA."

3. "DuPont was diligent in evaluating new information as it became available . . . DuPont was proactive, and set very conservative guidance standards for PFOA exposures that had many levels of safety factors to protect against adverse health effects to humans."

4. "DuPont proactively reviewed its guidance levels as additional information on potential health effects was received over the years" . . . and "DuPont's communications to employees and public statements regarding the scientific studies on the potential health effects of PFOA have been well grounded in the science related to PFOA."

5. "In terms of the state of the science over the years, at no time in or prior to 2000 . . . did the toxicology studies conducted on PFOA prove that it caused clinically adverse health effects in humans."

(Rickard Report at 4, 5, 8, ECF No. 4310-2.)

---

[3] Dr. Rickard is a Diplomat of the American Board of Toxicology and holds a Ph.D in toxicology and an M.S. in microbiology. (Rickard Report at 2, ECF No. 4310-2.) Dr. Rickard has worked in toxicology for over thirty-five years and has worked for DuPont in various research and management positions for over thirty years. *Id.*

B. Carrie Redlich M.D., M.P.H.

DuPont directs its current motion to the exclusion of the report and testimony of Dr. Redlich, who was obtained as an expert by Mr. Freeman.[4] Mr. Freeman offers Dr. Redlich's expert report (Redlich Report, ECF No. 4311-2) and her deposition testimony (Redlich Dep., ECF No. 4312-1) for her "opinions that include standards of care applicable to DuPont's actions arising from commonly-accepted principles and standards of environmental medicine." (Pl.'s Mem. in Opp. to Def.'s Mot. to Exclude Redlich Opinions at 10.) In his brief, Mr. Freeman indicates:

> [He] has proffered her to provide opinions as to the biopersistence and toxicity of C-8, the state of knowledge as to such issues during relevant times, and DuPont's compliance with applicable standards of conduct as applied in Dr. Redlich's fields of specialty "from an environmental medicine standpoint." As explained by Dr. Redlich during her deposition, her intent was to address "the importance of biopersistence," (Redlich Dep 71:6-8); "does this chemical biopersist and what the significance of biopersistence is," (*id.* 130:20-23; *see also id.* 115:20-117:24), within the field of occupational, preventive, and environmental medicine. In that regard, Dr. Redlich compared what DuPont knew and did against the standard of care in the field during the relevant times. Dr. Redlich has extensive experience evaluating and opining on such issues. (*Id.* 178:1-180:14 ("[T]his is something I do on a daily basis."); *see also id.* 181:10-183:1, 184:2-16, 189:7-17, 190:4-10 ("[I]n terms of assessing the standard of care for companies and looking at their risks of their operations and their impact on the surrounding community is something that . . . I address quite frequently."), 190:19-25 (Dr. Redlich describes situation where she has "given an opinion on standard of care that involved neighbors to an industrial facility"), 191:20-196-7 (Dr. Redlich describes prior consulting for Alcoa Aluminum in a similar situation).)

Id. at 14.

---

[4] Mr. Freeman proffers other corporate conduct experts who are not the focus of DuPont's current motion. While DuPont does note that Mr. Freeman's "other 'corporate conduct' experts also should be precluded from testifying regarding extra-legal duties, legal conclusions and DuPont's motives," those experts are the subject of two other *Daubert* motions. (ECF Nos. 4319, 4321.) The Court, therefore, will not address DuPont's arguments related to those other experts here.

1. Dr. Redlich's Qualifications

In her report, Dr. Redlich sets forth her qualifications. (Redlich Report at 1, Ex. 1 Curriculum Vitae.) Dr. Redlich is an occupational and environmental health physician with more than thirty years of experience. She is currently a Professor of Medicine at the Yale University School of Medicine, working primarily at the Yale Occupational and Environmental Medicine Program where she currently serves as Program Director. Dr. Redlich received her medical degree and her master's degree in public health from Yale University School of Medicine. Dr. Redlich is board-certified in internal medicine, occupational medicine, and preventive medicine, and is licensed to practice medicine in Connecticut and Washington. She completed her post-doctoral work in preventive and occupational medicine at several different medical centers, including Yale-New Haven Hospital and Yale School of Medicine. Dr. Redlich has published extensively on the topics of occupational and environmental medicine, and has published approximately 90 articles in peer reviewed journals on a variety of subjects related to toxic exposure, occupational medicine, and environmental and preventive medicine in general.

Dr. Redlich has held numerous academic positions in this field, and has provided consultation and advisory services to numerous national and international government and government-sponsored agencies, including the U.S. Centers for Disease Control, the U.S. National Academy of Sciences, the U.S. National Institute of Health, the Agency for Toxic Substances and Disease Registry, the National Institute of Occupational Safety and Heath, the U.S. Food and Drug Administration, and the U.S. Environmental Protection Agency, as well as numerous private and industry-funded organizations. Dr. Redlich explained in her deposition that her training allows her to "run the Yale Occupational and Environmental Medicine Program, and we address health effects that affect all, the whole person, all organs, all types of diseases."

(Redlich Dep. 49–51); *see also id.* 105 ("in many of the activities I do such as editing a major textbook, I address . . . occupational and environmental problems of the whole person"); *see also id.* 200–202.

Dr. Redlich has specifically studied and advised clients on the potential health effects of C-8 exposure and has "been familiar with PFOAs [] for many years." (Redlich Dep. 27); *see also id.* 54 ("I had literature and have addressed . . . questions related to C-8 before I was ever contacted by" Mr. Freeman's counsel), 57–59 ("questions about adverse health effects related to C-8 is not something new. And it is the type of chemical concern that I see patients with. [S]o it is not that I have just learned about C-8 a few months ago."), 59–60 ("I had seen patients with concerns about health effects of a range of chemicals including C-8 . . . I have seen patients with concerns about C-8, among other exposures."). Dr. Redlich has her own, independent research files on PFOA, which were created before she was retained for this case, and which she looked to for additional data in connection with her expert services in this case. *Id.* 12–13.

Dr. Redlich has familiarity with how "a number of other companies . . . have used [PFOA], both in the United States and abroad," including how the manufacturer of PFOA – 3M – handled the chemical. *Id.* 19, 29, 32, 33; *see also id.* 26–27 (confirming her work "over many years" with "a number of different chemicals and other companies").) From the "piece[s] of information among many that informed" her opinions, Dr. Redlich derived an understanding of how other companies making or using C-8 disposed of C-8 or handled "concerns about health effects." *Id.* 34, 35. In particular, Dr. Redlich confirmed that "the ability to dispose of [C-8] and the fact that there were different ways to dispose of it and that there was technology available to do that was something that [she] considered among many other pieces of information in coming to [her] conclusions." *Id.* 35.

2. Dr. Redlich's Opinions

In her report, Dr. Redlich explains biopersistence:

> "Biopersistence and biodurability have the potential to influence the long-term toxicity and hence pathogenicity of particles that deposit in the body. Therefore, biopersistence and biodurability are considered to be important parameters for the risk assessment of particles and fibres." The same is true for organic chemicals. Chemicals which are biopersistent impact the true "dose" of the chemical received as the increases exposure-time multiplied by the concentration results in the true dose measurement: "i.e., dose = concentration x exposure time."

(Redlich Report at 4) (citations omitted).

Dr. Redlich also explains the relationship between toxicology and harm to humans:

> Animal studies are useful for the purpose of understanding whether a chemical agent is likely to induce harm in humans. Because it is not ethical to prospectively subject humans to toxins for the purpose of seeing whether there is an effect, animal studies are very useful for helping researchers predict whether a chemical has the ability to cause some type of harm in humans.

Id. at 9.

Dr. Redlich reviewed the historical record of DuPont's conduct with regard to C-8 from the 1960s forward, published studies on C-8, her own files on C-8 and other chemicals, and "relied upon [her] clinical experience, [her] education, training, and expertise in the field of environmental medicine" and concluded:

> (1) DuPont knew or should have known that C-8 was a biopersistent compound.
>
> (2) DuPont knew or should have known that C-8 does not biodegrade in the environment.
>
> (3) DuPont knew or should have known that C-8 can bioaccumulate.
>
> (4) DuPont knew or should have known that C-8 was a toxic material.
>
> (5) DuPont knew or should have known that animal study data showed that C-8 is a carcinogen.

> (6) DuPont knew or should have known that DuPont was emitting C-8 into the environment in a manner that resulted in C-8 contamination of drinking water supplies near the Washington Works Plant.
>
> (7) DuPont knew or should have known that organic compounds which are biopersistent and toxic are likely to cause serious human harm because of the accumulation of dose and persistence of exposure.
>
> (8) Through its actions and omissions, DuPont acted with a conscious disregard for the rights and safety of persons that had a great probability of causing substantial harm.

(Redlich Report at 2–3.) Dr. Redlich also opines:

> Because DuPont knew or should have known that C-8 was a biopersistent toxin, and because DuPont knew or should have known that it needed to eliminate the emissions of C-8 into the air and Ohio River, it is my opinion that not only did DuPont fail to comply with the environmental medicine standard of care, but also acted with a conscious disregard for the rights and safety of people in the surrounding communities whom were at risk of being harmed by DuPont's actions and omissions.

Id. at 16–17.

DuPont moves for exclusion of all of Dr. Redlich's opinions and testimony under Rule 702 of the Federal Rules of Evidence and *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993). DuPont additionally asks for exclusion *in limine* of Dr. Redlich's opinion testimony under Federal Rule of Evidence 403.[5]

II.

The Court first considers DuPont's request for exclusion under Rule 702 and *Daubert*.

A. Standard

Rule 702 of the Federal Rules of Evidence governs the use of expert testimony, providing:

---

[5] Dr. Redlich's opinion testimony was also the subject of a motion *in limine* filed by DuPont. (ECF No. 4315.) At the May 6, 2016, *Motions in Limine Hearing*, the Court indicated that the issues raised in that motion would be resolved by this Opinion and Order.

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702.

This rule, as amended in 2000, reflects the Supreme Court's decisions in *Daubert* and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999). Fed. R. Evid. 702 advisory committee's notes, 2000 amend. ("In *Daubert* the Court charged trial judges with the responsibility of acting as gatekeepers to exclude unreliable expert testimony, and the Court in *Kumho* clarified that this gatekeeper function applies to all expert testimony, not just testimony based in science.").

This Court has broad discretion to determine whether to admit or exclude expert testimony. *In re Scrap Metal Antitrust Litig.*, 527 F.3d 517, 528 (6th Cir. 2008) ("[W]e will not substitute our own judgment for that of the district court and will reverse an evidentiary decision "only where we are left with a definite and firm conviction that [the district court] committed a clear error of judgment." (citation omitted)). The burden is on the party proffering the expert report and testimony to demonstrate by a preponderance of proof that the opinions of their experts are admissible. *Nelson v. Tenn. Gas Pipeline Co.*, 243 F.3d 244, 251 (6th Cir. 2001). "As a general matter, 'rejection of expert testimony is the exception, rather than the rule.'" *Little Hocking Water Ass'n, Inc. v. E.I. du Pont de Nemours & Co.*, No. 2:09-CV-1081, 2015 WL 1055305, at *14 (S.D. Ohio Mar. 10, 2015) (citing *In re Scrap Metal,* 527 F.3d at 530); *see also* Evidentiary Motions Order No. ("EMO") 2 at 4.

Determining the admissibility of expert testimony entails a flexible inquiry and any doubts should be resolved in favor of admissibility. *Daubert,* 509 U.S. at 594; Fed. R. Evid. 702

advisory committee's notes, ("[A] review of the case law. . . shows that rejection of the expert testimony is the exception rather than the rule."); *Jahn v. Equine Services, PSC,* 233 F.3d 382, 388 (6th Cir. 2000) (stating that in *Daubert* "[t]he Court explained that Rule 702 displays a liberal thrust with the general approach of relaxing the traditional barriers to opinion testimony" (internal quotations omitted)). Additionally, if the evidence is deemed admissible by a court, but it is ultimately found "insufficient to allow a reasonable juror to conclude that the position more likely than not is true, the court remains free to direct a judgment." *Daubert*, 509 U.S. at 596; *see also* Fed. R. Civ. P. 50.

B. Analysis

DuPont argues that Dr. Redlich's opinions should be excluded in their entirety because:

> (1) her opinions are wholly and improperly based on her self-defined "environmental medicine standard of care," which she concedes is a reiteration of the extra-legal "precautionary principle," and is not the relevant legal standard by which DuPont's conduct was governed at any time; (2) she espouses legal conclusions that are not appropriate for expert testimony and should be reserved for the jury; and (3) she improperly attempts to speculate regarding the intent behind DuPont's corporate decision-making with respect to C-8 and the state of mind of company employees in taking or not taking certain actions. Moreover, even if Dr. Redlich's opinions were appropriate for expert testimony (they are not), [(4)] the opinions that she seeks to offer are far outside her scope of expertise, and she did not employ any reliable methodology in reaching them.

(Def.'s Mem. in Support of its Mot. to Exclude Redlich Opinions at 1–2.)

1. Environmental Medicine Standard of Care

DuPont contends that "Dr. Redlich's entire testimony is premised on her self-defined 'environmental medicine standard of care,' which she concedes is nothing more than a reiteration of the 'precautionary principle.'" (Def.'s Mem. in Support of its Mot. to Exclude Redlich Opinions at 6–7.) DuPont further contends that the environmental medicine standard of care is a "subjective, ethical, extra-legal standard, which is not an appropriate subject for expert

testimony, [and] is not relevant to Mr. Freeman's claims . . . ." *Id.* at 7. The Court groups its analysis of these arguments into two categories: (a) extra-legal opinions, and (b) subjective opinions on ethics and morality.

a. "Extra-legal" Opinions

First, the Court notes that there is no dispute that the standards of conduct employed in environmental medicine are not the relevant legal standard. Indeed, both DuPont and Mr. Freeman offer experts that opine on industry standards not because they are coterminous with the legal standard, but rather to inform whether a legal duty was breached. That is, Mr. Freeman must prove that any reasonably prudent person would have foreseen that injury was likely to result to someone in his position from DuPont's conduct, *i.e.*, DuPont had and breached a legal duty. DuPont maintains that it conformed to the industry standards based upon its appropriate use of the medical, scientific, and/or industrial knowledge that was available to DuPont at all times relevant to the claims or causes of action asserted by the plaintiffs in this MDL. Thus, expert testimony on the state of the medical, scientific, and/or industrial knowledge available to DuPont is not only helpful to the jury, but actually *necessary* to evaluate DuPont's defense.

Courts have generally permitted expert testimony regarding standards of care in situations where the testimony is "distinctively related to a profession beyond the understanding of the average layman." *Betz v. Highlands Fuel Delivery, LLC*, No. 5:10-cv-102, 2013 U.S. Dist. LEXIS 13290, at *17–18 (D. Vt. Jan. 31, 2013) (discussing the standard of care for refurbishment and recertification of propane tanks as "not something within the knowledge of the average layperson"); *In re Baycol Products Litigation*, 532 F. Supp. 2d 1029, 1054 (D.Minn. 2007) (permitting an expert "to testify as to the standard of care for pharmaceutical companies");

Cook v. Rockwell Intern. Corp., 580 F. Supp. 2d. 1071, 1149 (D. Colo. 2006) (rejecting defendant's argument that expert's "testimony is no more than a summary of documentary evidence" and finding that "[s]afety and operating practices at a nuclear production facility are . . . highly specialized matters not within the province of an ordinary juror"); *Nat'l. Tel. Coop. Assoc. v. Exxon*, 38 F. Supp. 2d 1, 10 (D.C. 1998) (allowing standard of care expert in environmental contamination case where the issues are "so distinctly related to some science, profession or occupation as to be beyond the ken of the average layperson."); *In re Diet Drugs*, No. MDL 1203, 2001 WL 454586, *10 (Feb. 1, 2001) (accepting that there were relevant "pharmaceutical industry standards of conduct," but excluding several experts as unqualified to opine on them); *but see in In re Welding Fumes Product Liability Litigation* suggested. No. 1:03-CV-17000, MDL No. 1535, 2010 U.S. Dist. LEXIS 146067, at *143, n. 124 (N.D. Ohio June 4, 2010) ("That Dr. Hoffman's opinions are likely to confuse the jury is highlighted by his seventh ethical principle: 'A corporation should do more than comply with applicable laws and regulations, particularly if circumstances dictate that possible harm could result from a failure to do more.'").

Additionally, in similar cases, defendants have filed summary judgment motions where a plaintiff does not proffer an expert opinion on the industry standards to provide a basis for a jury to conclude whether or not a legal duty was breached. *Betz v. Highlands Fuel Delivery,LLC*, No. 5:10-cv-102, 2013 U.S. Dist. LEXIS 13290, at *3 (D. Vt. Jan. 31, 2013) (seeking summary judgment because "Plaintiffs do not have an expert opinion on the applicable standard of care"); *In re Yasmin & Yaz (Drospirenone) Marketing, Sales Practices & Prods. Liab. Litig.*, 3:09-md-02100, MDL No. 2100, 2011 U.S. Dist. LEXIS 145593, at *36–37 (S.D. Ill. Dec. 16, 2011) (finding that expert testimony on the standard of care in the pharmaceutical industry is

appropriate "because of the complex nature of the process and procedures and the jury needs assistance understanding it"); *O'Neal v. Dep't of Army*, 852 F. Supp. 327, 335 (M.D. Pa. 1994) (finding for defendant because the plaintiff failed to offer testimony regarding the appropriate standard of care to which the defendant should have been held, while the government offered uncontradicted testimony that all toxic chemical handling was in accordance with then-existing industry standards in groundwater contamination case).

In the instant action, for the jury to evaluate the state of the medical, scientific, and/or industrial knowledge available to DuPont requires review of the information available in those fields from the 1950s forward. This endeavor requires an understanding of the scientific and medical data available, and of the efficacy of the studies and scholarship done in those fields. The scientific studies reflect analytical detection limits for quantification of chemicals utilizing the precision, accuracy, representativeness, completion, and comparability of the methods available and those utilized by DuPont. The historical record is enormous, containing evidence of DuPont's conduct that began over fifty years ago and involves well over a decade of complex litigation, millions of documents, hundreds of witnesses operating in dozens of different regulatory, scientific, and technical fields, including, among others, toxicology, epidemiology, risk assessment, medicine, occupational health, regulatory compliance, public health, and chemical industry practices and policies. As this Court has previously stated:

> Indeed, this is the very same factual record that DuPont utilizes with its own expert witnesses so that they may identify and summarize the key facts and to help the jury understand DuPont's contention that it not only complied with all applicable industrial and scientific standards of care, but that it was proactive in that regard and demonstrated exemplary conduct throughout its entire history. As the Trial Plaintiffs highlight,
>
> > DuPont itself has *expressly acknowledged* in the context of prior C-8 drinking water contamination litigation that "[t]here is little doubt that . . . ***whether DuPont's stewardship of PFOA was***

> ***consistent with the industry's best practices, falls outside the 'everyday knowledge and experience of a lay juror'***" and that expert "testimony on the reasonableness of [DuPont's] conduct may be helpful to a jury in understanding otherwise complex issues." (Plaintiffs' Standard of Care Aff. Ex. L at 13.)

(Trial Pls.' Mem. in Opp. at 35) [(emphasis added)].

> DuPont further noted [in prior litigation]:
>
> [T]estimony on the reasonableness of a sophisticated manufacturer in its use and stewardship of an unregulated polyfluoromer chemical [C-8] within the framework of existing state and federal regulatory and remediation programs and the then-governing industry standards and best practices" derived from an expert's "specialized and technical knowledge, will assist the trier of fact in determining a highly complex and nuanced aspect of this case, and is the type of opinion testimony contemplated for submission to the jury under Rule 702 and *Daubert*." (*Id.* Ex. L at 14-15 (emphasis added).)

Id. (emphasis removed).

(EMO 2 at 9–10, MDL ECF No. 4129); (EMO 3, Def.'s Mot. to Exclude Expert Opinions Related to Narrative Testimony, MDL ECF No. 4178) (reviewing the varied and complex nature of the historical record).

As stated in more detail above, DuPont offers standard of care testimony based upon its asserted appropriate use of the medical, scientific, and/or industrial knowledge that was available to it. (Snyder, Voltaggio, Rickard Reports) (*e.g.,* it "was much more active and diligent than the majority of companies in terms of devoting resources to understanding and furthering the available science regarding potential effects of PFOA on human health and the environment, implementing controls, and reducing exposures"; "DuPont has shown leadership and gone beyond the regulatory requirements and the typical conduct of most companies in efforts to develop a safe environment for its workers and the community"; "continuously pursuing increasingly robust, sensitive, accurate, precise, and reproducible analytical methods for

measuring PFOA in media"; and that it "demonstrated leadership in voluntary commitments for global environmental stewardship for PFOA."). In other words, DuPont's experts consider the industry standards by which a company's conduct is evaluated opine on DuPont's conduct in relation to those standards, *i.e.*, it devoted more resources, sought even better science, and went beyond what was required of it. The MDL plaintiffs seek to introduce testimony to dispute DuPont's position, which DuPont supports with its own experts' opinions.

Dr. Redlich has specialized knowledge regarding how sophisticated manufacturers use and steward C-8 and other regulated and unregulated chemicals within the framework of the then-governing industry standards and best practices. She has specialized knowledge of, *inter alia*, biopersistence, toxicity of chemicals, and how animal studies relate to harm of humans. Indeed, her opinions on each of those issues are at odds with the opinions of DuPont's expert Dr. Rickard, who interprets the historic data regarding the scientific and medical studies to conclude that DuPont had no reason to know that C-8 was a toxic chemical capable of causing harm to humans. Therefore, Dr. Redlich's testimony will be helpful to the jury.

b. Opinion on Ethics and Morality

In addition to DuPont's contentions regarding the environmental medicine standard of care's status as a non-legal standard, DuPont objects to Dr. Redlich's opinion testimony as irrelevant because it is based on "subjective standards of ethics and morality." (Def.'s Mem. in Support of its Mot. to Exclude Redlich Opinions at 1.) Specifically, DuPont asserts:

> Dr. Redlich's opinions derive entirely from her self-defined "environmental medicine standard of care," which she acknowledges is based on the "precautionary principle." This is not . . . a commonly-accepted industry standard that in any way governed DuPont's actions or inactions at any relevant time. Rather, Dr. Redlich would have this jury measure DuPont's conduct against quintessential extra-legal, ethical, and subjective moral standards that this Court has already found to be ***inadmissible***. *See* Aug. 24, 2015 Motions Hearing Tr. in *Bartlett* [ECF No. 4209] at 99:8; EMO No. 2 at 27.

. . . .

> From a policy standpoint, "[i]mposition of a duty on the basis of aspirational policies like this one would discourage worthy but non-mandatory efforts to promote safety and amount to a rule that makes law out of the cliché, '[n]o good deed goes unpunished' . . . [and] would also result in almost unlimited potential liability." *McGee v. Home Depot*, 2013-Ohio-4623, at *13 (Ohio Ct. App. Oct. 18, 2013).

Id. at 1, 9, n. 6. DuPont's arguments are rejected for four reasons.

First, as to DuPont's contention that "Dr. Redlich's opinions derive entirely from her self-defined 'environmental medicine standard of care,'" DuPont further notes that "it is unclear whether environmental medicine—which is largely 'preventive' and/or 'precautionary' in nature and deals with 'uncertainties' and the frontiers of scientific knowledge—can even be considered generally accepted by the scientific community." *Id.* at 1, n.1 (citing *Willis v. Conopco, Inc.*, 108 F.3d 282, n.1 (11th Cir. 1997) (noting that expert admitted in deposition that 'environmental medicine is not considered mainstream medicine and is not generally accepted as scientifically valid by 'mainstream' medical community'))." *Id.* at n.1. The Court disagrees with DuPont's assessment that Dr. Redlich herself created an environmental medicine standard of care solely for the purpose of this case, and DuPont's suggestion that environmental medicine is not generally accepted as scientifically valid by the mainstream medical community.

As Mr. Freeman correctly points out, review of Dr. Redlich's Curriculum Vitae reflects that the field of environmental medicine not only exists but is, and has been for quite some time, a well-respected scientific discipline recognized among the most prestigious scientific and academic institutions on earth. (Redlich Report Ex. A at 1) (referencing an "Occupational and Environmental Medicine Program" at Yale University), (referencing graduate-level courses at Yale University on "Introduction to Occupational and Environmental Medicine), (referencing well-respected peer-review journal, entitled "Journal of Occupational and Environmental

Medicine"), and (referencing well-known "Textbook of Clinical Occupational and Environmental Medicine). And, the case upon which DuPont relies is one in which a single defense expert opined on environmental medicine in a deposition almost a decade ago, which is simply unpersuasive to support the proposition that environmental medicine is not generally accepted as scientifically valid by the mainstream medical community.

Second, with regard to DuPont's assertion that the environmental medicine standard of care is nothing more than the precautionary principle, DuPont further argues:

> Dr. Redlich relies on her so-called, self-described "environmental medicine standard of care" based on the "precautionary principle," which she claims "provides that a manufacturer should resist the use and emission of chemicals the health effects of which are either disputed or unknown." Redlich Report at 3. Under this "principle"—which was not fully developed until 1992 at the earliest and has never been adopted into any applicable law—when an activity "raises threats to the environment or human health, precautionary measures should be taken and the manufacturer should not wait for proof to certainty of a scientific cause and effect relationship." *Id.* at 4 & n.3.

(Def.'s Mem. in Support of its Mot. to Exclude Redlich Opinions at 4.) DuPont highlights Dr. Redlich's testimony in which she indicates that "really the standard of care from an environmental perspective is really the precautionary principle" and that the "precautionary principle" is "sort of an overarching principle of decision making"—a "guiding principle" reflected in a "whole group of information" *Id.* at 5 (citing Redlich Dep. at 209, 211, 293–94).

Mr. Freeman responds:

> Contrary to DuPont's spin of Dr. Redlich's report and her deposition testimony, Dr. Redlich explained that the standard of care in the field of environmental medicine dates back far before 1992, borrows from and incorporates concepts often referred to *in shorthand* as arising out of the basic "precautionary principle," *including* concepts addressed in that 1992 document, and is actually a synthesis of *many* different concepts from the field of environmental medicine scattered among *many* sources and authorities. (*See e.g.,* Redlich Dep 208:6-212:4 (Dr. Redlich explains how the standard of care is not just one principle adopted from one document but is derived from, found within, and "underlies so many documents"), 290:2-6 (Dr. Redlich disputes that the standard of care "is . . . just . .

> . the precautionary principle," and explains that it is based "on the whole body and practice of occupational environmental health.") (emphasis added), 293:21-294:4 (the standard of care is not based on "one single document").) Dr. Redlich also has explained that she specifically considered the impact and extent of any changes to the standard of care over the time period in question in forming her opinions in this case. (*Id.* 223:17-224:1.) . . . . Dr. Redlich looks to the "precautionary principle" as a single example of what the overarching standards of care aim to achieve. Dr. Redlich confirmed that the "precautionary principle" is essentially a basic framework for companies to follow to assist them in following the standard of care, but not that the "precautionary principle" is, in and of itself, the entire standard of care applicable to DuPont or others.

(Pl.'s Mem. in Opp. to Def.'s Mot. to Exclude Redlich Opinions at 30–31.)

The parties' arguments directed at the precautionary principle's incorporation in or impact on the standards utilized in environmental medicine somewhat misses the mark for the present inquiry. That is, the consideration before the Court is whether Dr. Redlich's expert testimony is relevant under Rule 702 and *Daubert*. Because Rule 702 "requires that the evidence or testimony 'assist the trier of fact to understand the evidence,'" expert testimony "which does not relate to any issue in the case is not relevant and ergo, nonhelpful." *Daubert*, 509 U.S. at 590–91. "In other words, there must be a 'fit' between the proposed testimony and the question(s) presented by the case at bar." *Id.* at 591. Here, just such a "fit" is present.

Dr. Redlich testified that the environmental medicine standard of care is accepted and practiced within the chemical industry and its medical personnel, and that she regularly consulted and advised chemical companies with respect to that standard. (Redlich Dep. at 12–13, 27, 54, 57, 59–60.) She opines on whether DuPont complied with the relevant standard of conduct utilized by similarly-situated chemical companies, testifying that she has "years of experience and a whole knowledge base about occupational environmental medicine," including familiarity with how "a number of other companies . . . have used [PFOA], both in the United States and abroad," and how the manufacturer of PFOA – 3M – handled the chemical. *Id.* at 19, 29, 32–33;

see also id. 26–27 (confirming her work "over many years" with "a number of different chemical and other companies"). Within the "piece[s] of information among many that informed" her opinions, is Dr. Redlich's understanding of how other companies making or using C-8 disposed of C-8 or handled "concerns about health effects." *Id.* 34–35. In particular, Dr. Redlich confirmed that "the ability to dispose of [C-8] and the fact that there were different ways to dispose of it and that there was technology available to do that was something that [she] considered among many other pieces of information in coming to [her] conclusions." *Id.* 35.

DuPont replies:

> [W]hile Plaintiff claims Dr. Redlich should be allowed to assess DuPont's conduct against "industry standards," *see* Opp. at 19, her deposition testimony shows that she cannot identify any company that manufactured or used C-8 other than DuPont and 3M, that she has no real knowledge of what other companies were doing with respect to C-8, and that she has no understanding of how C-8 was viewed by regulatory agencies—in sum, she has no knowledge regarding the industry she purports to opine about, much less the standards applicable to that industry [highlighting her testimony].

(Def.'s Reply in Support of its Mot. to Exclude Redlich Opinions at 14.) Review of the testimony highlighted by DuPont does not support this position.

Instead, the testimony shows that Dr. Redlich was not asked to review every other company that has used or manufactured C-8, nor to know from memory the name of every other company that used or manufactured C-8. Dr. Redlich repeatedly asked to review her records so that she could respond to DuPont's counsel's questions, but was not permitted to do so. This can be seen by this example taken from Dr. Redlich's deposition, in which she was being questioned about her work on this case and whether she "looked into the conduct of other companies that were making or using C-8." (Redlich Dep. at 26.) Dr. Redlich spoke of 3M and its handling of C-8, and then asked to "look over [her] records for all of the pieces of information -- . . . related to 3M." *Id.* at 29. In response, the following occurred:

Q. [from defense counsel] Let me hand you what we marked as Exhibit 7, a blank sheet of paper and a pen. Could you please write down for the jury a list of all the other companies that made C-8?

[Objection from plaintiff's counsel] This is a deposition. You cannot ask her to create things. That was not what the subpoena was directed to. . . . You can ask her questions, but you cannot require the witness to create a written document. So you do not have to answer that, and I instruct you not to answer.

Q. [by defense counsel] Doctor, list all the other companies for the jury that *made* C-8.

A. I wasn't really asked to comment on that, and I am not prepared to.

Q. So you don't know the companies that made C-8?

A. It is not something I have stored in my memory.

Q. And, Doctor, tell the jury the list of all the companies that *used* C-8 besides DuPont.

A. Again I wasn't really asked to comment on that.

Q. So you don't know?

A. I am aware that other companies used it. If you want, I could check in my records.

Q. But sitting here you can't list a single other company other than DuPont and 3M that used C-8?

A. Well, you know, I don't really store up every company that uses every chemical. That's just not the type of detail -- not detail, but that sort of information, you know, if I needed something like that, one could look that up.

Q. So your answer to my question is, no, you don't know the name of any other company that used C-8 other than DuPont and 3M?

A. Let me clarify. I am aware that there are a number of other companies that have used it, both in the United States and abroad. If you wanted, I could look in my records and give you the specific names. That is not something I memorized.

Q. For your work on this case, Doctor, in arriving at your opinions, you did not make any effort to go seek out and learn what other companies were using C-8?

> A. If you would like, I am aware of other companies that have used it. I just -- I don't have the memorized the names of those companies.
>
> Q. And you never knew them; you never – it is not that you don't remember it; you never researched it; right?
>
> A. In terms of you [sic] mean by "researched"?
>
> Q. Looked into what other companies were using C-8?
>
> A. I mean, as I said, I know that there are other companies. If you want, I could look in my notes and give you that information.
>
> Q. Is it your testimony to the jury that you have notes in your records that show the other companies that use C-8?
>
> A. Yes, I do have some documents that refer to other companies that have used it.

Id. at 29–33 (objections omitted).

The mere fact that Dr. Redlich indicated that she was not asked to opine on all of the other companies that have used or manufactured C-8 does not mean that she did not compare DuPont's conduct in handling C-8 with the conduct of other companies using C-8 or other regulated and unregulated chemicals. Indeed, her testimony shows that she in fact did make such comparisons.

Third, the Court is unpersuaded by DuPont's suggestion that Dr. Redlich seeks to impose a standard of conduct based upon aspirational policies that would discourage worthy efforts to promote safety. (Def.'s Mem. in Support of its Mot. to Exclude Redlich Opinions at 9, n.6.) DuPont relies upon *McGee v. Home Depot*, 2013-Ohio-4623, *supra*, for this proposition. However, that case is inapposite. In *McGee*, the plaintiff argued that a legal duty should be imposed upon a company based *only* upon its internal company policy. The situation here is quite different. The standard of conduct assessments made in the field of environmental medicine are not the same as assessing a company's conduct based on its own internal

aspirational policy. Nor is the Court permitting imposition of a legal duty based only upon an aspirational policy. The expert testimony instead relates to the industry standards based upon the state of the medical, scientific, and/or industrial knowledge. These standards will be helpful to the jury in its evaluation of whether DuPont had and breached a legal duty.

Fourth, as to DuPont's argument that this Court has already found this type of information inadmissible, DuPont refers to EMO 2 at page 27. (Def.'s Mem. in Support of its Mot. to Exclude Redlich Opinions at 1.) That testimony, however, is not of the same quality as Dr. Redlich's. In EMO 2, the Court reviewed the testimony of an expert offered by Trial Plaintiffs Bartlett and Wolf, holding:

> The Court also excludes Dr. Siegel's opinions related to the "general duty of care that any company would be expected to fulfill." Dr. Siegel's opinions as to what he "would consider to be an exemplary company, a good corporate citizen, or a company with a strong sense of social responsibility . . . the minimum level at which [he] would expect a company to act if it has a reasonable degree of concern for the health of its surrounding community" are ones appropriate for a jury to determine.

(EMO 2 at 27.)

Dr. Siegel offered a vague, general opinion of what an ethical, moral, or "good corporate citizen" looks like, referring to it as a "general duty of care." This is the type of opinion testimony contained in the cases upon which DuPont relies in its current motion:

> Courts have repeatedly recognized that opinions based on ethical principles—and specifically opinions such as Dr. Redlich's that are based on the precautionary principle—are ***unhelpful*** to a fact-finder and not admissible. *See, e.g.*, *In re Fosamax Prods. Liab. Litig.*, 645 F. Supp. 2d 164, 194 (S.D.N.Y. 2009) (granting motion to exclude expert's opinions concerning ethical standards in clinical trials and holding, *inter alia*, that standards of the Helsinki Declaration are "so vague as to be unhelpful to a fact-finder."); *In re Rezulin Prods. Liab. Litig.*, 309 F. Supp. 2d 531, 543 (S.D.N.Y. 2004) ("[T]he witnesses' opinions regarding ethical standards for reporting or analyzing clinical trial data or conducting clinical trials . . . . Even if charitably viewed as a 'standard,' the testimony nevertheless is 'so vague as to be unhelpful to a fact-finder.'"); *Kadlec Med. Ctr. v. Lakeview Anesthesia Assocs.*, 2006 WL 1328809, at *1 (E.D. La. May 12, 2006), amended

> on other grounds, 2006 WL 1328809 (May 12, 2006) ("The Court remains unpersuaded by plaintiffs' arguments that expert testimony as to defendants' ethical and/or moral duties would be helpful.").

(Def.'s Mem. in Support of its Mot. to Exclude Redlich Opinions at 7–8.)

In contrast to these cases and the portion of Dr. Siegel's opinion discussed above, Dr. Redlich draws from a body of scientific and medical data of which she, through her specialized training and experience, can appropriately utilize. She does not espouse some vague ethical standard of what a moral corporation should do based on her own subjective beliefs. Rather, she relies upon her specialized knowledge, skill, training, education, and years of experience in the field of environmental medicine to form her opinions. Her opinions will certainly help the jury to evaluate, from an environmental medicine standpoint, whether DuPont conformed to the industry standards based upon the state of the medical, scientific, and/or industrial knowledge, which in turn will provide the necessary information to assess how a reasonably prudent corporation in DuPont's position would act, *i.e.*, to determine whether DuPont had and breached a legal duty of care.

Fourth and last, the Court addresses DuPont's contention that all of Dr. Redlich's opinions should be excluded because "all of her opinions derive from her position that DuPont breached her precautionary-principle-based standard of care." (Def.'s Reply in Support of its Mot. to Exclude Redlich Opinions at 8.) However, even if the Court had found inadmissible all of Dr. Redlich's opinions related to the environmental medicine standard of care, her other opinions are nonetheless admissible. As can be seen from the Court's analysis *supra*, Dr. Redlich's opinions regarding biopersistence, toxicity, and the state of knowledge are not entirely derived from precautionary principle or the standards of conduct employed in the field of environmental medicine.

2. Legal Conclusion

DuPont argues that Dr. Redlich's testimony that DuPont's conduct showed a "conscious disregard for the rights and safety of persons that had a great probability of causing substantial harm" is an inadmissible legal conclusion. This Court agrees. "Opinion testimony that states a legal standard or draws a legal conclusion by applying law to the facts is generally inadmissible." *Sanchez v. Boston Sci. Corp.*, 2014 U.S. Dist. LEXIS 137189, at *10, *79 (S.D. W. Va. 2014). Thus, the Court excludes Dr. Redlich's opinion that DuPont showed a conscious disregard for the rights and safety of persons that had a great probability of causing substantial harm.

3. Motive, Intent, and State of Mind

Courts have typically barred expert opinions or testimony concerning a corporation's state of mind, subjective motivation, or intent. *See, e.g.*, *In re Rezulin Prods. Liab. Litig.*, 309 F. Supp. 2d 531 (S.D. N.Y. 2004). In general, courts have found that this type of "testimony is improper . . . because it describes 'lay matters which a jury is capable of understanding and deciding without the expert's help'" *Id.* at 546 (citation omitted); *see also Sanchez v. Boston Sci. Corp.*, No. 2:12-cv-05762, 2014 U.S. Dist. LEXIS 137189, at *9-10, 25, 48, 79, 81-83 (S.D. W. Va. Sept. 29, 2014)[6] (considering it to "to usurp the jury's fact-finding function by allowing an expert to testify as to a party's state of mind"). Here, DuPont contends:

> Dr. Redlich repeatedly seeks to speculate about what DuPont ("as a whole") "knew" and the motives and intent behind DuPont's corporate decision-making with respect to C-8. For example, Dr. Redlich repeatedly concludes that DuPont was "on notice" of or "knew" something, when she has no evidence of actual knowledge, cannot identify exactly when DuPont "knew" these things, *see id.* at 218:18-24, and, at most, can only opine on what DuPont "should have been on

[6] This case is "one of seven MDLs assigned to [United States District Judge Joseph R. Goodwin] by the Judicial Panel on Multidistrict Litigation concerning the use of transvaginal surgical mesh to treat pelvic organ prolapse and stress urinary incontinence. In the seven MDLs, there are over 60,000 cases currently pending, over 13,000 of which are in the Boston Scientific Corporation MDL." *Sanchez*, 2014 U.S. Dist. LEXIS 137189, at *3.

> notice of" or "should have known." *See, e.g.*, Redlich Report at 2-3; 7; 9; 15-16 ("The information which DuPont possessed put DuPont on notice C-8 could cause significant harm to humans and, therefore, that DuPont should eliminate the emissions of C-8, whether through a replacement surfactant or an active emissions elimination program through available technologies such as incineration or carbon filtration, as quickly as it could.").
>
> As a further example, Dr. Redlich speculates in her report that "relatively minor financial concerns" prevented "DuPont from initiating its C-8 elimination program," Redlich Report at 14, but admits at her deposition that she never looked into what DuPont did to consider replacements for C-8. *See* Redlich Depo. at 199:14-200:11.

(Def.'s Mem. in Support of its Mot. to Exclude Redlich Opinions at 13–14.) DuPont is correct in part.

In this portion of her report, Dr. Redlich states that "DuPont's internal documents . . . repeatedly reveal that the financial cost of the C-8 emissions elimination program inhibited DuPont from realizing the elimination of C-8 in the 1980s." (Redlich Report at 14.) This testimony is admissible. Dr. Redlich may not, however, speculate that DuPont's motive for failing to initiate an elimination program was its "relatively minor financial concerns." That testimony usurps the jury's fact-finding function by allowing an expert to testify as to a party's motives for its actions.

The Court disagrees, however, with DuPont's contention that Dr. Redlich speculates as to DuPont's motive and intent when she opines on what DuPont knew or should have known. Dr. Redlich reviews a complicated historical record and, based upon her unique qualifications, opines on what she believes DuPont knew or should have known at given points in time. This is not testimony that goes to motive or intent. Of course, DuPont may question Dr. Redlich about her opinions, exploring what studies or information she relied upon to make them. But that challenge is "to the accuracy of the expert's conclusions, not to their reliability, and bear[s] on

'the weight of the evidence rather than on its admissibility.'" *Little Hocking Water Ass'n, Inc.*, 2015 WL 1055305, at *8 (citing *In re Scrap Metal*, 537 F.3d at 529–31).

4. Qualifications and Methodology

DuPont suggests that Dr. Redlich is not qualified to give the opinions she offers and that, even if she were qualified. She failed to employ reliable methodology. This Court disagrees with DuPont's suggestion that Dr. Redlich is unqualified. Her above-mentioned qualifications support her ability to give opinions on biopersistence, toxicity, and state of the knowledge of environmental medicine. Additionally, her testimony as to her familiarity and work over many years with a number of different chemicals and other companies reflect that she is qualified to give the opinions that she offers.

As to DuPont's argument related to methodology, it contends:

> Even if an expert is qualified, moreover, courts frequently find testimony to be inadmissible where the expert fails to employ reliable methodology. In *Sanchez*, for instance, the court excluded expert testimony on the basis of its reliance on a limited set of reports that had been "hand-selected" and provided by counsel. *See Sanchez*, 2014 U.S. Dist. LEXIS 137189, at *56-58 (excluding proffered testimony where there was no way to assess the potential rate of error or presence of bias in the selection of documents, noting that "there [we]re no assurances that [plaintiffs' counsel] did not opportunistically choose samples while ignoring others that might have weakened or disproved [the expert's] theories").

(Def.'s Mem. in Support of its Mot. to Exclude Redlich Opinions at 16.)

And in its reply, DuPont states:

> Dr. Redlich employed an unreliable methodology in reaching her opinions in this case. For instance, while Plaintiff claims that Dr. Redlich recites "historic evidence" from a "historic record" spanning "over five decades" and compares "the historical factual record of DuPont's conduct" against the precautionary principle, *see* Opp. at 26, 32, 34, the precautionary principle was not formulated until 1992. Redlich Report at n.3 (identifying the 1992 Rio Convention as the foundation for the precautionary principle as she uses it). Thus, Dr. Redlich—who relies primarily on documents dating back to the 1960s, 70s, and 80s—ignores the developing state of science over time, and views all of DuPont's

> historic conduct through the lens of a later-formed ethical principle. This is not a reliable methodology.

(Def.'s Reply in Support of its Mot. to Exclude Redlich Opinions at 15.) DuPont's arguments are not well taken.

As indicated above, Dr. Redlich testified that the standard applied in environmental medicine is a compilation of many principles, some existing before 1992. Further, even if DuPont's assessment is correct, it goes to the accuracy or import of Dr. Redlich's opinion. "Challenges to the accuracy or import of the evidence relied upon by an expert go to the accuracy of the expert's conclusions, not to their reliability, and bear on 'the weight of the evidence rather than on its admissibility.'" *Little Hocking Water Ass'n, Inc.*, 2015 WL 1055305, at *8 (citing *In re Scrap Metal*, 527 F.3d at 529–31). "Where the reliability of the evidence is in dispute, it is more appropriate for a judge to admit the evidence than to keep it from the fact-finder because '[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.'" *Id.* at *4 (citing *Daubert*, 509 U.S. at 596).

Last, the Court disagrees with DuPont's suggestion that Dr. Redlich's opinion is unreliable because the documents she reviewed were hand-picked by counsel. In circumstances where experts are retained to review an historical record that spans decades and encompasses millions of documents, it is not uncommon for experts to rely on counsel to provide the ports of the record relevant to their areas of inquiry. Moreover, Dr. Redlich disputes that "the plaintiffs' lawyers picked" all the documents she reviewed, noting she reviewed "their documents, and also literature that [she] previously had and any literature searches that [she] did." (Redlich Dep. at 291.) In any event, "critiques of an expert's evidence gathering techniques . . . generally go to the weight of the evidence, not its admissibility." *Id.* at *14 (citing *United States v. Stafford*, 721

F.3d 380, 395 (6th Cir. 2013)). As this Court noted in *Little Hocking*, DuPont's "charges of cherry-picking data" do not "undermine the reliability of [the expert's] methodology." *Id.* at 9. Similar to the experts the plaintiff utilized in *Little Hocking*, Dr. Redlich offers opinions that "rest[] on a complex web of interrelated and corroborating evidence in the record." *Id.*

5. Conclusion – Rule 702 and *Daubert*

Based on the foregoing, the Court finds that Dr. Redlich's opinion testimony that has not been excluded will give context to the then-existing industry standards for chemical companies and will be helpful for a lay jury in its consideration of whether DuPont should have anticipated that an injury was likely to result from its release of C-8 into the surface waters and unlined landfills in the communities surrounding its Washington Works plant.

III.

The Court next addresses DuPont's request for exclusion of Dr. Redlich's opinion testimony under Rule 403 of the Federal Rules of Evidence. DuPont has also raised this issue in a motion *in limine*. (Def.'s Mot. *in Limine* to Exclude Ethics Morality, Social Responsibility, or Other Extra-Legal Standards of Conduct ("Motion *in Limine* No. 9"), ECF No. 4104.)

A. Standard

Neither the Federal Rules of Evidence nor the Federal Rules of Civil Procedure explicitly authorize a court to rule on an evidentiary motion *in limine*. The United States Supreme Court has noted, however, that the practice of ruling on such motions "has developed pursuant to the district court's inherent authority to manage the course of trials." *Luce v. United States,* 469 U.S. 38, 41 n.4 (1984). The purpose of a motion *in limine* is to allow a court to rule on issues pertaining to evidence prior to trial to avoid delay and ensure an evenhanded and expedient trial. *See Ind. Ins. Co. v. Gen. Elec. Co.,* 326 F. Supp. 2d 844, 846 (N.D. Ohio 2004) (citing *Jonasson*

v. Lutheran Child & Family Servs., 115 F.3d 436, 440 (7th Cir. 1997)). Notwithstanding this well-meaning purpose, courts are generally reluctant to grant broad exclusions of evidence *in limine*, because "a court is almost always better situated during the actual trial to assess the value and utility of evidence." *Koch v. Koch Indus., Inc.*, 2 F. Supp. 2d 1385, 1388 (D. Kan. 1998); *accord Sperberg v. Goodyear Tire & Rubber Co.*, 519 F.2d 708, 712 (6th Cir. 1975).

To obtain the exclusion of evidence under such a motion, a party must prove that the evidence is clearly inadmissible on all potential grounds. *See Ind. Ins. Co.*, 326 F. Supp. 2d at 846; *Koch*, 2 F. Supp. 2d at 1388; *cf. Luce*, 469 U.S. at 41, n.4. "Unless evidence meets this high standard, evidentiary rulings should be deferred until trial so that questions of foundation, relevancy and potential prejudice may be resolved in proper context." *Ind. Ins. Co.*, 326 F. Supp. 2d at 846.

Even if evidence is relevant, a court may still exclude the evidence, under Federal Rule of Evidence 403, which provides that, "[a]lthough relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence." Fed. R. Evid. 403. Whether to exclude evidence under Rule 403 is a matter within the trial court's discretion. *Paschal v. Flagstar Bank*, 295 F.3d 565, 576 (6th Cir. 2002) ("In reviewing the trial court's decision for an abuse of discretion, the appellate court must view the evidence in the light most favorable to its proponent, giving the evidence its maximum reasonable probative force and its minimum reasonable prejudicial value.").

B. Analysis

DuPont argues that testimony related to Dr. Redlich's environmental medicine standard "can have only one purpose: to create confusion, causing jurors to conflate moral or ethical standards with the legal standards about which they will be instructed, and to reverse the burden of proof." (Def.'s Mem. in Support of its Mot. to Exclude Redlich Opinions at 9–10) (citing Fed. R. Evid. 403.) In DuPont's Motion *in Limine* No. 9, it contends that "evidence and testimony about standards of ethics, morality, or social responsibility also should be excluded because it implies that the jury can and should resolve the plaintiff's claims on extra-legal considerations as opposed to the law as instructed by the Court." *Id.* at 6 (citing Fed. R. Evid. 403).

DuPont continues:

> In fact, the differences between the standard Dr. Redlich wants to apply and the standard that actually does apply could result in a "mini-trial regarding the different standards," thereby "diverting attention away from the real issue of negligence." *Villalba v. Consol. Freightways Corp.*, 2000 U.S. Dist. LEXIS 11773, at *18–19 (N.D. Ill. Aug. 10, 2000) (excluding evidence of purported industry standard under Rule 403 where differences between that standard and negligence standard would have confused and misled the jury).
>
> Dr. Redlich's opinion that DuPont breached the "environmental medicine duty of care," for instance, would likely be interpreted by the jury as conclusive evidence of liability under the legal standard, thereby interfering with jurors' ability to apply the proper legal standard provided by the Court.

Id. at 10; *see also id.* at 4 (Dr. Redlich "wants to opine in this case that DuPont failed to comply with its duty of care from an "environmental medicine standpoint,"), *id.* at 12 ("she seeks to graft on to the analysis a self-defined 'environmental medicine' duty of care"), *id.* ("then goes on to opine that DuPont breached that self-defined, extra-legal duty").

Initially, the Court notes that, to the extent it was not clear above and/or at the Motions *in Limine* Hearing held May 6, 2016, opinions related to what an ethical or moral corporation would do are not the proper subject of expert testimony in the instant action. These expert

testimony determinations are highly fact dependent, as the MDL court in *In re Welding Fumes Product Liability Litigation* suggested. MDL No. 1535, 2010 U.S. Dist. LEXIS 146067. That is, the *In re Welding Fumes* court found the testimony of the ethics expert on "what an 'ethical corporation' *should have* done" inadmissible (except in rebuttal), noting however, that "the Court can certainly imagine cases where his expertise would be admissible and relevant to the issues raised." *Id.* at 143, n. 125.

With regard to DuPont's arguments related to confusion, as was done in the *Bartlett* trial, the Court will again give clear instructions to the jury regarding its task. At the beginning of the *Bartlett* trial, the Court gave the jury "a summarized version of the law that applies [to Mrs. Bartlett's case] . . . to help [the jury] follow the evidence as it [was] submitted":

> In her first claim for negligence, Mrs. Bartlett must prove to you by a preponderance of the evidence three elements, or parts: First, that DuPont owed her a duty of care; second, that DuPont breached or failed to follow its duty of care; and, third, as a result of this breach, . . . Mrs. Bartlett was injured.
>
> When I say that Mrs. Bartlett must prove that DuPont owed her a duty of care, that means essentially that she must show that DuPont did not act reasonably, that a reasonable company or person would have anticipated that injury to a person was foreseeable from their conduct.

(Trial Tr. vol. 2 at 31, Bartlett ECF No. 154.)

Then again at the close of trial, the Court directed the jury in instructions that were sent with the jury to its deliberations:

Instruction No. 14

BURDEN OF PROOF

> Unless I instruct you otherwise, the burden of proof in this case is on the plaintiff to prove her claims and any damages by a preponderance of the evidence, which I will define for you.

. . . .

Instruction No. 19

NEGLIGENCE – GENERALLY, ORDINARY CARE

Now, I will explain the first claim brought by Mrs. Bartlett, which is a claim for negligence. "Negligence" is a failure to use ordinary care. "Ordinary care" is the care a reasonably prudent corporation would use in similar circumstances. "Ordinary care" is not an absolute term, but a relative one, viewed in the light of all the surrounding circumstances.

To prove her claim for negligence, Mrs. Bartlett has the burden of proving three elements by a preponderance of the evidence:

(1) DuPont owed Mrs. Bartlett a duty of care;

(2) DuPont breached its duty of care to Mrs. Bartlett; and

(3) Mrs. Bartlett suffered an injury as a proximate result of DuPont's breach of the duty of care.

I will now instruct you on each of these three elements.

Instruction No. 20

NEGLIGENCE – DUTY

To prove the existence of a duty, Mrs. Bartlett must show by a preponderance of the evidence that a reasonably prudent person would have foreseen that injury was likely to result to someone in Mrs. Bartlett's position from DuPont's conduct. In deciding whether reasonable prudence was used, you will consider whether DuPont should have foreseen, under the circumstances, that the likely result of an act or failure to act would cause injuries. The test for foreseeability is not whether DuPont should have foreseen the injuries exactly as it happened to Mrs. Bartlett. The test is whether under the circumstances a reasonably prudent corporation would have anticipated that an act or failure to act would likely cause injuries.

(Final Jury Instructions at 15, 20, 21, Bartlett ECF No. 139.)

The Court will do the same with regard to instructions in the *Freeman* trial. The parties and the Court can "expect juries to follow instructions and decide multiple [claims] accurately and independently." *United States v. Davis*, 74 F.3d 1241 (6th Cir. 1996).

Additionally, at the *Bartlett* trial, the parties questioned the expert witnesses as to the differences between the legal standards and the standards utilized in the scientific, environmental, and medical fields relevant to DuPont's stewardship over C-8. The parties are encouraged to do the same in the *Freeman* trial. An example is shown in the following exchange with one of Mrs. Bartlett's experts:

> Q. [To Dr. Siegel] You realize that the standards of the public health field, which is informed by a whole host of things, can be different than the standards in a court of law?
>
> A. Yes.
>
> Q. And the public health field is focused on minimizing risks?
>
> A. [E]liminating – well, sometimes it's elimination, but sometimes it's minimization.
>
> Q. And that's different than determining whether a substance actually caused a disease in a specific individual or whether something was likely to happen?
>
> A. Correct.

(Trial. Tr. vol. 4 at 217, Bartlett ECF No. 156-2.)

Moreover, the Court finds no support for the proposition that introduction of this type of evidence will result in mini-trials regarding the different standards. This is the same type of evidence the parties offered in the *Bartlett* trial, and there it did not result in mini-trials regarding different standards. The same process will be followed in Mr. Freeman's trial.

Finally, the Court explained in detail above why this testimony is helpful, and indeed, necessary. The Court does, however, offer the following to help alleviate DuPont's concern regarding any potential for confusion. As discussed at the May 6, 2016, Motions *in Limine* Hearing, the Court reaffirmed its prior rulings prohibiting the parties from utilizing any terms that have a specialized legal meaning, such as "breach" or "negligence." The Court includes in

this group the word "duty." The parties may refer only to the then-existing medical, environmental, or scientific standards of care, standards of conduct, and best or usual practices, but may not refer to any standard or common practice as a "duty of care." The expert may give his or her opinion that DuPont's conduct met, fell below, or rose above, those standards or common or best practices. The experts may not state that DuPont met or failed to meet its duty with regard to any of the standards or practices.

As with all *in limine* decisions, this ruling is subject to modification should the facts or circumstances at trial differ from those which have been presented in the pre-trial motions and memoranda.

IV.

In accordance with this Opinion and Order, the Court **GRANTS IN PART AND DENIES IN PART** Defendant's Motion to Exclude the Opinions and Testimony of Carrie Redlich Based on Extra-Legal Standards of Care, Her Improper Legal Conclusions, and DuPont's State of Mind. (ECF No. 4315.)

IT IS SO ORDERED.

5-26-2016
DATE

EDMUND A. SARGUS, JR.
CHIEF UNITED STATES DISTRICT JUDGE