

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
WESTERN DIVISION
No. 5:18-CV-73-D

JAMES S. DEW, et al.,

Plaintiffs,

v.

E.I. DU PONT DE NEMOURS AND
COMPANY, et al.,

Defendants.

ORDER

On February 21, 2018, individuals in Fayetteville, North Carolina, who own property near the Fayetteville Works facility (collectively, “plaintiffs”) filed a complaint against E.I. du Pont de Nemours and Company (“DuPont”), The Chemours Company (“Chemours”), and The Chemours Company FC, LLC (“Chemours FC”) (collectively, “defendants”) [D.E. 1]. Plaintiffs allege that defendants discharged toxic chemicals from the Fayetteville Works facility into the Cape Fear River and surrounding air, soil, and groundwater. See [D.E. 1] 3. The court has detailed the extensive procedural history of this case. See, e.g., Dew v. E.I. du Pont de Nemours & Co., No. 5:18-CV-73, 2019 WL 13117100, at *1 (E.D.N.C. Apr. 17, 2019) (unpublished). This order recounts relevant events concerning the pending motions.

On August 1, 2019, plaintiffs filed a second amended complaint [D.E. 49]. On August 16, 2019, plaintiffs corrected their second amended complaint [D.E. 51]. On September 10, 2020, the parties moved jointly for entry of a second case management order to allow plaintiffs to be added by notice of amendment rather than an amended complaint [D.E. 79]. On September 18, 2020, the court granted the joint motion [D.E. 80]. On November 30, 2021, plaintiffs filed a notice of

amendment to add new plaintiffs, including Sandra Riggins Branch (“Branch”) (collectively with previous plaintiffs, “plaintiffs”) [D.E. 98].

On February 12, 2024, plaintiffs moved to exclude the report and testimony of defendants’ expert [D.E. 154], Dr. Brent Finley, and filed a memorandum [D.E. 155] and statement of material facts [D.E. 160] in support. That same day, defendants moved for summary judgment on Branch’s private nuisance claim [D.E. 176] and filed a memorandum [D.E. 177], a statement of material facts [D.E. 178], and an appendix to the statement of material facts [D.E. 179] in support. In a separate motion, defendants also moved to exclude the report and testimony of plaintiffs’ expert [D.E. 188], Dr. Adam Domanski, and filed a memorandum [D.E. 189] and exhibits [D.E. 190] in support.

On March 4, 2024, Branch responded in opposition to defendants’ motion for summary judgment [D.E. 201] and filed both a response to defendants’ statement of material facts [D.E. 202] and an appendix to her response [D.E. 203]. In a separate motion, plaintiffs responded in opposition to defendants’ motion to exclude Dr. Domanski’s report and testimony [D.E. 204] and filed a memorandum and exhibits in support [D.E. 205]. That same day, defendants responded in opposition to Branch’s motion to exclude Dr. Finley’s report and testimony. [D.E. 208].

On March 18, 2024, defendants replied to Branch’s response in opposition to defendant’s motion for summary judgment [D.E. 230], responded to Branch’s statement of material facts in support of her motion opposing defendants’ motion for summary judgment [D.E. 231], and filed an appendix to the statement of material facts in support of their motion for summary judgment [D.E. 232].

As explained below, the court denies defendants’ motion to exclude the report and testimony of Dr. Adam Domanski, denies plaintiffs’ motion to exclude the report and testimony of

Dr. Brent Finley, and denies defendants' motion for summary judgment on Branch's private nuisance claim.

I.

Defendants move to exclude Dr. Domanski's report and testimony under Federal Rule of Evidence 702 and Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 597 (1993). See [D.E. 188] 1. Likewise, plaintiffs move to exclude Dr. Brent Finley's report testimony under Federal Rule of Evidence 403 and 702 and Daubert. See [D.E. 154] 1.

Rule 702 of the Federal Rules of Evidence governs the admission of expert testimony. See Fed. R. Evid. 702; Kumho Tire Co. v. Carmichael, 526 U.S. 137, 141–42 (1999); Gen. Elec. Co. v. Joiner, 522 U.S. 136, 142–43 (1997); Daubert, 509 U.S. at 589–95; United States v. Forrest, 429 F.3d 73, 80–81 (4th Cir. 2005); Silicon Knights, Inc. v. Epic Games, Inc., No. 5:07-CV-275, 2011 WL 6748518, at *5–6 (E.D.N.C. Dec. 22, 2011) (unpublished). Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if the proponent demonstrates to the court that it is more likely than not that:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods;
and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702. Rule 702 “assign[s] to the trial judge the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand.” Daubert, 509 U.S. at 597; see Cooper v. Smith & Nephew, Inc., 259 F.3d 194, 199–203 (4th Cir. 2001).

The proponent of the expert testimony must establish its admissibility by a preponderance of the evidence. Fed. R. Evid. 702; see Fed. R. Evid. 104(a); Daubert, 509 U.S. at 592 n.10; Cooper, 259 F.3d at 199; see also Huddleston v. United States, 485 U.S. 681, 687 n.5 (1988); Bourjaily v. United States, 483 U.S. 171, 175 (1987). A district court has broad discretion in determining the admissibility of proposed expert testimony. See Hamling v. United States, 418 U.S. 87, 108 (1974); United States v. Gastiaburo, 16 F.3d 582, 589 (4th Cir. 1994).

Expert testimony is appropriate when it “will help the trier of fact to understand the evidence or to determine a fact in issue.” Fed. R. Evid. 702(a). A district court may permit a witness qualified by knowledge, skill, experience, training, or education to testify and state an opinion where “([1]) the testimony is based upon sufficient facts or data, ([2]) the testimony is the product of reliable principles and methods; and ([3]) the expert has reliably applied the principles and methods to the facts of the case.” Fed. R. Evid. 702(b)–(d). Courts have distilled Rule 702’s requirements into three crucial inquiries: (1) whether the proposed expert witness is qualified; (2) whether the proposed testimony is relevant; and (3) whether the proposed testimony is reliable. See Kumho Tire Co., 526 U.S. at 141; Daubert, 509 U.S. at 589; Forrest, 429 F.3d at 80. The trial court must perform the special gatekeeping obligation concerning these three requirements. See, e.g., Kumho Tire Co., 526 U.S. at 147.

When a party challenges the reliability or relevance of an expert’s testimony, the court must “satisfy itself that the proffered testimony meets the relevant standard as a precondition to admissibility.” Snell v. Reid, No. 22-1869, 2024 WL 2815061, at *3 (4th Cir. June 3, 2024) (per curiam) (unpublished) (quotations omitted); see Sardis v. Overhead Door Corp., 10 F.4th 268, 282 (4th Cir. 2021). The court must make explicit findings concerning the challenged preconditions

of admissibility either by written order or orally on the record. See Snell, 2024 WL 2815061 at *3; Sardis, 10 F.4th 268 at 283; United States v. Smith, 919 F.3d 825, 835–36 (4th Cir. 2019).

As for qualification, an expert may be qualified based on “knowledge, skill, experience, training, or education.” Fed. R. Evid. 702. A court assesses qualifications in reference to the matter to which the witness seeks to testify. See Daubert, 509 U.S. at 591–93; Gladhill v. Gen. Motors Corp., 743 F.2d 1049, 1052 (4th Cir. 1984). The witness need not be the most well-known or well-qualified witness. See Gladhill, 743 F. 2d at 1052. Nonetheless, a witness does not become an expert simply by claiming to be an expert or because some other court permitted the witness to testify as an expert. See, e.g., Thomas J. Kline, Inc. v. Lorillard, Inc., 878 F.2d 791, 799–800 (4th Cir. 1989) (holding that a witness with an M.B.A. was not qualified to provide expert opinion testimony on complex economic antitrust matters about which the witness was not qualified by training, experience, or education); United States v. Bahena, 223 F.3d 797, 809–10 (8th Cir. 2000) (holding that a witness who held himself out to be an expert on voice spectrography lacked the required training, experience, or education). Moreover, expertise in one topic does not qualify a witness to testify about another topic. See, e.g., Sardis, 10 F.4th at 288–90, 295 (excluding testimony about an industry standard not sufficiently related to the product at issue and excluding testimony that contradicts standards imposed by governing law); Zellers v. NexTech Ne., LLC, 533 F. App’x 192, 197 (4th Cir. 2013) (per curiam) (unpublished) (affirming exclusion of a neurologist’s testimony about the toxicity of certain chemicals used for refrigeration because the neurologist had no training in toxicology); Cooper, 259 F.3d at 200 (excluding testimony of a medical doctor who based an opinion on a medical device without conducting tests or studying the medical device); Ancho v. Pentek Corp., 157 F. 3d. 512, 519 (7th Cir. 1998) (excluding testimony

when the expert failed to visit the site of the accident or otherwise familiarize himself with the specific details of the accident at issue).

To be relevant, the proposed expert testimony must be helpful to the trier of fact concerning a claim or defense at issue in the case. See Daubert, 509 U.S. at 591–92; United States v. Lespier, 725 F.3d 437, 449 (4th Cir. 2013); Kopf v. Skyrn, 993 F.2d 374, 377 (4th Cir. 1993); Persinger v. Norfolk & W. Ry., 920 F.2d 1185, 1188 (4th Cir. 1990); Scott v. Sears, Roebuck & Co., 789 F.2d 1052, 1055 (4th Cir. 1986). To be helpful, the proposed expert testimony must fit the facts of the case. “Fit is not always obvious, and scientific validity for one purpose is not necessarily scientific validity for other, unrelated purposes.” Daubert, 509 U.S. at 591 (quotation omitted). To be helpful to the trier of fact, the proposed expert testimony must be outside the common knowledge or function of the fact finder. See, e.g., Lespier, 725 F.3d at 449 (affirming exclusion of expert testimony on how sleep deprivation affects the reliability of an eye witness to a crime); Persinger, 920 F.2d at 1188 (affirming exclusion of expert testimony about the amount of weight that an individual could safely lift based on an easily-applied industry formula); Gladhill, 743 F.2d at 1052 (affirming decision that a police officer who had investigated 600 car accidents and arrived at the car accident scene immediately after the car accident was qualified to give an opinion as to the cause of the car accident based on his review of the car accident scene); see also United States v. Hill, 749 F.3d 1250, 1260 (10th Cir. 2014) (holding that an expert witness cannot testify about whether another witness is credible); Nimley v. City of New York, 414 F.3d 381, 398 (2d Cir. 2005) (same).

“[T]he test of reliability is flexible and the law grants a district court . . . broad latitude when it decides” reliability. United States v. Wilson, 484 F.3d 267, 274 (4th Cir. 2007) (quotations omitted); see Kumho Tire Co., 526 U.S. at 141–42; Belville v. Ford Motor Co., 919 F.3d 224, 233

(4th Cir. 2019). There is not a fit when a large analytical gap exists between the facts and the opinion. See, e.g., Joiner, 522 U.S. at 146–47 (affirming exclusion of testimony where the expert’s opinion was based on irrelevant testing on animals unrelated to the case at issue); In re Lipitor (Atorvastatin Calcium) Mktg., Sales Pracs. & Prods. Liab. Litig., 892 F.3d 624, 634–35 (4th Cir. 2018) (affirming exclusion of testimony when the expert’s testing contradicted his opinion); Nease v. Ford Motor Co., 848 F.3d 219, 232–33 (4th Cir. 2017) (affirming exclusion of testimony when expert on vehicle safety failed to test his own hypothesis); Cooper, 259 F.3d at 200–01 (affirming exclusion of testimony on what caused a medical injury when the expert’s testing did not provide evidence of causation). The Federal Rules of Evidence do not require “a district court to admit opinion evidence that is connected to existing data only by the ipse dixit of the expert.” Joiner, 522 U.S. at 146; see Small v. WellDyne, Inc., 927 F.3d 169, 177 (4th Cir. 2019) (“Without testing, supporting literature in the pertinent field, peer reviewed publications[,] or some basis to assess the level of reliability, expert opinion testimony can easily, but improperly, devolve into nothing more than proclaiming an opinion is true ‘because I say so.’”).

In determining “whether proffered testimony is sufficiently reliable, the court has broad latitude to consider whatever factors bearing on validity that the court finds to be useful; the particular factors will depend upon the unique circumstances of the expert testimony involved.” Westberry v. Gislaved Gummi AB, 178 F.3d 257, 261 (4th Cir. 1999). Factors that may bear on the reliability of the expert’s testimony include (1) whether a theory or technique can be (and has been) tested, (2) whether the theory or technique has been subjected to peer review and publication, (3) whether a technique has a high known or potential rate of error and whether there are standards controlling its application, and (4) whether the theory or technique enjoys general acceptance within the relevant community. See Kumho Tire Co., 526 U.S. at 149–50; Daubert, 509 U.S. at

593–94; see, e.g., Sardis, 10 F.4th at 288–90 (holding testimony about product safety unreliable when expert did not test the product); McKiver v. Murphy-Brown, LLC, 980 F.3d 937, 960 (4th Cir. 2020) (holding that a witness’s method for analyzing the origin of swine fecal material was widely used and applied reliably enough to be admitted despite not being subject to peer review); In re Lipitor, 892 F.3d at 644–45 (holding that a medical doctor testifying that Lipitor caused certain diseases was excludable for not factoring in other risk factors, such as age, body mass index, and family history); Baxter v. Comm’r of Internal Revenue Serv., 910 F.3d 150, 157–58 (4th Cir. 2018) (holding that mere disagreement with an expert’s otherwise reliable methodology is not grounds for exclusion); United States v. Crisp, 324 F.3d 261, 265–69 (4th Cir. 2003) (holding that expert fingerprint analysis was admissible despite defendant’s objections to its general scientific accuracy). “Result-driven analysis, or cherry-picking, undermines principles of the scientific method and is a quintessential example of applying methodologies (valid or otherwise) in an unreliable fashion.” In re Lipitor, 892 F.3d at 634; see EEOC v. Freeman, 778 F.3d 463, 468–69 (4th Cir. 2015) (Agee, J., concurring) (collecting cases).

A.

Plaintiffs offer the report and testimony of Dr. Adam Domanski to opine on the alleged diminution in property values resulting from public knowledge of per- and polyfluoroalkyl substance (“PFAS”) contamination in the area surrounding the Fayetteville Works facility. See

[D.E. 171-18] 1–51.¹ Dr. Domanski has a Ph.D. in economics and several years of experience in “applying economic tools to aid in policy, business, and legal decisions.” Id. at 40. In addition to his job as an expert witness, Dr. Domanski works as an adjunct professor in the economics department at Seattle University. Id. In his report, Dr. Domanski purports to address two distinct issues: (1) the “impacts to residential property values of six [p]laintiffs as a result of contamination from the Chemours Fayetteville Works Plant in Bladen County, North Carolina”; and (2) the defendants’ “financial conditions and ability to pay damages.” Id. at 5.

Defendants seek to exclude Dr. Domanski’s conclusions concerning property devaluations. See [D.E. 189] 1–2. Defendants urge the court to exclude Dr. Domanski’s report and testimony for “four independent reasons”:

First, [Dr. Domanski] labels his study a difference-in-difference analysis but fails to follow what he, himself calls necessary steps to reliably perform that methodology. Second, [Dr. Domanski] subjectively designed his econometric study and cherry-picked data in a way that would produce results to support a predetermined conclusion. Third, [Dr. Domanski] cannot explain why the majority of his results do not provide any statistically significant support for his conclusion and did not consider alternative explanations for outliers. Fourth, [Dr. Domanski’s] opinions are unfounded and do not fit the needs of this case because (a) the underlying premise of his analysis—that residential home sale prices are influenced by public awareness of sampling for PFAS contamination—is rejected by the expert opinions Dr. Domanski relies on, and (b) he applies an average diminution of value to the individual Plaintiffs as a percentage basis, without accounting for property-specific factors.

Id. at 2 (quotations and emphasis omitted). The court addresses each argument in turn.

¹ Dr. Domanski prepared his report for a group of “bellwether plaintiffs.” See [D.E. 171-18] 5. This group consists of Paul and Socorra Abril of 4216 Marshwood Lake Road, Fayetteville, Cumberland County, NC; Richard and Patsy Davis of 7242 Fire Department Road, Fayetteville, Cumberland County, NC; Annie and John Stevens of 7619 NC Hwy 87 South, Fayetteville, Cumberland County, NC; Sandra Riggins Branch of 21 West Shaw Mill, Saint Pauls, NC and 37 West Shaw Mill, Saint Pauls, Bladen County, NC; Cynthia Faircloth of 3884 Tranquility Road, Fayetteville, Cumberland County, NC; and Allison Pini of 405 Jax Court, Fayetteville, Cumberland County, NC.

Defendants argue that Dr. Domanski failed to reliably apply the difference-in-difference methodology. See id. 3-4. Dr. Domanski states that data related to “homes that sold within the contamination footprint before the public became broadly aware of the contamination” is “necessary” to measure “the effect of environmental contamination.” [D.E. 171-18] 9. In forming his final opinion, Dr. Domanski did not compare that dataset to the other datasets he compiled for his analysis. [D.E. 189-2] 67-68. Instead, Dr. Domanski compared property values within the treatment area after public awareness of contamination to property values outside the treatment area before and after public awareness of the contamination. See [D.E. 171-18] 10-35; [D.E. 189] 6; [D.E. 189-2] 64-68; [D.E. 204] 9-11. Dr. Domanski also explained why he designed his study to consider the factors he selected. See, e.g., [D.E. 171-18] 8-35; [D.E. 204-3] 10-12. According to plaintiffs, peer-reviewed literature supports Dr. Domanski’s methodology. See, e.g., [D.E. 204]; [D.E. 204-7] 2.

In opposition to Dr. Domanski’s opinion, defendants’ expert, Jennifer Pitts, opines that Dr. Domanski’s analyses “suffer from numerous issues and errors.” [D.E. 189-4] 8; see id. at 8-25; [D.E. 189] 7. Defendants also argue that the peer-reviewed literature that plaintiffs cite does not support Dr. Domanski’s methodology. See [D.E. 229] 2-4.

Where an expert witness explains why he considered certain variables and did not consider others in his econometric analyses, cross examination provides the best means for settling disputes about the intricacies of econometric analyses. See, e.g., SMD Software, Inc. v. EMove, Inc., 945 F. Supp. 2d 628, 642 (E.D.N.C. 2013). Courts have recognized the difference-in-difference methodology as acceptable under Rule 702. See, e.g., Messner v. Northshore Univ. Health Sys., 669 F.3d 802, 826 (4th Cir. 2012); Mr. Dee’s Inc. v. Inmar, Inc., No. 1:19CV141, 2021 WL

4224720, at *18 (M.D.N.C. Sept. 16, 2021); Lowes Foods, LLC v. Burroughs & Chapin Co., Inc., No. 4:16-CV-354, 2019 WL 2454570, at *2–3 (D.S.C. Apr. 17, 2019). Defendants can scrutinize Dr. Domanski’s specific methodological choices on cross examination. Accordingly, the court rejects defendants’ argument.

ii.

Next, defendants accuse Dr. Domanski of cherry-picking. See [D.E. 189] 9–11. Specifically, defendants dispute Dr. Domanski’s choice to define his study area to include properties within four miles of the Fayetteville Works facility. See id.; see also [D.E. 189-2] 30–36. Defendants argue this four-mile perimeter amounts to an “outcome determinative” choice by Dr. Domanski, calibrated to “only . . . generate results supportive of his ultimate conclusion” [D.E. 189] 9. In support, defendants cite their expert’s opinion that “Dr. Domanski’s model . . . is unfounded.” Id. at 10. Defendants also cite their expert’s conclusion that Dr. Domanski’s model yields “statistically [in]significant” diminutions in property values when applied to alternative radii. See [D.E. 189-4] 22–23 (purporting to replicate Dr. Domanski’s model with alternative radius distances).

Defendants suggest that Dr. Domanski’s model could have yielded different figures if he chose different input values. Defendants neglect, however, to identify any objective criteria that would compel or disqualify any one particular radius value. Likewise, the court finds no reason to prefer defendants’ proposed alternative perimeter to Dr. Domanski’s four-mile perimeter. As defendants acknowledge, “Dr. Domanski had many options to define the contamination footprint for his analysis.” [D.E. 189] 11. Without more, defendants’ arguments serve as fodder for cross examination but not as grounds for exclusion.

Next, defendants argue that “[t]he vast majority of Dr. Domanski’s results are not statistically significant—meaning that he cannot reject the null hypothesis that public awareness of contamination has no effect on property values.” Id. at 12 (cleaned up). Plaintiffs and Dr. Domanski disagree. See, e.g., [D.E. 189-2] 34–41; [D.E. 204] 16–18.

“Statistical significance is a measure of confidence that a trend observed in a dataset is not random.” In re Lipitor, 892 F.3d at 641. Statistical significance is typically expressed by a p-value which “represents the probability that an observed positive association could result from random error even if no association were in fact present.” Federal Judicial Center, Reference Manual on Scientific Evidence 576 (3d. ed. 2011) (“RMSE”); see In re Lipitor, 892 F.3d at 641. “To determine whether an association is statistically significant, statisticians compare the p-value to a predetermined threshold value (also known as a significance level). If the p-value is smaller than the significance level, then the finding is statistically significant.” In re Lipitor, 892 F.3d at 641. “Otherwise, it is not.” Id. “The most common significance level . . . used in science is .05.” RMSE at 577 (footnote omitted); see In re Lipitor, 892 F.3d at 641. “A .05 value means that the probability is 5% of observing an association at least as large as that found in the study when in truth there is no association.” RMSE at 577 (footnote omitted); see In re Lipitor, 892 F.3d at 641. Thus, a p-value less than .05 indicates confidence that the results of an analysis were not the product of random error. See In re Lipitor, 892 F.3d at 641.

“A significant p-value is not . . . some all-purpose salve, nor is it a get-out-of-Daubert-free card.” Id. “Just as statistically significant evidence won’t result in automatic admission, the absence of a p-value that is smaller than .05 (or some other threshold) isn’t necessarily fatal to a case.” Id. Instead, a court must consider statistical significance as an aspect Rule 702’s reliability

inquiry and scrutinize the data as it would any other scientific evidence. See id. In turn, the United State Court of Appeals for the Fourth Circuit has “decline[d] to establish a bright-line rule requiring experts to rely only on evidence that is statistically significant or else have their opinions excluded.” Id. at 642.

Defendants’ expert alleges that at least one of Dr. Domanski’s findings yields a p-value of 0.557, “well outside any generally accepted thresholds of 0.05 or less or 0.10 or less.” [D.E. 189-4] 21. Assuming without deciding that the “[t]he vast majority of Dr. Domanski’s results are not statistically significant,” this fact alone does not require exclusion. See In re Lipitor, 892 F.3d at 641. Dr. Domanski compared property values within the treatment area after public awareness of contamination to property values outside the treatment area before and after public awareness of the contamination. See [D.E. 171-18] 10–35; [D.E. 189] 6; [D.E. 189-2] 64–68; [D.E. 204] 9–11. Moreover, Dr. Domanski explained why he designed his study to consider the factors he selected. See, e.g., [D.E. 171-18] 8–35; [D.E. 204-3] 10–12. Furthermore, Dr. Domanski argues, contrary to defendants’ assertions, that “nearly all the contaminant sampling area–year interactions are statistically significant” [D.E. 204-3] 5.

The court will not use Rule 702 to settle this technical squabble between experts. Defendants may press Dr. Domanski on his findings during cross examination and present their own expert witness. Moreover, the mere presence of statistical insignificance does not, by itself, warrant exclusion under Rule 702. See, e.g., In re Lipitor, 892 F.3d at 641. Accordingly, the court declines to exclude Dr. Domanski’s report and testimony on this basis.

iv.

Next, defendants ask the court to exclude Dr. Domanski’s report and testimony because “(a) the underlying premise of his analysis—that residential home sale prices are influenced by

public awareness of sampling for PFAS contamination—is rejected by the expert opinions Dr. Domanski relies on, and (b) he applies an average diminution of value to the individual Plaintiffs as a percentage basis, without accounting for property-specific factors.” [D.E. 189] 2 (quotations omitted).

As a starting point for his calculations, Dr. Domanski relied on each plaintiff’s current property appraisal as assessed by plaintiffs’ other experts, Crawford Mackethan (“Mackethan”) and Ann Jackson (“Jackson”). See [D.E. 171-18] 31–33 & n.53, n.55, n.57, n.59–60, n.62; [D.E. 189] 13–16; [D.E. 204] 18. Dr. Domanski opines that Mackethan and Jackson’s appraisal values reflect the public’s awareness of the PFAS contamination in the study area and that, “but for the contamination,” the “appraised value[s] would be higher.” [D.E. 189-2] 16; see [D.E. 204-3] 19. Defendants respond that the cited appraisals do not reflect an impaired value because neither Mackethan nor Jackson deliberately “considered[ed] PFAS contamination in their appraisals.” [D.E. 189] 14; see also [D.E. 189-5] 12; [D.E. 189-6] 9. Likewise, defendants’ expert opines that Dr. Domanski assumes “without any market support” that Mackethan and Jackson’s property appraisals “represent an impaired value.” [D.E. 189-4] 3. Plaintiffs reply that Mackethan and Jackson’s appraisal values “are based on recent comparable sales from nearby homes” and therefore reflect any impairments currently affecting property values in the study area, to include public awareness of PFAS contamination. [D.E. 204] 18–20.

Mackethan and Jackson each provide lengthy reports detailing their methodologies and conclusions. See [D.E. 204-11]; [D.E. 204-12]. Neither Mackethan nor Jackson explicitly factored the public’s awareness of PFAS contamination into their appraisal calculations. Mackethan and Jackson, however, relied on a common definition of “Market Value” to formulate their appraisal values. See [D.E. 204-11] 34; [D.E. 204-12] 40. Accordingly, Mackethan and Jackson determined

the properties' values by considering "all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably[,] and assuming the price is not affected by undue stimulus." [D.E. 204-11] 34; see [D.E. 204-12] 40. Mackethan and Jackson both "implicit[ly]" assumed the following condition: "both parties are well informed or well advised, and each acting in what he considers his own best interest." [D.E. 204-11] 34 (emphasis added); see [D.E. 204-12] 40. Additionally, Mackethan and Jackson considered numerous characteristics for each property to determine its specific appraisal value. These characteristics include the size of the lot, the features of the property, the area in which the property sits, the demand and supply within the local real estate market, the type of property, the fixtures and materials within the property, whether the property sits within an urban, suburban, or rural area, the appliances within the home, and numerous other physical and environmental qualities. See [D.E. 204-11] 5–33; [D.E. 204-12] 5. Whether or not Mackethan and Jackson explicitly factored the public's awareness of PFAS contamination into their appraisal calculations, their study parameters were sufficiently capacious to capture any potential price impairment.

Defendants' arguments go to weight and not admissibility. Plaintiffs' experts used a constellation of data points to reach their appraisal figures. Plaintiffs' experts explained their methodologies and conclusions. Defendants do not suggest that these appraisal values are atypical of the kind that experts like Dr. Domanski rely on to prepare a report. Furthermore, Dr. Domanski explains why he relied on Mackethan and Jackson's appraisal values. See [D.E. 171-18] 31–33 & n.53, n.55, n.57, n. 59–60, n.62; [D.E. 189] 13–16; [D.E. 189-2] 16; [D.E. 204] 18; [D.E. 204-3] 19. Whether or not Dr. Domanski considered sufficient variables to accurately measure the public's reaction to PFAS contamination is prime fodder for cross examination, not exclusion under Rule 702. Accordingly, the court rejects this argument.

Next, defendants argue that Nix v. Chemours Company FC, No. 7:17-CV-189, 2023 WL 6471690 (E.D.N.C. Oct. 4, 2023) (unpublished), requires the court to exclude Dr. Domanski's report and testimony. In Nix, the court declined to grant class certification on a putative class's remedy for diminution-in-value of property. See id. at *24. There, plaintiffs' expert prepared a damages model based on average losses across 130,000 different properties in five counties and did not include property specific variables. Id. The court found that "sweeping averages alone do not suffice to demonstrate common proof of causation for the diminution-in-value remedy." Id. The court also noted that PFAS contamination would not affect each property uniformly. Id. Thus, "adjustments up or down" from plaintiffs' damages model "and whether such adjustments were actually or proximately caused by PFAS . . . required individualized inquiries not captured in [the expert's] model or any other simple calculation." Id. In short, the expert's model in Nix lacked property specific considerations.

Dr. Domanski's report and testimony do not suffer from the same defects as the expert's report in Nix. In calculating each plaintiff's damages, Dr. Domanski considered numerous property specific characteristics, such as the property's proximity to defendants' Fayetteville Works site, the availability of parks and playgrounds, the quality of neighborhood schools, the square footage of the property, and proximity of employment centers. See [D.E. 171-18] 6-9. Furthermore, Dr. Domanski relied upon experts Mackethan and Jackson's appraisal figures, which also reflect numerous property specific considerations. See [D.E. 204-11] 5-33; [D.E. 204-12] 5. Thus, Nix does not help the defendants, and the court rejects this argument.

In considering the defendants' motion, the court has examined Dr. Domanski's report and testimony under Rule 702. Specifically, the court has considered (1) whether Dr. Domanski is qualified, (2) whether the proposed report and testimony are relevant, and (3) whether the proposed report and testimony are reliable. See Fed. R. Evid. 702; Kumho Tire Co., 526 U.S. at 141; Daubert, 509 U.S. at 589; Forrest, 429 F.3d at 80. In considering these requirements, the has court discharged its special gatekeeping duties under Rule 702. See, e.g., Kumho Tire Co., 526 U.S. at 147. Moreover, plaintiffs have established that Dr. Domanski's report and testimony satisfy Rule 702's requirements by a preponderance of the evidence. The court finds Dr. Domanski qualified to offer his report and testimony concerning PFAS contamination and property values. See [D.E. 171-18] 39. Likewise, the court finds Dr. Domanski's report and testimony relevant and reliable. See Fed. R. Evid. 702; Kumho Tire Co., 526 U.S. at 141; Daubert, 509 U.S. at 589; Forrest, 429 F.3d at 80. Dr. Domanski's report and testimony will likely aid the trier of fact in understanding plaintiffs' damages and fits the facts of the case. See Fed. R. Evid. 702(a); Joiner, 522 U.S. at 146-47. Accordingly, the court denies defendants' motion to exclude Dr. Domanski's report and testimony and denies as moot defendant's request for an evidentiary hearing.

B.

Defendants offer the report and testimony of Dr. Brent Finley to opine on plaintiffs' alleged exposures to PFAS and "whether these alleged exposures could have caused or increased the risk of developing disease." [D.E. 171-27] 2. Dr. Finley has more than 30 years of experience as a toxicologist and in conducting and managing chemical risk assessments. Id. at 5. He received his B.A. in Biological Sciences from Cornell in 1982, and his Ph.D. in Toxicology from Washington State University in 1986. See id. at 83. Within the last 25 years, Dr. Finley has authored over 400

chemical risk assessments and published more than 160 peer-reviewed academic articles concerning chemical exposure. See id. at 5. In his report, Dr. Finley applies a risk assessment methodology to determine whether hexafluoropropylene oxide dimer acid (“GenX”), perfluoro-2-methoxyacetic acid (“PFMOAA”), perfluorooctanoic acid (“PFOA”), or perfluorooctane sulfonic acid (PFOS) pose a health risk. See id.

Plaintiffs move to exclude Dr. Finley’s report and testimony under Federal Rule of Evidence 403 and 702 and Daubert. See [D.E. 154] 1. Plaintiffs contend that Dr. Finley “fail[ed] to address all PFAS detected in Plaintiffs’ private drinking wells” [D.E. 155] 1. Plaintiffs also argue that “for the PFAS [he] considered,” Dr. Finley unreliably applied his risk assessment methodology. See [D.E. 155] 1, 4–11. Specifically, plaintiffs argue that Dr. Finley’s chronic reference dose calculations are unreliable for each of the three PFAS his study considers: GenX, PFMOAA, and PFOA. See id.

Plaintiffs present different challenges to Dr. Finley’s conclusions for each PFAS. Specifically, plaintiffs argue: “[(1)] For Gen X, Dr. Finley created a [] [chronic reference dose] for this litigation rather than one supported by EPA and peer-reviewed literature; [(2)] For PFMOAA, [Dr. Finley] created a [] [chronic reference dose] for this litigation despite North Carolina Department of Environmental Quality taking the position that the existing studies on PFMOAA are insufficient for developing a [] [chronic reference dose]; [(3)] And for PFOA, [Dr. Finley] used an outdated [chronic reference dose] rather than EPA’s most recent [chronic reference dose].” [D.E. 155] 5. The court addresses each argument in turn.

i.

Plaintiffs argue that “Dr. Finley’s risk assessment as to GenX lack reliability [because] Dr. Finley chose to derive a [] [chronic reference dose] specifically for litigation” Id. at 10. A

chronic reference dose is an “an estimate of a daily oral exposure . . . that is likely to be without an appreciable risk of deleterious effects.” [D.E. 155] 2 n.1. One variable that affects a chronic reference dose calculation is the total uncertainty factor. See [D.E. 171-27] 43; [D.E. 172-1] 49. For a given substance, the total uncertainty factor is calculated by multiplying several constituent factors that range from zero to ten. See [D.E. 171-27] 47–48; [D.E. 172-1] 107–12. These constituent factors are: (1) intraspecies extrapolation, (2) interspecies extrapolation, (3) subchronic extrapolation, and (4) database deficiencies. [D.E. 171-27] 47–48; [D.E. 172-1] 107–12. The lower the total uncertainty factor then the higher the chronic dose.²

Plaintiffs contend that Dr. Finley chose impermissibly low values for the constituent factors used to calculate the uncertainty value which is, itself, but a component of the chronic reference dose calculation which, itself, is a component of the risk assessment methodology. Stated differently, plaintiffs argue that Dr. Finley chose the wrong subparts to calculate a subpart of a subpart of a larger equation. Specifically, plaintiffs object to Dr. Finley’s chosen values for the intraspecies extrapolation (for which, Dr. Finley chose a value of three); the subchronic extrapolation (for which, Dr. Finley chose a value of three); and the database deficiency (for which, Dr. Finley chose a value of zero). See [D.E. 155] 7–10. Plaintiffs note, and Dr. Finley concedes, that these values are lower than those selected by other experts conducting GenX risk assessments. See [D.E. 155] 7–10; [D.E. 171-27] 47–49. Because Dr. Finley selected lower uncertainty factor values, Dr. Finley’s calculation yielded higher chronic reference doses. Plaintiffs argue that Dr.

² The standard chronic reference dose calculation can be expressed as: ([human equivalent dose] ÷ [total uncertainty factor]) = [chronic reference dose]. See [D.E. 172-1] 48–49. By function of this calculation, as the denominator increases, the final output—the chronic reference dose—decreases.

Finley's choice to employ lower constituent factors in calculating his overall uncertainty factor renders his calculations unreliable for three reasons. See [D.E. 155] 5–10.

First, plaintiffs disagree with Dr. Finley's choice to set the intraspecies factor at three rather than ten. See [D.E. 155] 7–8. Dr. Finley justifies his choice by stating that the EPA failed to justify its high intraspecies factor value when “the evidence suggests there is very little interindividual variability in humans.” [D.E. 171-27] 48.

Second, plaintiffs contend that Dr. Finley's exclusion of the database deficiency factor is “inexplicabl[e].” [D.E. 155] 9. Although, some other experts conducting GenX risk assessments chose values ranging from three to ten, Dr. Finley concluded that the GenX database was not deficient and excluded the database deficiency factor from his total uncertainty factor. See [D.E. 171-27] 44–45, 49. Dr. Finley explains that, in his experience with how the EPA evaluates databases, the existing GenX database is sufficient given the number and type of studies. [D.E. 165-2] 79; see [D.E. 171-27] 49 n.3. Dr. Finley also reasons that the database deficiency factor is irrelevant for risk assessments concerned with causation. See [D.E. 171-27] 49 n.3.

Third, plaintiffs note that even though the EPA and Dr. Finley used the same 90-day subchronic GenX study in their risk assessments, Dr. Finley set his subchronic extrapolation factor at three rather than the EPA's choice of ten. See [D.E. 155] 9–10. Dr. Finley supports his choice by stating that three is the standard value for 90-day subchronic studies. See [D.E. 171-27] 49 & n.3.

To begin, “[r]isk assessment is not an exact science.” RMSE at 649. “It should be viewed as a useful framework to organize and synthesize information and to provide estimates” Id. Although risk assessment methodology is generally agreed upon, “significant controversy remains, particularly when actual data are limited and generally conservative default assumptions are used.”

Id. Originally developed to provide life-long regulatory guidance, modern risk assessment methods are typically based on “appropriately prudent assumptions.” Id. at 649–50. These assumptions “often intentionally encompass the upper range of possible risks.” Id. at 650. As a result, applying the methods of a risk assessment “is an exercise in toxicological reasoning.” Id. at 651.

Dr. Finley and the EPA employed similar methodologies to compute the chronic reference dose calculation in their respective risk assessments. Compare [D.E. 171-27] 47–49 with [D.E. 172-1] 48–49. At bottom, plaintiffs argue that Dr. Finley failed to properly compute the chronic reference dose. See [D.E. 155] 4–11. Whether Dr. Finley properly performed the chronic reference dose calculation “goes more to the weight to be attached to his opinion than to its admissibility.” Sparks v. Gilley Trucking Co., 992 F.2d 50, 54 (4th Cir. 1993). Moreover, nothing in the record indicates that Dr. Finley engaged in “results driven analysis.” In re Lipitor, 892 F.3d at 634; Freeman, 778 F.3d at 469. To the contrary, toxicology literature supports Dr. Finley’s opinion that many of the EPA’s uncertainty factors are too conservative for causation-focused risk assessments. See [D.E. 171-27] 47–49; RMSE 649–50. Furthermore, Dr. Finley explained why he departed from other risk assessments in selecting lower uncertainty factors. See [D.E. 171-27] 47–49.

Defendants have established by a preponderance of the evidence that Dr. Finley’s GenX calculations satisfy Rule 702. Cross examination offers the proper forum for plaintiffs’ arguments about Dr. Finley’s GenX exposure analysis. See, e.g., Daubert, 509 U.S. at 596. Thus, the court rejects plaintiffs’ arguments concerning Dr. Finley’s GenX exposure analysis.

ii.

Plaintiffs argue that the court should exclude Dr. Finley’s PFMOAA risk assessment because no peer-reviewed publication has proposed a chronic reference dose. See [D.E. 155] 10.

Specifically, plaintiffs argue “Dr. Finley’s risk assessment as to PFMOAA is . . . unreliable.” Id. at 10. In support, plaintiffs note that Dr. Finley relied upon a study published by Woodlief et al. in 2021 to formulate a chronic reference dose for PFMOAA exposure. See [D.E. 155] 10 n.7; [D.E. 171-28] 12, 16; [D.E. 208] 6–7. Plaintiffs argue that the North Carolina Department of Environmental Quality analyzed the Woodlief et al. study and found “that it alone could not be used to develop a[] [chronic reference dose] like that which Dr. Finley developed [in his report].” [D.E. 155] 10 n.7.³

Whether a methodology has been peer reviewed is one criterion a court may consider in determining the reliability of challenged expert testimony. Courts also consider (1) whether a theory or technique can be (and has been) tested, (2) whether a technique has a high known or potential rate of error and whether there are standards controlling its application, and (3) whether the theory or technique enjoys general acceptance within the relevant community. See Kumho Tire Co., 526 U.S. at 149–50; Daubert, 509 U.S. at 593–94. These considerations are “non-exhaustive guideposts to aid in the required reliability analysis.” Sardis, 10 F.4th at 281. Furthermore, these factors “neither necessarily nor exclusively appl[y] to all experts or in every case, as the relevance of some factors can depend on the nature of the issue, the expert’s particular expertise, and the subject of his testimony.” Id. at 281 (cleaned up); see also Kumho Tire, 526 U.S. at 137, 141, 150. Therefore, a district court retains broad discretion in determining the admissibility of proposed expert testimony. See Kumho Tire, 526 U.S. at 153; Sardis, 10 F.4th at 281; Gastiburo, 16 F.3d at 589; Nease, 848 F.3d at 229.

The Woodlief et al. study appears to be the only study evaluating the potential effects of PFMOAA exposure in animals. See [D.E. 171-27] 42. Accordingly, Dr. Finley acknowledges the

³ Plaintiffs’ expert Dr. Jamie DeWitt coauthored this study.

“very limited” PFMOAA database in his report. See [D.E. 171-27] 49–50. Indeed, the dearth of such studies undergirds plaintiffs’ motion to exclude Dr. Finley’s opinions regarding PFMOAA. The lack of peer-reviewed studies examining PMFOAA exposure weighs against admitting Dr. Finley’s conclusions as to PFMOAA. The court, however, must consider factors other than peer review and publication.

The disciplines of chemical exposure risk assessment and toxicology have both been the subject of much scholarship. Dr. Finley possesses experience and expertise in both disciplines. See [D.E. 171-27] 5. In calculating a chronic reference dose for PFMOAA, Dr. Finley relied on generally accepted methodologies and explained his opinions in detail. See [D.E. 171-27] 20–62; [171-28]. Recognizing the limited studies on PFMOAA exposure, Dr. Finley “used very large unknown factors . . . to ensure the threshold value had a large margin of safety.” [D.E. 208] 7. Thus, although the court acknowledges plaintiffs’ concerns as to the lack of peer-reviewed literature assigning a chronic reference dose for PFMOAA exposure, the court finds defendants have presented sufficient evidence to satisfies Rule 702’s admissibility requirements. Accordingly, the court rejects plaintiffs’ arguments concerning Dr. Finley’s PFMOAA chronic reference dose calculation.

iii.

Next, plaintiffs argue that the court should exclude Dr. Finley’s opinions regarding PFOA as unreliable. See [D.E. 155] 10–13. Specifically, plaintiffs argue that Dr. Finley should have used the EPA’s 2022 draft PFOA chronic reference dose instead of the EPA’s final 2016 chronic reference dose. See [D.E. 155] 11.

Dr. Finley’s decision to use the EPA’s final 2016 PFOA chronic reference dose over the 2022 draft dose does not suggest that he unreliably conducted his risk assessment. In his report,

Dr. Finley discussed both the EPA's 2016 PFOA chronic reference dose and the EPA's 2022 draft PFOA chronic reference dose. See [D.E. 171-27] 23; [D.E. 171-28] 14. No evidence suggests that the toxicological research community regards the EPA's 2022 draft PFOA chronic reference dose as the standard for exposure risk assessment. Dr. Finley's decision to use the EPA's 2016 value represents an exercise of "toxicological reasoning" that is best addressed through "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof" Daubert, 509 U.S. at 596; see RMSE 651. Accordingly, the court rejects plaintiffs' argument.

iv.

Next, plaintiffs argue that "Dr. Finley's analysis fails to consider all PFAS detected in Plaintiffs' wells and does not fit the facts of the case." [D.E. 155] 11 (quotation omitted). Dr. Finley's report analyzes plaintiffs' alleged exposure to three PFAS chemicals: GenX, PFMOAA, and PFOA. See [D.E. 171-27] 5. Dr. Finley does not opine about the other chemicals detected in the plaintiffs' wells.

Under Rule 702, "fit" is another word for relevance. See United States v. Ancient Coin Collectors Guild, 899 F.3d 295, 318 (4th Cir. 2018). "The Supreme Court has explained that relevance—or what has been called fit—is a precondition for the admissibility of expert testimony, in that the rules of evidence require expert opinions to assist the trier of fact to understand the evidence or to determine a fact in issue." Id. (quotation omitted). To be relevant, the proposed expert testimony must be helpful to the trier of fact concerning a claim or defense at issue in the case. See Daubert, 509 U.S. at 591–92; Lespier, 725 F.3d at 449; Kopf, 993 F.2d at 377; Persinger, 920 F.2d at 1188; Sears, Roebuck & Co., 789 F.2d at 1055.

Dr. Finley's report and testimony examine exposure risk for GenX, PFMOAA, and PFOA, chemicals plaintiffs allege contaminated their wells. Dr. Finley did not consider all the chemicals plaintiffs allege contaminated their wells, and he did not purport to do so. Moreover, as to those chemicals Dr. Finley did analyze, his report and testimony will aid the trier of fact in understanding plaintiffs' alleged exposure risk. Accordingly, the court rejects plaintiffs' argument.

v.

Next, plaintiffs ask the court to exclude Dr. Finley's report and testimony under Federal Rule of Evidence 403. See [D.E. 154] 1. Rule 403 permits a court to "exclude relevant evidence if its probative value is substantially outweighed by a danger of one or more of the following: unfair prejudice, confusing the issues, misleading the jury, undue delay, wasting time, or needlessly presenting cumulative evidence." Fed. R. Evid. 403.

Dr. Finley's report and testimony analyzes plaintiffs' alleged exposures to three PFAS chemicals: GenX, PFMOAA, and PFOA. See [D.E. 171-27] 2. The court has balanced the Rule 403 factors and finds Dr. Finley's report and testimony to be highly probative and declines to exclude them under Rule 403. Cf. Sprint/United Mgmt. Co. v. Mendelsohn, 552 U.S. 379, 384 (2008); PBM Prods., LLC v. Mead Johnson & Co., 639 F.3d 111, 125 (4th Cir. 2011); United States v. Udeozor, 515 F.3d 260, 265 (4th Cir. 2008); Garraghty v. Jordan, 830 F.2d 1295, 1298 (4th Cir. 1987); United States v. Penello, 668 F.2d 789, 790 (4th Cir. 1982) (per curiam). Accordingly, the court rejects plaintiffs' Rule 403 argument.

vi.

In considering the plaintiffs' motion, the court has examined Dr. Finley's report and testimony under Rule 702. Specifically, the court has considered (1) whether Dr. Finley is qualified; (2) whether the proposed report and testimony are relevant; and (3) whether the proposed

report and testimony are reliable. See Fed. R. Evid. 702; Kumho Tire Co., 526 U.S. at 141; Daubert, 509 U.S. at 589; Forrest, 429 F.3d at 80. In considering these requirements, the court has discharged its special gatekeeping duties under Rule 702. See, e.g., Kumho Tire Co., 526 U.S. at 147. Defendants have established that Dr. Finley's report and testimony satisfy Rule 702's requirements by a preponderance of the evidence. The court finds Dr. Finley qualified to offer his report and testimony on plaintiffs' alleged exposures to PFAS. [D.E. 172-27] 2. Likewise, the court finds Dr. Finley's report and testimony both relevant and reliable. See Kumho Tire Co., 526 U.S. at 141; Daubert, 509 U.S. at 589; Forrest, 429 F.3d at 80. Dr. Finley's report and testimony will likely aid the trier of fact in understanding plaintiffs' alleged PFAS exposures, and the court finds that Dr. Finley's testimony fits the issues. See Fed. R. Evid. 702(a); Joiner, 522 U.S. at 146-47. Accordingly, the court denies plaintiffs' motion to exclude Dr. Finley's report and testimony.

II.

Defendants seek summary judgment on Branch's private nuisance claim. See [D.E. 176] 1-2. Summary judgment is appropriate when, after reviewing the record as a whole, the court determines that no genuine issue of material fact exists and the moving party is entitled to judgment as a matter of law. See Fed. R. Civ. P. 56(a); Scott v. Harris, 550 U.S. 372, 378, 380 (2007); Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247-48 (1986). The party seeking summary judgment initially must demonstrate the absence of a genuine issue of material fact or the absence of evidence to support the nonmoving party's case. See Celotex Corp. v. Catrett, 477 U.S. 317, 325 (1986). Once the moving party has met its burden, the nonmoving party may not rest on the allegations or denials in its pleading, see Anderson, 477 U.S. at 248-49, but "must come forward with specific facts showing that there is a genuine issue for trial." Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986) (emphasis and quotation omitted). A trial court

reviewing a motion for summary judgment should determine whether a genuine issue of material fact exists for trial. See Anderson, 477 U.S. at 249. In making this determination, the court must view the evidence and the inferences drawn therefrom in the light most favorable to the nonmoving party. See Harris, 550 U.S. at 378.

A genuine issue of material fact exists if there is sufficient evidence favoring the nonmoving party for a jury to return a verdict for that party. See Anderson, 477 U.S. at 249. “The mere existence of a scintilla of evidence in support of the [nonmoving party’s] position [is] insufficient” Id. at 252; see Beale v. Hardy, 769 F.2d 213, 214 (4th Cir. 1985) (“The nonmoving party, however, cannot create a genuine issue of material fact through mere speculation or the building of one inference upon another.”). Only factual disputes that affect the outcome under substantive law properly preclude summary judgment. See Anderson, 477 U.S. at 248.

Branch asserts a private nuisance claim arising from defendants’ alleged contamination of her private well at 37 West Shaw Mill Road.⁴ See [D.E. 98] 5; [D.E. 202] 1. Under North Carolina law, plaintiffs seeking to recover for a private nuisance must show a substantial and unreasonable interference with the use and enjoyment of their property. See Grant v. E.I. du Pont de Nemours & Co., No. 4:91-CV-55, 1995 WL 18239435, at *5 (E.D.N.C. July 14, 1995) (unpublished), aff’d sub nom. Stancill v. E.I. du Pont de Nemours & Co., 91 F.3d 133, 1996 WL 267327 (4th Cir. 1996) (per curiam) (unpublished table decision); Kent v. Humphries, 303 N.C. 675, 677, 281 S.E.2d 43, 45 (1981); Shadow Grp., LLC v. Heather Hills Home Owners Ass’n, 156 N.C. App. 197, 200, 579 S.E.2d 285, 287 (2003); Jordan v. Foust Oil Co., 116 N.C. App. 155, 167, 447 S.E.2d 491, 498 (1994). An interference is substantial when it results in significant annoyance, some material

⁴ Branch owns another property at 21 West Shaw Mill Road that relies on a private well for water. See [D.E. 176] ¶ 1; [D.E. 177] 1; [D.E. 201]. The private nuisance claim concerning that property is not at issue in this order.

physical discomfort, or injury to plaintiffs' health or property. See Watts v. Pama Mfg. Co., 256 N.C. 611, 617–18, 124 S.E.2d 809, 813–14 (1962); Pake v. Morris, 230 N.C. 424, 426, 53 S.E.2d 300, 301 (1949); Duffy v. E.H. & J.A. Meadows Co., 131 N.C. 31, 34, 42 S.E. 460, 461 (1902); Shadow Grp., 156 N.C. App. at 200, 579 S.E.2d at 287. Unreasonableness is a question of fact judged by an objective standard that balances the relative benefit to defendant against the harm to plaintiff. See Pendergrast v. Aiken, 293 N.C. 201, 217, 236 S.E.2d 787, 797 (1977); Watts, 256 N.C. at 618, 124 S.E.2d at 814; Rainey v. St. Lawrence Homes, Inc., 174 N.C. App. 611, 613–14, 621 S.E.2d 217, 220 (2005).

Defendants seek summary judgment on Branch's private nuisance claim because the property at 37 West Shaw Mill Road sources its water from a public water utility, not a private well. See [D.E. 176] 1–2.⁵ Nuisance law differentiates between private and public nuisances. A defendant creates a public nuisance when the nuisance interferes with the “rights and privileges common to the public or to all the people of the community.” Barrier v. Troutman, 231 N.C. 47, 49, 55 S.E.2d 923, 925 (1949); see Twitty v. State, 85 N.C. App. 42, 49, 354 S.E.2d 296, 301 (1987). A plaintiff must show “unusual and special damage” to bring a public nuisance claim. Barrier, 231 N.C. at 49, 55 S.E.2d at 925; see Hampton v. N.C. Pulp Co., 223 N.C. 535, 543–44, 27 S.E.2d 538, 543–44 (1943); Neuse River Found., Inc. v. Smithfield Foods, Inc., 155 N.C. App. 110, 115–16, 574 S.E.2d 48, 52–53 (2002), abrogated on other grounds by Comm. to Elect Dan Forest v. Emps. Pol. Action Comm., 376 N.C. 558, 853 S.E.2d 698 (2021). In contrast, a defendant creates a private nuisance “where the nuisance results from violation of private rights and are such as to constitute a private wrong by injuring property or health, or where by the use of structures

⁵ Defendants withdrew their other alleged grounds for summary judgment. Compare [D.E. 176] ¶¶ 3–5, and [D.E. 177] 4–7, with [D.E. 202] ¶ 19, and [D.E. 231] ¶ 19.

and permitted conditions a nuisance has been created, causing annoyance to the individual and disturbing him in the possession of his premises and rendering the use and occupancy thereof uncomfortable, injuriously affecting the peace and menacing the health and safety of his home.” Barrier, 231 N.C. at 49–50, 55 S.E.2d at 925. Distinguishing the two “is not simply a matter of tallying the number of people affected by a defendant’s allegedly tortious conduct . . . [but] depends on the nature of the interest affected by the defendant’s conduct.” Rhodes v. E.I. du Pont de Nemours & Co., 636 F.3d 88, 96 (4th Cir. 2011).

To survive summary judgment on her private nuisance claim, Branch must forecast evidence from which a reasonable jury could find (1) that the defendants’ conduct in allegedly contaminating her private well was unreasonable, and (2) that Branch suffered a substantial invasion of her interest in the private use and enjoyment of her property.

Branch’s property at 37 West Shaw Mill Road has been connected to a public water utility since 2006. See [D.E. 178] ¶¶ 4–5, 10; [D.E. 201] 2–4; [D.E. 202] ¶ 4. A private well exists on the property, but Branch does not currently draw water from it. See [D.E. 161-16] 11–12; [D.E. 177] 1–4; [D.E. 202] ¶¶ 15–18. Defendants argue that because Branch does not rely on the private well at 37 West Shaw Mill Road for water, she cannot assert a private nuisance claim. After all, according to defendants, Branch’s “interest in clean water from the public water utility [is shared] equally with members of the general public . . . meaning the interest affected is a public—rather than a private—interest.” [D.E. 176] 1. Defendants then cite Priselac v. Chemours Company, No. 7:20-CV-190, 2022 WL 909406, at *5 (E.D.N.C. Mar. 28, 2022) (unpublished), and argue that they “are therefore entitled to summary judgment on [Branch’s] private nuisance claim.” Id.

In Priselac, a plaintiff and the class she sought to represent brought a private nuisance claim against the Chemours Company and other defendants after drinking water “supplied by the Cape

Fear Public Utility Authority, which draws water for its customers from the Cape Fear River.” Id. at *1. The plaintiff alleged that the Chemours Company and other defendants “released PFCs into the Cape Fear River . . . through their operations at the Fayetteville Works Site, thereby contaminating her property and drinking water.” Id. The plaintiff did not allege that the Chemours Company and other defendants had contaminated her private well or any other non-public source of water. See id. at *5. Because the plaintiff alleged only that the Chemours Company had contaminated her public water source, this court held that plaintiff could not maintain a private nuisance claim. See id. at *5 (“[Plaintiff] shares her interest in clean water from the utility company equally with members of the general public who also get their water from the Cape Fear Public Utility Authority. Thus, even though defendants’ alleged contamination of the Cape Fear River . . . affects [plaintiff’s] use and enjoyment of her private property, the interest affected is a public interest.” (cleaned up)); see Rhodes, 636 F.3d at 96 (“The fact that the water eventually was pumped into private homes did not transform the right interfered with from a public right to a private right.”).

Priselac cannot bear the weight that defendants place on it. Notably, in Dew v. E.I. du Pont de Nemours & Company, 2019 WL 13117100, this court denied a motion to dismiss a private nuisance claim when the defendants allegedly contaminated plaintiffs’ private wells, not a public utility. Dew, 2019 WL 13117100, at *2, 5–6; see Rhodes, 636 F.3d at 96–97. Viewing the record in the light most favorable to Branch, Branch owns the property at 37 West Shaw Mill Road, and the property has been “damage[d] as a result of the presence of [d]efendants’ PFAS chemicals.” [D.E. 98] 5; see [D.E. 161-17]; [D.E. 178] ¶ 1; [D.E. 201] 1–4; [D.E. 202] ¶ 1. Branch has lived on the property for 22 years and currently resides there with her husband and nephew. See [D.E. 161-16] 4. Although connected to a public water utility, Branch maintains a private well on the

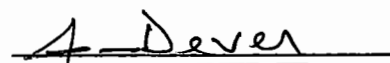
property equipped with a “functioning pump.” [D.E. 203-2] 1; see [D.E. 202] ¶ 14; [D.E. 231] ¶ 14. Branch relied on this private well for water until 2006. See [D.E. 179-1] 6; see also [D.E. 178] ¶¶ 4–5, 10; [D.E. 201] 2–4. On April 19, 2023, Branch’s expert tested the “water supply well” at 37 West Shaw Mill Road and discovered PFAS contamination. [D.E. 161-4] 46; see [D.E. 161-16] 11–12. Branch contends that if the well “w[as] not contaminated with PFAS, [she] would occasionally use the well for drinking water when outside.” [D.E. 202] ¶ 16; see [D.E. 231] ¶ 16. Branch also contends that the “PFAS contamination has . . . interfered with the use and enjoyment of her property at [37 West Shaw Mill Road].” [D.E. 202] ¶ 18. Thus, Branch’s private nuisance claim arises from the alleged contamination of her private well.

Branch does not premise her private nuisance claim “on contamination of the public water serving the house at 37 West Shaw Mill Road.” [D.E. 201] 4; cf. Rhodes, 636 F.3d at 96–97. Moreover, the mere existence of a public water utility connection does not talismanically defeat Branch’s private nuisance claim. A reasonable jury could find defendants liable for Branch’s private nuisance claim. Thus, the court denies defendants’ motion for summary judgment.

III.

In sum, the court DENIES defendants’ motion to exclude the report and testimony of plaintiffs’ expert Dr. Adam Domanski [D.E. 188], DENIES plaintiffs’ motion to exclude the report and testimony of defendants’ expert Dr. Brent Finley [D.E. 154], and DENIES defendants’ motion for summary judgment on Branch’s private nuisance claim [D.E. 176].

SO ORDERED. This 30 day of September, 2024.



JAMES C. DEVER III
United States District Judge