

JESSIE FISHER, *et al.*,

Plaintiffs,

V.

CIBA SPECIALTY CHEMICALS CORP.,

et al.,

Defendants.

CIVIL ACTION 03-0566-WS-B

This matter is before the Court on plaintiffs' Motion for Class Certification (doc. 330). Also pending are certain ancillary filings, including Defendants' Motion to Re-Urge Motions to Strike or Exclude Experts Farber and McFaddin (doc. 364), Defendants' Motion in Limine to Preclude Evidence of Newly Disclosed Sampling Data (doc. 365), and Defendants' Motion to Strike Affidavit of Dr. Philip Bedient (doc. 366), as well as various objections tendered by the parties to exhibits and deposition excerpts designated or utilized by opposing parties. A Class Certification Hearing was conducted before the undersigned on April 25 & 26, 2006, and the motions have been briefed and argued. These filings are now ripe for disposition.

Plaintiffs initiated this putative class action in this District Court by filing a Complaint (doc. 1) on August 25, 2003. The presently operative Third Amended Class Action Complaint (doc. 212) alleges that plaintiffs Jessie Fisher (“Fisher”), Arlean Reed (“Reed”), Barbara Byrd (“Byrd”), and Ronald McIntyre (“McIntyre”) (collectively, “plaintiffs”) are residents of, and property owners in, Washington County, Alabama. Plaintiffs maintain that their property values have been impaired because such property has been contaminated by a nearby chemical manufacturing facility that is or has been owned at various times by defendants Ciba Specialty Chemicals Corporation, Ciba-Geigy Corporation, Novartis, Ltd., Inc., and Syngenta Crop Protection, Inc. (collectively, “Ciba” or “defendants”). This manufacturing facility is located on a site exceeding 1,000 acres, with a developed plant site encompassing approximately 2.4 square

miles. The Ciba site is approximately 1.3 kilometers northeast of McIntosh, Alabama, just north of a manufacturing plant owned and operated by Olin Corporation, just south of timber land owned by the Tensaw Land and Timber Company, and just west of a bend in the Tombigbee River. Ciba's McIntosh facility, which remains in active use today, has been operated continuously by defendants since 1952, and has been used to manufacture dozens of pesticides and herbicides at various times. From 1952 through 1965, the Ciba plant produced millions of pounds of the insecticide dichloro-dyphenyl-trichloroethane ("DDT").¹ For an approximately 18-month period in 1953 and 1954, the Ciba plant also manufactured an insecticide called benzene hexachloride ("BHC").² Because of on-site contamination, Ciba's McIntosh facility was designated a Superfund site by the United States Environmental Protection Agency ("EPA") in 1983.

In 2003, plaintiffs, on behalf of themselves and others similarly situated, sued Ciba on state law theories of negligence, conspiracy, strict liability, trespass, nuisance, intentional misrepresentation, negligent misrepresentation, fraud and fraudulent concealment, constructive fraud, and punitive/exemplary damages, as well as a federal claim under the Racketeer Influenced and Corrupt Organizations Act, 18 U.S.C. §§ 1961 *et seq.* ("RICO"). Plaintiffs seek compensatory and punitive damages for diminution in property values resulting from the Ciba plant's contamination of their property with DDT and BHC.

After more than two and a half years of contentious litigation, plaintiffs filed their Motion for Class Certification (doc. 330) on March 24, 2006. Plaintiffs argued that vast

¹ DDT is a World War II-era chemical compound that was widely utilized in the U.S. to combat disease-bearing mosquitoes and as an agricultural insecticide in the 1940s, 1950s and 1960s. The federal government banned almost all uses of it in 1972 because of concerns over DDT's environmental impacts, as well as its status as a probable carcinogen. DDT is a man-made substance and does not occur in nature. According to plaintiffs' expert, DDT's popularity stemmed in part from its persistence in the environment, such that "it would just stay there and continue to kill over a long period of time." (Tr., at 154.)

² According to plaintiffs' expert testimony, BHC is a pesticidal compound that has four different forms, or isomers, the most common of which is known as lindane. (Tr., at 61.) Like DDT, BHC is a fat-soluble, long-lived pesticide that is ordinarily transported by similar pathways as DDT, except that BHC is more volatile than DDT. (*Id.* at 61-62.)

quantities of DDT and BHC had migrated offsite from the Ciba plant in contaminated process wastes via pathways of airborne dispersion, wastewater emissions into surface and ground waters, and human activity (*i.e.*, transport and dispersal of contaminants by such mechanisms as tire treads, workers' clothing, and residues from trucks bearing loads of hazardous materials).³ Plaintiffs are requesting certification of a class of owners of property within an approximately 2.1 mile radius of the Ciba site, with an additional one mile spur jutting out to the west along Topton Road. (*See* Plaintiffs' Exh. A.) Plaintiffs would define the class as consisting of "all individuals or entities who owned non-income producing real property in Washington County, Alabama on August 25, 2003 in the geographic area" of the 2.1 mile circle and spur identified above. (Plaintiffs' Brief, at 22-23.)

The Motion for Class Certification has been exhaustively litigated via more than 140 pages of briefing, approximately 240 exhibits,⁴ and two full days of live testimony and oral

³ As originally framed, the Motion for Class Certification identified four chemicals of concern: DDT, BHC, chlordane and t-nonachlor. (*See* Plaintiffs' Memorandum, at 5-9.) Less than 24 hours before the Rule 23 hearing, plaintiffs announced their abandonment of the chlordane and t-nonachlor allegations, such that the only chemicals at issue are DDT and BHC. (Tr., at 13.) At the outset of the Rule 23 hearing, plaintiffs' counsel confirmed on the record that "the only two chemicals that are being considered are DDT and BHC." (*Id.* at 19.) In light of this refinement, the Court will not address or consider those portions of plaintiffs' filings setting forth arguments and evidence pertaining to alleged contamination by chlordane, t-nonachlor or any chemical other than DDT and BHC.

⁴ At the Court's instruction, the parties submitted courtesy copies of their exhibits for the undersigned's use in advance of the Hearing. The parties were notified that these courtesy copies were not a substitute for electronically filed briefs and accompanying exhibits, and that those courtesy copies would not be part of the official record. (*See* Order dated March 29, 2006 (doc. 339), at 2.) Yet many of defendants' courtesy-copy submissions deviated materially from their electronically filed exhibits. For example, Exhibit D-4 that defendants electronically filed is a seven-page excerpt of William McIntyre's deposition transcript. But the hard copy version of Exhibit D-4 provided to chambers consists of approximately 100 pages of material, included the complete McIntyre transcript and various bulky exhibits to same. Such surplusage is not part of Exhibit D-4. The same sorts of discrepancies were found with the courtesy copies of Exhibits D-6, D-7, D-8, D-9, D-13, D-15, D-16, D-17, D-18, D-19, and D-20. The Court will consider only the versions of these exhibits that were electronically filed, plus the exhibits admitted into evidence during the Rule 23 hearing. Extraneous material set forth in the courtesy copies is not part of the record and will not be reviewed or relied on in any way herein.

argument generating nearly 500 pages of official transcripts.⁵ Before proceeding with a recitation of relevant facts for that Motion, however, the Court will address three evidentiary motions submitted by defendants just one day before the Rule 23 hearing. (*See* docs. 364, 365, 366.) The two-day Class Certification Hearing incorporated oral argument on several of these Motions, which are potentially significant in delineating the scope of the record.

II. Pre-Hearing Evidentiary Motions.

A. Motion to Re-Urge Motions to Strike or Exclude Experts.

Back on March 14, 2006, prior to the Motion for Class Certification being filed, defendants launched a number of pre-emptive attacks on plaintiffs' case in the form of motions to strike or exclude various prospective expert witnesses' opinions, reports and testimony from the Rule 23 proceedings. (*See* docs. 324 through 327.) In an Order (doc. 328) dated March 21, 2006, the undersigned denied these motions as premature, inefficient and otherwise lacking in merit. On the cusp of the Rule 23 Hearing, defendants filed a Motion to Re-Urge Motions to Strike or Exclude Experts Farber and McFaddin (doc. 364), through which defendants rekindled their objections to two of the four plaintiffs' experts that were the subject of defendants' volley of previous motions.⁶ In particular, defendants sought to exclude the expert opinions and reports of Dr. Theodore Farber and Michelle A. McFaddin on the following bases: (a) their opinions "fail to assist the trier of fact in determining issues germane to the Fed.R.Civ.P. 23

⁵ The proposed record originally consisted of more than 430 exhibits submitted by the parties, including 188 exhibits by plaintiffs and 250 exhibits by defendants. After the Class Certification Hearing, however, court personnel returned nearly 200 of these exhibits to the parties pursuant to the Court's April 12, 2006 Order (doc. 345), which stated in relevant part: "The parties are cautioned that any designated exhibits to which they do not refer in their briefs and which they do not mention during the Rule 23 hearing will not be considered by the Court." (*Id.*, ¶ 5.) The exhibits returned to the parties after the hearing failed to satisfy these announced criteria. For that reason, they are not included in the court file and will not be reviewed by the undersigned in deciding the Rule 23 Motion.

⁶ Defendants' filings renewed their objections only as to plaintiffs' experts Farber and McFaddin. Although defendants had filed motions to strike or exclude the testimony of plaintiffs' experts Kaltoven and Bedient on March 14 (concurrently with the motions directed at Farber and McFaddin), defendants opted not to renew or re-urge those motions. As such, the Court will not revisit or re-analyze defendants' previously denied motions to strike or exclude the reports, opinions and testimony of Kaltoven and Bedient.

requirements”; (b) their expert reports are inadmissible hearsay as to which defendants have not had an opportunity to conduct cross-examination; and (c) McFaddin’s report includes improper speculation and offers opinions that extend beyond the scope of her expertise. (*See* docs. 364, 325, 326.)

1. Admissibility of Reports of Non-Testifying Experts.

Neither Farber nor McFaddin testified at the Class Certification Hearing, nor does the Court recall any mention of either of them during said Hearing; however, plaintiffs did attach their respective expert reports as exhibits to the Motion for Class Certification. (*See* Exhibit P-45 (Expert Report of Dr. Theodore Farber); Exhibit P-75 (Expert Report of Michelle A. McFaddin, J.D.)). Defendants’ threshold objection to both reports is that they are inadmissible hearsay because defendants could not cross-examine the experts as to the bases of their opinions. (Motion to Re-Urge, at 2.)

This argument fails for two reasons. First, plaintiffs correctly assert that the Federal Rules of Evidence are not stringently applied at the class certification stage because of the preliminary nature of such proceedings. Courts confronted with Rule 23 issues may consider evidence that may not ultimately be admissible at trial. *See, e.g., In re Hartford Sales Practices Litigation*, 192 F.R.D. 592, 597 (D. Minn. 1999) (“On a motion for class certification, the evidentiary rules are not strictly applied and courts will consider evidence that may not be admissible at trial.”); *Rockey v. Courtesy Motors, Inc.*, 199 F.R.D. 578, 582 (W.D. Mich. 2001) (same); *Thompson v. Board of Ed. of Romeo Community Schools*, 71 F.R.D. 398, 402 n.2 (W.D. Mich. 1976) (explaining that rules of evidence “need not be viewed as binding during a hearing on such preliminary matters as class certification”); *see generally Mehl v. Canadian Pacific Railway Ltd.*, 227 F.R.D. 505, 508-09 (D.N.D. 2005) (ruling on class certification motion without evidentiary hearing and noting that expert opinions offered by both sides should receive appropriate weight in class certification analysis).⁷ Second, the court file reflects that the parties

⁷ The Court recognizes that during the Hearing defendants proffered oral argument that the Federal Rules of Evidence should be rigorously applied to avoid unjust results. (Tr., at 272-74.) This contention is unavailing for three reasons. First, despite ample notice that plaintiffs intended to argue for relief from the Rules of Evidence in the Hearing, defendants came forward with not a single case supporting their position that those Rules should be

undertook considerable class certification discovery from August 2004 through March 2006. The expert reports in question are dated June 2005. This timeline reflects that defendants had ample time to take the depositions of both Dr. Farber and McFaddin. At that time, defendants could have cross-examined these expert witnesses at length about the opinions presented in their reports. Defendants elected not to do so.⁸ Having made that choice, defendants cannot now be heard to complain that they have somehow been unfairly “depriv[ed] ... of the opportunity to test the basis for the opinions offered.” (Motion to Re-Urge, at 2.) This objection is **overruled**.⁹

2. *Defendants’ Relevancy Objections to Dr. Farber’s Report.*

Dr. Farber’s report, which reflects his expertise in the areas of pharmacology and toxicology, largely consists of an academic tract outlining in general terms the “regulatory process and the regulatory history leading to the cancellation of” DDT. (Exh. P-45, at 4.) This

stringently enforced. Second, to bolster their position that cross-examination of these witnesses is necessary, defendants cited examples in which class discovery had ferreted out weaknesses or inconsistencies in plaintiffs’ proposed evidence. But this evidence undercuts defendants’ argument by illustrating that the parties’ comprehensive class discovery efforts situate them well to expose inaccuracies or misrepresentations relating to each others’ exhibits, even without cross-examination at the Hearing. Third, the fundamental point of the above authorities is that a Rule 23 hearing is not a trial on the merits. The Court makes no findings of fact and announces no ultimate determinations on the merit of plaintiffs’ claims. The only question is whether plaintiffs have made a sufficient showing to warrant invoking the Rule 23 procedural device in litigating their claims. In that context, the Federal Rules of Evidence take on a substantially reduced significance, as compared to a typical evidentiary hearing or trial.

⁸ In seeking to exclude both the Dr. Farber and McFaddin reports, defendants represent to the Court that they chose not to depose these experts because the opinions expressed in their reports “had no bearing on class certification issues.” (*See* doc. 325 at n. 9; doc. 326 at n. 6.) Defendants’ strenuous objection that they could not cross-examine these experts is a direct and eminently foreseeable consequence of their strategic decision not to take their depositions during class discovery.

⁹ Defendants’ objection to these expert reports is curious, as defendants have submitted exactly the same kinds of evidence. Specifically, defendants have injected into the record reports from several experts who did not testify at the Hearing, including William Desvousges (Exhs. D-21, D-250) and Edwin Johnson (Exh. D-19). Had it been adopted by the Court, defendants’ hearsay argument would have barred those defense expert reports, as well as those of Dr. Farber and McFaddin. Thus, defendants, as well as plaintiffs, benefit from the allowance of these kinds of exhibits for Rule 23 purposes.

report explains, *inter alia*, that DDT was a widely used and very effective pesticide for crops and for controlling malaria and typhus outbreaks after 1945; that DDT has been classified as a probable human carcinogen bearing a range of human health effects; that DDT breaks down in the environment into DDD and DDE, both of which have similar chemical and physical properties to DDT;¹⁰ that DDT and its sister compounds are highly persistent in the environment; that almost all uses and registrations of DDT were canceled by the EPA in 1972; that DDT is not currently manufactured and cannot be used in the United States; and that despite the lack of any present manufacture or use of this compound “small amounts of DDT [are] still present in soils throughout the U.S.” (Exh. P-45, at 14-16.)

Defendants seek to strike or exclude Dr. Farber’s report as irrelevant to the Motion for Class Certification. The Court disagrees. This case has been postured as being focused on alleged DDT contamination in the McIntosh community. Dr. Farber’s report provides a detailed discussion of the history and properties of DDT, revealing information that the Court has found nowhere else in the voluminous class certification record. Such information may not be of crucial importance to a Rule 23 analysis, but it is unquestionably useful background data that has enhanced and enriched the undersigned’s understanding of the primary chemical compound of interest in this lawsuit. On that basis, the Court finds Dr. Farber’s expert report helpful and illuminating as to the issues of concern in the Motion for Class Certification. Defendants’ attempt to exclude Dr. Farber’s report is not well taken, and the Motion to Re-Urge is **denied** as to that exhibit.

3. *Defendants’ Specific Objections to McFaddin’s Report.*

Michelle McFaddin, J.D., an administrative law attorney, submitted a 48-page single-spaced expert report on the “general environmental, regulatory history” of the Ciba facility in McIntosh. (Exh. P-75, at 1.) Much of her report appears to be a factual narrative of

¹⁰ Plaintiffs’ expert Marco Kaltofen explained that DDT degrades in the environment to DDD and DDE, and that all three compounds are structurally similar. (Tr., at 61.) DDT, DDD and DDE in samples are often collectively referred to in these proceedings as “DDTr.” (*See, e.g., id.* at 61, 348.) The Court will adhere to the parties’ nomenclature in this regard. Any sample that contains any of DDT, DDD, or DDE is a positive sample for DDTr, and will be so characterized.

contamination-related events occurring at the Ciba plant, as well as Ciba's interactions with regulatory agencies, during the time period at issue. To the extent that McFaddin's report offers a synopsis of facts concerning the Ciba plant based on her reading of other exhibits, it does not state expert opinions at all, but simply provides the witness's slant on facts that are in the Rule 23 record. The last three pages of this report, labeled "Conclusions," include the following opinions: (a) Ciba has produced and continues to produce hazardous chemicals at the McIntosh site; (b) in many instances, these chemicals "have been released, discharged and emitted into the environment ... thereby damaging the community's natural resources"; (c) the soils and groundwater under and adjoining the Ciba plant "are contaminated by multiple hazardous compounds"; (d) the Tombigbee River has also been contaminated by Ciba chemicals; (e) Ciba's involvement with preventing or minimizing contamination has been "reluctant[]" as it has obstructed regulatory efforts, "consistently delayed notifying federal and state agencies" of known contamination, "opposed agency requests" to investigate contamination, "attempted to restrict the scope of these investigations," sought to shift the blame for proven contamination, and otherwise used "hardball tactics" in dealing with regulators; (f) Ciba has failed to develop a groundwater recovery program to extract all contaminants from aquifers under the site; (g) Ciba has refused to take action to remediate contamination of the Olin Basin and other off-site locations; (h) Ciba has refused to clean up contamination within its floodplain, has refused to investigate its contamination of the River, and has opposed requests to sample biological tissues in the area; (i) Ciba discharges large quantities of hazardous waste today; (j) Ciba has not satisfied Clean Air Act requirements for the last three years; (k) Ciba consistently minimizes the adverse health and environmental effects of its operations; (l) the Ciba plant "pose[s] a continuing risk to individuals living and/or working in the vicinity of the plant as well as an imminent and substantial ecological/environmental threat"; and (m) Ciba has not acted responsibly to prevent contamination, and Ciba personnel have shown little interest in developing an environmental compliance program. (Exh. P-75, at 46-48.)

After studying McFaddin's report, the Court shares defendants' concerns. The document reads like the fact section of a brief, not the report of an expert witness. The vast majority of McFaddin's report simply summarizes and states her advocacy-based interpretation of documents in the record concerning Ciba's historical conduct. These statements of alleged fact

do not appear to benefit from, or to be based to any extent on, McFaddin's status as a regulatory expert. The Court's task in examining the Rule 23 issues presented here is not assisted by McFaddin's one-sided recitation of record facts. She does not show that she has special skills that render her reading of record documents concerning the history of the Ciba plant, and her conclusions as to what Ciba has or has not done, any more or less persuasive than that of a layperson. For example, McFaddin concludes that Ciba has failed and refused to take action to remediate its off-site contamination. But how is that conclusion bolstered by her expertise as a "regulatory expert"? Is she not simply acting as another advocate for plaintiffs in arguing the facts in a manner that is most beneficial to her clients? How does this purported expert report differ from a supplemental brief submitted by another lawyer for plaintiffs? The Court has been unable to obtain satisfactory answers to these questions. The picture grows even murkier when one considers McFaddin's "conclusions" that Ciba has contaminated its soils, its groundwater, and surface waters. What special ken does an administrative law attorney have to render expert opinions as to existence and causes of environmental contamination?

Simply put, the Court does not perceive McFaddin's report as an "expert report" at all, but rather as written advocacy by a lawyer, akin to a supplemental brief on the facts presented by another attorney representing plaintiffs. Although she has been couched as a "regulatory expert," her conclusions do not appear to relate to, or benefit from, any such expertise. Of course, the Court is cognizant that "[a]t the class certification stage, the court should not delve into the merits of an expert's opinion, or indulge in 'dueling' between opposing experts." *In re Natural Gas Commodities Litigation*, 231 F.R.D. 171, 182 (S.D.N.Y. 2005). An expert opinion must meet only a "low hurdle" to receive consideration at the Rule 23 stage. *See id.* "[T]he question is whether the expert evidence is sufficiently probative to be useful in evaluating whether class certification requirements have been met." *Dukes v. Wal-Mart, Inc.*, 222 F.R.D. 189, 191 (N.D. Cal. 2004); *Foster v. St. Jude Medical, Inc.*, 229 F.R.D. 599, 600 n.1 (D. Minn. 2005) ("the *Daubert* inquiry is somewhat limited at the class certification stage"). Nonetheless, in light of the infirmities documented above, McFaddin's report is not sufficiently probative to aid the evaluation of whether Rule 23 requirements have been met. Accordingly, the Motion to Re-Urge is **granted** as to the McFaddin report, and Exhibit P-75 is hereby **stricken** and

excluded from consideration for purposes of the instant Motion for Class Certification.¹¹

B. Motion in Limine to Preclude Evidence of Newly Disclosed Sampling Data.

Also on the day before the Class Certification Hearing, defendants filed a Motion in Limine to Preclude Evidence of Newly Disclosed Sampling Data (doc. 365), in which they objected to Exhibit P-171, a document furnished to defendants for the first time on April 21, 2006, just two business days before the Hearing. That exhibit purported to include plaintiffs' new sampling data that had not previously been disclosed to defendants. Given the untimely disclosure, the Motion in Limine requests that such data be excluded pursuant to Rule 37(c)(1), Fed.R.Civ.P.

The Court heard oral argument on this issue during the Hearing. (Tr., at 19-21.) Plaintiffs' counsel explained that they had undertaken additional sampling of household dust from various locations two weeks prior to the Hearing "as part of [their] ongoing obligations to the class." (*Id.* at 19.) According to plaintiffs, the five sample results in question were received by plaintiffs on the afternoon of April 21, 2006 and promptly forwarded to defense counsel. (*Id.* at 20.) These samples were drawn from dust on the properties of proposed class representatives Arlean Reed, Jessie Fisher and Barbara Byrd, as well as two other locations. (*Id.* at 20-21.)¹²

¹¹ This determination is hardly crippling to plaintiffs' case. Plaintiffs' briefs appear rely on the McFaddin report solely for the proposition that Ciba systematically underreports waste generation rates and toxic chemical releases. (Plaintiffs' Brief, at 28.) Such facts, if true, do not require expert testimony, but may readily be shown by recitation of the source documents on which McFaddin relied.

¹² The record is confusing as to the exact locations of these five samples. Given the last-minute nature of these samples, it appears that most or all of the parties' visual aids excluded those samples. To further confound matters, several days after the Hearing, plaintiffs' counsel filed a Notice of Filing Corrected Exhibits (doc. 373), which included new versions of Exhibits P-173, P-174 and P-178 that incorporated the additional five dust samples. Unfortunately, those revised exhibits also incorporated other unidentified and unexplained changes from the versions introduced during the Hearing, such that it is impossible to ascertain exactly which samples depicted on the amended exhibits are the five samples in question. The Court understands from Exh. P-171 and plaintiffs' counsel's representations during the Hearing as follows: (a) three of the samples come from the residences of Byrd, Reed and Fisher, all of which are outside the boundaries of plaintiffs' proposed class area; and (b) a fourth sample comes from the residence of Etori Toolles, wherever and whomever that might be.

Plaintiffs' counsel proffered no justification for why they waited to conduct dust sampling of class representatives' homes until the eleventh hour.¹³ In response, defense counsel asserted that they had been prejudiced by receiving this data on the eve of the Hearing, in that they had not had an opportunity to depose plaintiffs' expert about those samples; they had not been provided underlying technical data and field notes relating to those samples, which defendants' experts would require to perform their own analysis; and their experts had not had an opportunity to analyze these sample results or to incorporate them into their existing analyses. (*Id.* at 19-21.)

Obviously, both sides expended tremendous amounts of energy and resources in preparing for the Class Certification Hearing. They participated in approximately 18 months of hard-fought, intensive class discovery. They retained skilled experts who spent untold hours poring over sampling data, analyzing it for trends, formulating conclusions, drafting reports, testifying about their research and opinions in discovery depositions, preparing for their testimony in the Hearing, and creating visual aids to highlight and underscore key aspects of their testimony. All of these efforts were thrown into disarray by plaintiffs' last-minute inclusion of five brand-new samples just two business days before the Hearing, well after the close of an 18-month discovery period. Throughout the Hearing, there was ongoing confusion in expert testimony and accompanying exhibits as to whether the April 21 samples were or were not included.¹⁴ There were caveats to expert testimony and exhibits where such testimony and

¹³ At most, plaintiffs' expert, Marco Kaltofen, suggested during his Hearing testimony that the collection of certain samples was delayed by "problems with getting sufficient dust mass to be analyzed" and the need "to let a certain amount of dust accumulate." (Tr., at 143-44.) However, plaintiffs' counsel never presented this argument in response to defendants' objections. Even if they had, nothing in Kaltofen's testimony or anywhere else in the record suggests that insufficient dust mass would have been present at those locations in, say, February 2006 for sampling to be conducted at that time, within the limits of the class discovery and with sufficient time for disclosure and analysis by both sides in advance of the Hearing. In short, the "insufficient dust mass" explanation, in its current form, falls well short of justifying plaintiffs' conduct in waiting until two weeks before the Hearing to take these samples, then springing these sample results on opposing counsel just two business days before the Hearing.

¹⁴ For example, there were multiple confusing exchanges between defense counsel and Kaltofen attempting to ascertain whether figures tabulated by Kaltofen were inclusive or exclusive of the April 21 samples and seeking to distinguish between new data and old data, new spreadsheets and old spreadsheets. (Tr., at 117-18, 146, 148-49.) Also, the Court has struggled

exhibits failed to include the April 21 sample results, and objections where they did. Plaintiffs submitted revised exhibits several days after the Hearing to include the April 21 samples, which had been excluded from the versions of several exhibits presented during the Hearing. And defendants certainly did not have a fair, reasonable opportunity to study the April 21 samples or to incorporate them into their expert's analysis.¹⁵

All of these practical, logistical and prejudicial problems were injected into the Class Certification Hearing by plaintiffs unnecessarily. The class discovery schedule established by Magistrate Judge Bivins was crafted specifically to avoid this kind of unfair surprise at the Hearing. Yet plaintiffs have failed to explain the timing of these five samples. It could not have been a new discovery by plaintiffs that testing was needed at the property of the named plaintiffs, yet this testing was performed more than two and a half years after the inception of this lawsuit. Surely, plaintiffs could have sampled the household dust on the class representatives' property during the discovery period, and did not have to wait until the last possible moment before the Hearing. The inefficiencies to the Hearing, and the prejudice to defendants, could have been readily avoided had plaintiffs simply collected and analyzed these dust samples before or during the applicable class discovery period.

In short, it is this Court's opinion that the April 21 sample results violated the spirit of plaintiffs' discovery obligations, needlessly ushered confusion into the Class Certification Hearing, and prejudiced defendants. In the absence of compelling reasons why this data could not have been collected and produced far sooner, the Court will not consider it. Defendants' Motion in Limine to Preclude Evidence of Newly Disclosed Sampling Data (doc. 365) is **granted** pursuant to Rule 37(c)(1), Fed.R.Civ.P., and the five dust sample results reported on

to compare sampling maps submitted by the parties as exhibits that are inclusive of the April 21 samples with maps that are exclusive of the April 21 samples, and has in some instances had a difficult time discerning which is which.

¹⁵ Dr. Langseth, defendants' expert who reviewed and analyzed plaintiffs' sampling results, testified at the Hearing that he had not had an opportunity to review this brand-new data because he had just received it a few days earlier and the data was lacking laboratory sheets and other key information necessary to the analysis. (Tr., at 405.)

April 21, 2006 will be **excluded**.¹⁶

C. Motion to Strike Affidavit of Dr. Philip Bedient.

Defendants' final pre-hearing motion was a Motion to Strike Affidavit of Dr. Philip Bedient (doc. 366). As part of their April 21 pre-hearing submission, plaintiffs filed Exhibit P-169, an Affidavit from Dr. Bedient, plaintiffs' expert in hydrology and groundwater flow.¹⁷ In this Affidavit, Dr. Bedient testified that a "large plume of dissolved BHC" from Ciba migrated south to the Olin facility over a 30-year period from the 1950s to the 1980s and that, "to a reasonable degree of scientific certainty" that plume had migrated to groundwater beneath residential areas south of the Olin property. (Exh. P-169.) This Affidavit testimony stands in contrast to Dr. Bedient's previous deposition testimony, wherein he stated that he had neither modeled nor mapped any groundwater plume from the Ciba plant to plaintiffs' properties, that he had taken no steps to define the geographic boundary of any contaminant plume from Ciba, that no groundwater would move to the west or southwest from the Ciba site, that groundwater flows from Ciba would be to the southeast "and maybe to the south," that he had done no modeling to assess whether contaminated groundwater had migrated beyond the pump and treat system on the Olin property south of the Ciba site, and that he could point to no data showing Ciba-related groundwater contamination outside of Ciba and Olin's properties. (Tr., at 302-24.) Based on this discrepancy, defendants urge the Court to exclude Exhibit P-169 as a "sham affidavit." *See*,

¹⁶ The prejudice to plaintiffs from the exclusion of this material is slight, at best. Although certain April 21 samples tested positive for BHC and DDT, at least several of them were outside the boundaries of the proposed class area, and were therefore of minimal relevance in evaluating the prospective class delineated by plaintiffs.

¹⁷ The purposes of this Affidavit are far from clear given plaintiffs' representations during the Hearing that no groundwater class is sought. (*See* Tr., at 24 ("We're not here seeking today a groundwater subclass in this case"), 474 ("We're not seeking a groundwater class. We're not seeking a surface water class.")). If plaintiffs are not seeking certification of a class based on groundwater contamination, then it is unclear how expert testimony concerning groundwater contamination is germane to the Rule 23 Motion. Dr. Bedient testified that there is no relation between any indoor dust samples and groundwater for purposes of contamination pathways. (Tr., at 310.) Yet both parties devoted scarce Hearing time to videotaped deposition testimony concerning alleged groundwater contamination and have litigated the Dr. Bedient Affidavit, all without ever explaining whether or how evidence of groundwater contamination has any bearing on the class certification issues.

e.g., *McCormick v. City of Fort Lauderdale*, 333 F.3d 1234, 1240 n.7 (11th Cir. 2003) (“Under the law of this Circuit, we may disregard an affidavit submitted solely for the purpose of opposing a motion for summary judgment when that affidavit is directly contradicted by deposition testimony.”); *Van T. Junkins and Associates, Inc. v. U.S. Industries, Inc.*, 736 F.2d 656 (11th Cir. 1984) (“When a party has given clear answers to unambiguous questions ..., that party cannot thereafter [submit] an affidavit that merely contradicts, without explanation, previously given clear testimony.”).

A close comparison of Dr. Bedient’s deposition testimony and his Affidavit reveals that it might be possible to harmonize the two. *See, e.g.*, *Messick v. Horizon Industries, Inc.*, 62 F.3d 1227, 1231 (9th Cir. 1995) (stating that, even under the “sham affidavit” doctrine, “the non-moving party is not precluded from elaborating upon, explaining or clarifying prior testimony”). In his deposition taken on February 10, 2006, Dr. Bedient testified that, at that time, he had not reviewed any data showing groundwater contamination outside of Ciba’s property boundaries. (Tr., at 311, 313.) However, he also testified, “I do think that there is a potential for a plume like this to have migrated to the south, across Olin and beyond.” (*Id.* at 321.) In his April 20 Affidavit, Dr. Bedient described data that he contends demonstrates that a large plume of BHC had migrated over a 30-year period south from the Ciba plant, across the Olin property, and into the neighborhoods to the south. It is possible to envision scenarios in which these statements might be reconciled. The problem is that Exhibit P-169 offers no such explanation, and makes no attempt to account for the discrepancy between Dr. Bedient’s deposition testimony and his Affidavit prepared two months later. If the Affidavit is intended as a mere clarification, then it is incumbent on the witness to explain the grounds for the clarification. This has not been done, and this Court will not indulge speculation as to the witness’s thought processes in revising his opinions.¹⁸

¹⁸ This issue might have been circumvented altogether had Dr. Bedient testified as a live witness at the Hearing. He did not. Thus, his testimony is confined to the deposition transcript (which was reproduced in part at the Hearing), and the April 20 Affidavit. Those documents do not attempt to explain the tectonic shift in his testimony. At the Hearing, plaintiffs’ counsel allowed that “this is something different than what was presented in his expert report and what was presented during his deposition testimony” and offered an explanation relating to confusion over two chemical names. (Tr., at 23-24.) But the Court has heard no

Setting aside the sham affidavit rule, the real problem with Exhibit P-169 is its timing. Much like the new dust samples, the Dr. Bedient Affidavit was furnished to defendants' counsel on April 21, 2006, well after the class discovery period had closed and just two business days shy of the Class Certification Hearing. Under the circumstances, defendants had no reasonable opportunity to investigate the substance of that Affidavit before the Hearing, to address it with their own experts, or to question Dr. Bedient (who did not testify at the Hearing) about this newly-stated opinion. Plaintiffs have made no attempt to justify the eleventh-hour filing of Exhibit P-169. There is no indication as to when Dr. Bedient formulated this new opinion, what the circumstances were under which he did so, or how much time elapsed between the formulation of this new opinion and its dissemination to defense counsel on April 21. There is no indication that Dr. Bedient first reached this opinion on April 21, 2006.

The parties and this District Court have invested too many resources in the class discovery process in this case to blithely permit a "trial by ambush" to unravel those efforts. The springing of multiple last-minute evidentiary surprises on defendants' counsel with no explanation is inexcusable, particularly in light of the grueling 18-month class discovery period to which the parties were subjected and the nearly three-year lapse between the filing of the Complaint and the Hearing. If plaintiffs wished to supplement or amend Dr. Bedient's expert testimony and report, they were obliged to do so in a proper, timely manner, with reasonable notice to opposing counsel and a fair opportunity for a supplemental deposition of the witness. By furnishing this exhibit at the last possible minute before the Hearing, plaintiffs deprived defense counsel of any meaningful opportunity to test or rebut it.

The Motion to Strike Affidavit of Dr. Philip Bedient (doc. 366) is **granted**, and Exhibit P-169 is **stricken**.¹⁹

testimony or averment of Dr. Bedient adopting this explanation as the basis for the change in his opinions. Counsel's unadorned, uncorroborated representations about chemical name mix-ups are insufficient to reconcile the Affidavit with the deposition transcript.

¹⁹ Again, plaintiffs suffer no prejudice from this outcome. By plaintiffs' insistence, class certification issues in this case do not turn on groundwater contamination because plaintiffs are not seeking certification of a groundwater class. As such, Dr. Bedient's opinions (in any form) are of no more than tangential relevance.

III. Facts Pertaining to Class Certification Issues.

A. *Operations of Ciba's McIntosh Plant.*

Aerial photographs presented by the parties and testimony by defendants' aerial photography interpretation expert, Wayne Grip, reflect that the Ciba manufacturing facility in McIntosh, Alabama underwent significant expansions and transformations from the time it first became operational in 1952 through the present. (Exhs. P-7 through P-13.)²⁰ Although that facility has produced numerous types of industrial, agricultural and specialty chemicals during the last half-century, plaintiffs have confined their allegations of property contamination to two specific products manufactured by Ciba McIntosh for discrete periods of time, to-wit: DDT and BHC. The scope of this action having thus been narrowly circumscribed, no consideration need be given to other products manufactured by the Ciba facility at any time, or the potential environmental impacts of same.²¹

1. *DDT.*

The Ciba site in McIntosh began operations in October 1952 as a DDT plant, with a

²⁰ During the Hearing, Grip presented and testified concerning numerous aerial photographs of the Ciba site over the years. Unfortunately, defendants failed to submit those photographs into evidence, offering only Exhibits D-50 through D-65, which are aerial photographs of the McIntyre property, not the Ciba site. While the Court will consider Grip's testimony and analysis for Rule 23 purposes, it cannot weigh photographs that defendants neglected to place in the record.

²¹ Despite their representations to the Court that their Rule 23 motion is based solely on alleged DDT and BHC contamination, plaintiffs' filings devote substantial attention to other alleged contaminants. Because this evidence and argument is irrelevant, no further discussion is necessary, with one exception. On page 17 of their principal brief, plaintiffs reiterate their contention that Ciba intentionally sprayed five Egyptian children with Galecron in 1976 in the name of research. (Plaintiffs' Brief, at 17.) The Court has previously stricken this allegation as scandalous, pursuant to Rule 12(f), Fed.R.Civ.P. (*See* Order dated March 28, 2005 (doc. 107), at 16-17.) In repeating it here, plaintiffs again attempt to smear Ciba with allegations that have no relevance to Rule 23 issues, that appear calculated to vilify Ciba concerning unrelated matters, and that were expressly proscribed by the undersigned's March 28, 2005 Order. The Court **strikes** the reference to the Egyptian children experiment on page 17 of plaintiffs' brief, as well as Exhibit P-63, as an inappropriate attempt to demonize and disparage Ciba in the eyes of the Court by reference to collateral matters concerning a chemical that is not at issue here, events that allegedly occurred some 30 years ago on the other side of the world, and allegations that lack any possible nexus to the Rule 23 issues at hand.

capacity of 8 million pounds per year. (Exh. P-3.) In 1958, the Ciba plant's DDT production capabilities expanded, to a total capacity of 18 million pounds per year. (See Exh. P-4.) Plaintiffs do not present evidence of the total amount of DDT actually manufactured at the facility on an annual basis; however, documents from 1961 and 1962 relating to Ciba's production processes reflect capacities of 40,000 to 60,000 pounds of DDT per day. (See Exhs. P-14, P-15.)²² In 1965, Ciba discontinued all production of DDT at the McIntosh site. (Exhs. P-5, P-16, P-19, D-1.) The DDT production unit at Ciba McIntosh was dismantled in the early 1970s. (Exh. P-19.) By 1972, of course, most DDT uses were banned in the United States. (Exh. P-45.)

The record is clear that wastes containing DDT have been stored on site at the Ciba facility at various times. An undated, uncaptioned document that apparently relates to Superfund cleanup options at the site in the early 1980s reflects that DDT was contained in sludges, sands, clays and other wastes in an old effluent ditch, waste disposal pits, a tar disposal area, an open burn area, and a bluffline area that had previously been used for open burning and pit disposal of process wastes. (Exh. P-20.) There is evidence that Ciba utilized open pit burning for process wastes during the entire time that the facility produced DDT. (Exh. P-21.)²³ There is also evidence that, during the 1953-1965 time period, DDT was released in Ciba's wastewater into the Tombigbee River. In particular, plaintiffs have proffered evidence that Ciba's "DDT Operational Manual" called for only visual inspection of wash water for DDT particles before draining it into the River. (Exh. P-33.) In 1978, an untitled Ciba document acknowledged that in the early days of the McIntosh facility, there was "essentially no control" of wastewater discharges, but that stringent restrictions had since been implemented. (Exh. P-115.) Wastewater emitted by Ciba into the Tombigbee River contained average concentrations of DDT

²² Plaintiffs extrapolate from those figures to a conclusion that the Ciba site was actually producing between 72 million and 87 million pounds of DDT per year. (Exh. P-186.) That computation assumes facts not in evidence and will not be accepted.

²³ Plaintiffs allege that open pit burning "would serve to vaporize a larger portion of the waste into the air in McIntosh including the community surrounding the plant." (Plaintiffs' Brief, at 11.) However, they identify no evidence that might support this proposition, nor has the undersigned located any such evidence or testimony in the voluminous Rule 23 record.

of 52 parts per billion as of 1963. (Exh. P-34.) Further evidence of DDT contamination of the River in the 1960s includes sampling of river muds in 1964 that revealed relatively high DDT concentrations. (Exh. P-5.)²⁴ There is no evidence that the Ciba plant has produced any DDT since January 1965, or that the Ciba plant presently discharges or emits any DDT into the community.

2. *BHC.*

In early 1953, Ciba activated a unit producing another insecticide product, BHC, at the McIntosh site. (Exhs. P-3, P-19.) BHC production at the facility was short-lived, as production was terminated approximately 12 to 18 months after it began. (Exh. P-19.)

The record reflects that Ciba maintained BHC wastes on-site. In particular, documentation shows that a disposal site on the premises included solids and soil contaminated with BHC, and that a “very large surface waste pile” containing BHC was buried at the Ciba site in approximately the early 1960s. (Exh. P-20.) Apparently, the pile included alpha and beta isomers from the BHC production process, which were simply spread on the ground to the east of the DDT unit. (Exh. P-21.) Plaintiffs allege that dust from this waste pile “was transported off-site by wind action for miles,” and that the pile was further “disbursed” by rain before the pile was buried some 40+ years ago. (Plaintiffs’ Brief, at 6.) However, plaintiffs provide no citations to record evidence or expert testimony in support of such a proposition. Be that as it may, there is no evidence that the Ciba facility has produced BHC since 1954, or that BHC is being emitted or released into the surrounding community by Ciba’s operations today.

²⁴ Plaintiff also proffers evidence of fish kills and damage to other aquatic life in the River, as well as harm to nearby timber interests, during the time period in which Ciba was producing DDT. (Exhs. P-30, P-31, P-32, P-37, P-47, etc.) The Court’s review of the record does not disclose any evidence specifically linking those events to DDT, as opposed to other potential pollutants being emitted from the facility during the time period at issue. To the contrary, at least one article presented by plaintiffs attributes the fish kills to diazinon, another pesticide produced by Ciba. (Exh. P-49.) Elsewhere, plaintiffs offer evidence that Ciba was discharging substantial quantities of contaminants other than DDT and BHC in its effluent stream in 1980. (Exh. P-36.) For example, plaintiffs accuse Ciba of contributing to mercury pollution in the Tombigbee River. (Plaintiffs’ Brief, at 17; Exh. P-62.) Plaintiffs do not explain, and it is unclear to the Court, how alleged environmental impacts from other chemicals might promote plaintiffs’ Rule 23 Motion seeking certification of a class for alleged DDT and BHC contamination.

B. Evidence of DDT and BHC Contamination in McIntosh.

In approximately September 1983, the EPA placed the Ciba facility on the National Priority List as a so-called “Superfund” site for remediation under the Comprehensive Environmental Response Compensation and Liability Act (“CERCLA”). (Exhs. P-51, D-158.) Shortly thereafter, federal and state regulators commenced extensive investigation of contamination on the Ciba site and began formulating remediation plans. (Exhs. D-158, D-10.)²⁵ Physical cleanup activities of the Ciba site under CERCLA were completed in 2000 and the EPA concluded in September 2001 that the remedial action at that site was protective of human health and the environment; however, the EPA has not yet deleted this location from the National Priority List. There is no dispute that the Ciba property was contaminated with DDT and BHC when it was designated a Superfund site. This case, however, turns on plaintiffs’ contentions that DDT and BHC originating at Ciba have migrated off-site and contaminated the property of prospective class members in the McIntosh area, diminishing their property values. Accordingly, a central question is whether there is evidence of DDT and BHC contamination in the proposed class area today and, if so, what the nature of that evidence is. This topic consumed the bulk of the Class Certification Hearing, and its potential linchpin status in the Rule 23 analysis warrants in-depth discussion of the record facts concerning same.

1. Dust, Soil and Sediment Samples.

Plaintiffs retained environmental engineer Marco Kaltofen to collect and analyze samples in the McIntosh area for DDT and BHC contamination. In his extensive Hearing testimony, Kaltofen explained that in developing sampling protocols in this case, he sought to determine sources of DDT and BHC in McIntosh, to identify preferential pathways by which these substances are transported into and around the community, and also to determine likely receptors (*e.g.*, locations where the chemicals were coming to rest). (Tr. at 60.) The sampling media of

²⁵ A *Mobile Register* article dated July 29, 1992, reflects that the EPA had recently selected a clean-up methodology for the Ciba site, with an estimated cost of nearly \$50 million. (Exh. D-158.) The July 1992 article offered no timetable for completion of the CERCLA remediation efforts at the Ciba site. A *Register* story dated September 8, 1992 estimated remediation costs at \$94 million, with the project to begin sometime in 1993 and last approximately nine years. (Exh. D-10.)

primary concern in Kaltofen's analysis were indoor dusts, soils and sediments. (*Id.*)

With respect to sources, Kaltofen testified that DDT and BHC are man-made chemicals that do not appear naturally, and that no other manufacturer in or around McIntosh is known to have produced DDT or BHC during the time period at issue. (Tr. at 62, 92, 152-53, 164-65.) There are no natural background sources of DDT or BHC in the absence of human activity. (*Id.* at 75, 80, 434.) Nonetheless, Kaltofen recognized that reference values of DDT and BHC are above zero because of widespread prior agricultural, household and industrial use of these chemicals; therefore, a certain level of these substances can be expected to be found in soils (which can later be tracked into homes and accumulate in household dust) even without contamination by Ciba. (Tr., at 71.) Kaltofen cited reference values for DDT as high as 25 ppb, and for BHC as high as 1.22 ppb. (*Id.* at 70-71.)²⁶ To be more specific, Kaltofen acknowledged that there were secondary uses and sources of DDT other than the Ciba facility because DDT was used throughout the south for mosquito control, as a home insecticide, and as an agricultural insecticide on cotton, corn and okra crops. (*Id.* at 153-54.) The expert testimony was in agreement that "DDT was extremely widely used" for agriculture and pest control prior to its 1972 ban. (*Id.* at 372, 402.) Kaltofen also agreed that BHC has allowable uses, even today. (*Id.*

²⁶ Defendants cite sources suggesting that the appropriate reference value for chlorinated hydrocarbon residues in cropland in Alabama is between 200 and 280 ppb. (Tr., at 136-37.) The exhibit including this suggested reference value was not submitted to the Court or even assigned an exhibit number by defendants. (Tr., at 136.) When plaintiffs inquired about it, defendants responded, "This is not an exhibit. It's cross-examination." (*Id.*) The result, of course, is the Court does not have this document before it for purposes of ascertaining proper reference values for BHC and DDT in the community. The Court also recognizes that defendants' expert, Dr. Langseth, testified that published screening values for the compounds at issue here are 1,700 ppb for DDT and 440 ppb for the lindane isomer of BHC. (Exh. D-127; Tr., at 355-58.) The scientific relevance of these "screening values" is hotly debated by the parties' respective experts. (*E.g.*, Tr., at 356-57.) The Court need not and will not attempt to settle the academic debate over the utility or futility of screening values in this case because to do so would be to engage in a dueling-expert analysis, which is inappropriate in the Rule 23 setting. *See Natural Gas Commodities*, 231 F.R.D. at 182 ("At the class certification stage, the court should not delve into the merits of an expert's opinion, or indulge in 'dueling' between opposing experts.").

at 154.)²⁷

Kaltofen collected and analyzed 17 household dust samples from locations within the proposed class boundaries. (Exh. B.)²⁸ Plaintiffs' annotated map reflects that 11 of those samples tested positive for DDT_r, with concentrations ranging from 10 ppb to 62,480 ppb. (*Id.*)²⁹ Most samples were on the low end of that range, as 5 "detect" samples had readings of 105 ppb or lower, and just 3 had readings in excess of 1,000 ppb. (*Id.*) All told, 9 of the dust samples were above the 25 ppb reference value cited by Kaltoven. (*Id.*) Looking at the universe of dust samples tested for DDT_r and excluding the purported "outlier" of the 62,480 ppb sample, defendants' expert, Dr. David Langseth, opined that the detection frequency of DDT_r in those samples was less than those reported in studies examining areas of the country where there was no known or suspected local source of DDT, and that the arithmetic mean of the concentration of DDT_r in plaintiffs' McIntosh samples was commensurate with those found in such other studies. (Exh. D-83; Tr., at 379-85.) Based on this analysis, Dr. Langseth concluded that DDT_r

²⁷ Additionally, Kaltoven stated that any number of chlorinated pesticides (including heptachlor, endrin, aldrin, dieldrin, and chlordane) found in his sampling results in the McIntosh community are properly viewed as contaminants, were used for various agricultural or home purposes, and were never manufactured by Ciba in McIntosh. (Tr., at 156-57.)

²⁸ The Court has excluded the five dust sample results that were first reported to defendants on April 21, 2006. Because the parties have not identified those late samples with specificity, it is not clear whether any of those samples were or not included in Kaltoven's testimony and visual aids. To the extent that those items were included, they should not be considered. For that reason, the Court relies on Exhibits B, P-78 and P-105, which are plaintiffs' large sample maps predating the April 21 samples.

²⁹ The Court recognizes that both Kaltoven and defendants' expert, Dr. David Langseth, performed analyses of this data. The Court further recognizes that their tallies of detects vs. non-detects are not identical. For example, Kaltoven's charts depict detects for DDT_r in 15 of 20 dust samples within the class boundaries, while Dr. Langseth's show detects in only 12 of 20 dust samples. (*Compare* Exh. P-176 with Exh. D-110.) Even more strikingly, plaintiffs' large map shows DDT_r in 18 of 31 soil and sediment samples, but Dr. Langseth states that DDT_r was found in only 6 of 41 such samples. (*Compare* Exh. P-105 with Exh. D-97.) Moreover, the experts' statistics appear not to synch up precisely with plaintiffs' large sample maps, Exhibits B and P-105. The Court cannot, need not and will not attempt to resolve these discrepancies for purposes of the instant Rule 23 proceedings, but will simply set forth a fair synopsis of the sampling data presented, without deciding the numerous inconsistencies among different exhibits and witnesses purportedly presenting exactly the same data.

concentrations in McIntosh dust samples “are not different than you’d expect if you just went into some random community.” (Tr., at 385.)

With respect to soil and sediment, it appears that there were 31 such samples within the class boundary, of which 18 tested positive for DDT. (Exh. P-105.) It appears, however, that six of the positive samples were taken from either Ciba property or Olin property, such that they do not relate to the property of any putative class member. Kaltofen’s testimony and accompanying visual aids do not reveal the concentrations of DDT in soil and sediment. However, Exhibit P-105 shows that DDT concentrations in these samples ranged from 2.8 ppb (sample CGMI008S) to 40,200 ppb (sample MI0301S), with most samples skewing toward the lower end of that spectrum.

Moving on to BHC, Kaltofen’s data reflects that 14 dust samples within the proposed class boundary were tested for BHC, and that five tested positive for one or more BHC isomers, at concentrations ranging from 0.974 ppb to 40.117 ppb. (Exhs. P-178, P-179.)³⁰ However,

³⁰ As if the Rule 23 record were not sufficiently complicated already, two days after the Hearing plaintiffs filed a Notice of Filing Corrected Exhibits (doc. 373) that purported to submit new versions of several visual aids (P-173, P-174, P-175, P-178, P-179, P-180) utilized by Kaltofen during the Hearing. Leave of court was neither requested nor received for these “corrections.” Plaintiffs’ Notice explains that P-179 and P-180 “were edited to include the BHC point.” What BHC point? Why was it not included in the original versions of P-179 and P-180? Why is it appropriate to include it now? These questions are left unanswered. Instead, the Notice describes at length that P-179 and P-180 are being revised because plaintiffs’ computer consultant noticed that a small portion of one number was cut off from the original exhibit. The original version of P-179 does not reflect that any concentration reading was truncated, and the only missing digit on P-180 was for a data point approximately five miles west of the Ciba plant and well outside the class area. More troubling is the fact that the “corrected” versions of P-179 and P-180 include a new icon over the McIntyre property showing a positive reading for BHC in a dust sample at that site. But neither the P-179 and P-180 used at the Hearing, nor plaintiffs’ meticulously prepared Exhibits B and P-105 submitted before the Hearing made reference to a positive BHC reading at that location. Nor does Exhibit P-171, which purports to be a comprehensive spreadsheet showing all dust samples, reflect a BHC detection on McIntyre property dust samples. The Court is at a loss to understand the absence of that data point from all four of plaintiffs’ visual aids and spreadsheets purporting to show dust sample BHC testing results that were submitted prior to and during the Hearing, and why plaintiffs now slip that data point into a “corrected” version of P-179 and P-180 after the Hearing, without leave of court, without explanation and without giving defendants an opportunity to object. In lieu of initiating a protracted inquiry into this matter, further delaying and complicating these proceedings, the

three of those samples do not appear on Exhibit P-105, but were apparently April 21 samples added into Kaltofen's presentation at the last minute. (*Compare* Exh. P-105 with Exh. P-179.) Those samples have been excluded, leaving just two BHC detections in household dusts in the proposed class area, at concentrations of 10.5 and 16 ppb. (Exh. P-105.) Approximately 22 soil and sediment samples within the class boundary were tested for BHC, and six of those revealed BHC in quantities ranging from trace amounts to 234 ppb (in Olin Basin sediments). (Exhs. P-178, P-179.)³¹ Of those six soil and sediment samples that tested positive for BHC, two were located in the Ciba/Olin industrial complex, two others were located on the Weaver property (approximately three miles west of the Ciba property at the far western edge of the proposed class boundary), and the two remaining samples tested positive for BHC at concentrations of "trace" and 1 ppb, respectively, well below the applicable reference value.

Few samples within the class area tested positive for both DDT_r and BHC. By the Court's count, just one dust sample and five soil samples showed "detect" readings for both chemicals. (Exh. P-105.) Further, the evidence reflects that contaminants in soil, sediments and dust were not limited to DDT_r and BHC; to the contrary, various samples included such chemicals as chlordane, dieldrin, aldrin, heptachlor and others that have apparently never been produced or handled by Ciba's McIntosh facility. (Tr., at 349; Exh. P-105.)

As to patterns of DDT_r and BHC contamination in the community, the parties' respective experts testified to sharply contrasting opinions. Plaintiffs' expert, Kaltofen, opined that "there's a clear pattern of very high levels [of DDT_r readings] at the source area and extinction of those levels as you move away from it." (Tr., at 68.) By comparison, defendants' expert, Dr.

Court simply **strikes** the Notice of Filing Corrected Exhibits (doc. 373) and all of its attachments as an improper attempt to supplement the Hearing record after the fact without authorization from the Court. The Hearing record closed when the Hearing concluded on April 26, 2006. Any party wishing to submit information to the Court that was new or different than that presented during the Hearing needed to seek permission to do so. Plaintiffs did not make such a request.

³¹ There appears to be a discrepancy between Exhibit P-105 and Exhibit P-179 as to the total number of soil, sediment and dust samples tested for BHC. Specifically, many samples listed in Kaltofen's Hearing exhibit P-179 as having been tested for BHC are listed on Exhibit P-105, but with no indication as to whether they were tested for BHC. The resulting incongruity and confusion renders it more difficult to navigate the Rule 23 record.

Langseth, viewed the same data and saw no declining gradient or declining concentrations of contaminant in samples as one moved further away from the Ciba site; in fact, Dr. Langseth's reading was that "it's almost a random pattern" of DDT and BHC radiating outward to the south and west from the Ciba facility. (*Id.* at 360, 370-73, 388, 392, 407.) It is well established that a class certification hearing is not the proper platform for a district court to decide between conflicting expert testimony; therefore, the Court will not resolve this divergence at this time. *See In re Visa Check / MasterMoney Antitrust Litigation*, 280 F.3d 124, 135 (2nd Cir. 2001) (at the class certification stage, "a district court may not weigh conflicting expert evidence or engage in 'statistical dueling' of experts"); *LaBauve v. Olin Corp.*, 231 F.R.D. 632, 644 (S.D. Ala. 2005) (same); *In re Rubber Chemicals Antitrust Litigation*, 232 F.R.D. 346, 353 (N.D. Cal. 2005) (similar).

2. Pathways of Contamination.

After reviewing the sampling data showing the presence of DDT and BHC in dust, soil and sediments at certain locations within the proposed class boundary, one might reasonably inquire as to how it arrived there. Plaintiffs' evidence on this point consisted of the deposition and Hearing testimony of Kaltofen, as well as his written report.

Kaltofen's report states that surface water and groundwater "represent the primary pathways of contaminant transport from the Ciba site." (Exh. P-73, at 4.) By plaintiffs' own admission, however, neither of these pathways is relevant for class certification purposes. At the Hearing, plaintiffs' counsel stated, "We're not seeking a groundwater class. We're not seeking a surface water class." (Tr., at 474.) Even if they were, Dr. Bedient's deposition testimony would foreclose class certification on those bases. According to Dr. Bedient, surface water flows in the area of concern would be from northwest to southeast because of the slope and elevation of the watershed in that area. (Tr., at 303-04.) Because surface water cannot flow upgradient, surface water from the Ciba site would not be expected to flow onto the properties of the named plaintiffs, and surface water impacts of the Ciba site to the west and southwest (where the named plaintiffs' property is located) are "minimal." (*Id.* at 304-05, 312.)³² Dr. Bedient also indicated

³² Defendants' expert, Dr. Langseth, echoed these opinions by testifying that the relative positions of the Ciba facility and the sample locations within the relevant watersheds are

that there would be no groundwater movement from the Ciba site to the west or southwest, which again is where the named plaintiffs' properties are located. (*Id.* at 309.)³³ Besides, Dr. Bedient testified, he would not expect to find DDT in groundwater based on Ciba's alleged contamination activities. (*Id.* at 311.) More generally, Dr. Bedient testified that he was aware of no evidence of contamination of any of the named plaintiffs' properties resulting from surface water or groundwater. (*Id.* at 323.) Because plaintiffs have conceded that they do not seek certification of a class on the basis of groundwater or surface water pathways of contamination, and because plaintiffs' expert, Dr. Bedient, has unequivocally foreclosed the possibility of groundwater or surface water contamination from Ciba to the named plaintiffs' property, no purpose would be served by further discussion or analysis of the groundwater and surface water pathways in the context of this Motion.³⁴

Excluding groundwater and surface water pathways, Kaltofen placed substantial weight on airborne distribution of these contaminants as follows: "The material is not very water soluble so that dusts and sediments in soils that contain DDT are going to be redistributed by the winds

such that surface water would have had to flow uphill from the Ciba site to the sample locations, effectively "rul[ing] out a surface water transport pathway." (Tr., at 344; Exh. D-124.) According to Dr. Langseth, the natural flow of groundwater from Ciba was towards the Tombigbee River, not back towards the community. (Tr., at 399; Exh. D-125.) He further testified that he was aware of no evidence showing that contamination from the Ciba facility had migrated into the groundwater in residential communities to the southeast. (Tr., at 398-99.)

³³ The Court recognizes Kaltofen's statement in his report that DDT-bearing dense nonaqueous phase liquids ("DNAPL") in groundwater may negate these general principles because DNAPL "may travel in directions and at speeds that are quite different than prevailing groundwater gradients." (Exh. P-73, at 8.) But Dr. Bedient testified that he had seen no data suggesting that the DNAPL has traveled into the community, that there has been no documented movement of the DNAPL offsite, that it would be a "stretch" to suggest that the DNAPL could have moved far enough offsite to impact the plaintiffs' properties, and that it is correctly described as a "potential problem, not a documented problem." (Tr., at 317-19.) The theoretical possibility of DNAPL contamination to offsite groundwater is surely not a basis for resuscitating any arguments by plaintiffs that groundwater contamination warrants class certification here, which arguments plaintiffs have waived, in any event.

³⁴ Dr. Langseth's testimony reinforces this conclusion, inasmuch as he "was able to look at the pathways and rule out surface water and groundwater as potential pathways for contaminants to get from the Ciba plant into the community." (Tr., at 346.)

in this area. So we have airborne fallout.” (Tr., at 83.)³⁵ Particles containing the highest concentrations of these pesticides are so fine that even light winds can disperse them through the community. (*Id.* at 86-87.) Airborne distribution could also proceed from “historical emissions from open burning onsite by Ciba,” although there did not appear to be evidence that specifically DDT or BHC wastes were incinerated via such methods. (Exh. P-73, at 11; Tr., at 465-66.)³⁶ Aside from airborne distribution, Kaltofen testified that these contaminants may be redistributed in the contaminant by “drag out” (where these materials can be dragged out on the tires of trucks leaving the Ciba site or can be lost on loads being moved by trucks) or even by workers carrying some of these materials on their clothing. (Tr., at 83.) No evidence exists concerning the nature, frequency, extent, range or practical significance of any such “drag out” pathway.

C. Class Representatives and the Proposed Class Area.

1. Proposed Class Representatives.

The pleadings identify four named plaintiffs: Jessie Fisher, Arlean Reed, Barbara Byrd and William Ronald McIntyre. These individuals are purportedly bringing claims against Ciba on their own behalf and on behalf of all others similarly situated. But Fisher, Byrd and Reed do not own property within the proposed class boundaries. In that regard, plaintiffs’ counsel admit that Fisher, Byrd and Reed “live outside the 2.1 mile radius that has been drawn” and do not own property within the proposed class area. (Tr., at 18; Exh. D-123.) For that reason, plaintiffs

³⁵ Based on his study of wind diagrams for the McIntosh area, Kaltofen concluded that wind directions are highly variable. (*Id.* at 83-84.) As such, his opinion is that winds blew these contaminant particles in all directions from the Ciba plant.

³⁶ Kaltofen’s testimony on air dispersion of DDT and BHC from the Ciba site was qualitative rather than quantitative. He did not prepare an air dispersion model to estimate distances and concentrations of these contaminants through the airborne pathway. (Tr., at 94.) There is thus no evidence in the record as to how far and in what concentrations wind-borne transportation of contaminants from Ciba’s McIntosh facility might reasonably be expected to travel into the surrounding community. Further, Dr. Langseth testified that Kaltofen’s theory that DDT-laden sediments in the Tombigbee River floodplain might dry and then be blown into the community as fugitive dust was “highly imp[lau]sible” based on his understanding of the topography, vegetation, and meteorological features of that area. (Tr., at 397.) Kaltofen’s testimony was diametrically different on this point. (Tr., at 153.) Again, this Court cannot resolve debates between experts at this juncture.

style their Motion for Class Certification as being brought exclusively by McIntyre, without mentioning the other named plaintiffs. (*See* Plaintiffs' Brief (doc. 330), at 1.) At the outset of the Class Certification Hearing, plaintiffs' counsel acknowledged that the only named plaintiff for whom they seek class representative status is McIntyre.³⁷ Accordingly, the Court need not consider facts relating to the other named plaintiffs, but instead will focus on McIntyre's situation for class certification purposes.

McIntyre testified that he resides outside the proposed class area; however, he owns or co-owns several parcels within that class area, all of which are clustered together within one square mile. (Tr. at 202; Exh. P-130.) Specifically, he owns two adjoining 12-acre parcels that are primarily in timber; a nearby 4.3-acre parcel (owned jointly with his sister) that includes an old, unoccupied family house; a 4-acre parcel of farmland that he owns jointly with his sister; another 4.3-acre parcel; a 3.6-acre parcel; and an 0.74-acre parcel. (Exh. P-90; Exh. P-130.)³⁸ Although the distances vary depending on which parcel is selected and which beginning and end points are chosen, all of these parcels are approximately one mile due west of the western

³⁷ The following exchange makes this designation unmistakably clear:

"THE COURT: ... Who are the class members, Mr. Reich, at this point? Who do you propose to be the class members in this case?
"MR. REICH: Right now, Your Honor, we are offering Ronald McIntyre. ...
"THE COURT: As I understand, then, for purposes of this hearing, the only two chemicals that are being considered are DDT and BHC and Mr. McIntyre is the proposed class representative?
"MR. REICH: Yes, your honor."

(Tr., at 18-19.)

³⁸ Exhibit P-130 includes a detailed map depicting the properties that McIntyre owns, and highlighting such parcels in red. Unfortunately, the highlighting is incomplete. Lot 8 is the parcel on which the dust sample that tested positive for DDT was found, and McIntyre's testimony is clear that Lot 8 is the parcel on which the old family homestead rests. (Exh. P-90; Tr., at 204.) Yet the map supplied by plaintiffs fails to designate Lot 8 as a parcel owned or co-owned by McIntyre. (Exh. P-130; Tr., at 203-04.) This inaccuracy creates needless confusion in the record; however, notwithstanding plaintiffs' failure to mark it as a property owned by McIntyre, the Court finds that McIntyre did in fact jointly own Lot 8 with his sister and that Lot 8 was the parcel on which a DDT-contaminated dust sample was taken.

boundary of the Ciba facility. (Exh. P-130; Tr., at 290.) Only one of his parcels, Lot 8, is at issue in this case, because Lot 8 is the only one of McIntyre's parcels that yielded a "detect" for DDT or BHC.³⁹ Kaltofen collected and analyzed a household dust sample from the deserted family dwelling located on Lot 8 on McIntyre's property.⁴⁰ That sample showed a concentration of DDT of 62,480 ppb, by far the highest reading for that chemical in any sample (dust, soil or sediment) collected in plaintiffs' field testing. (Exh. P-105.) In fact, the dust sample from the McIntyre home yielded a DDT concentration nearly 30 times greater than that measured in any other dust sample in the class area. (*Id.*)⁴¹ Plaintiffs' evidence did not reflect that any sample taken from McIntyre's properties within the class area yielded a "detect" for BHC. (Exhs. B, P-105, P-171.) Another dust sample – taken from a trailer on the McIntyre property within yards of the deserted McIntyre homestead – was a "nondetect" for DDT. (Tr., at 132.) And a soil sample taken from McIntyre's property slightly east of the homestead (and closer to the Ciba plant) also came back with a "nondetect" reading for DDT. (*Id.* at 361; Exh. D-118.)

Dr. Langseth opined that high DDT in the dust sample extracted from the McIntyre homestead could be explained by sources other than Ciba, such as the long history of agricultural

³⁹ By McIntyre's admission, plaintiffs' counsel have not told him about contamination on any of his other parcels of land in the class area, and he has no knowledge of any such contamination. (Tr., at 228.)

⁴⁰ The "household" from which the dust sample was collected was a house in which McIntyre's parents had formerly lived; however, that dwelling has been vacant for approximately 6 to 8 years. (Tr., at 210.) Kaltofen explained that because the McIntyre house has been unoccupied for so long, it represents more of an archival record of undisturbed past activities than currently occupied dwellings might. (*Id.* at 74.)

⁴¹ The dust sample with the next highest concentration of DDT was taken from the Et Tawil property, and registered a DDT level of 2,100 ppb. As to the Et Tawil property, however, Kaltofen testified that the mechanism for transport of DDT to the property was unique because the property owner had arranged for truckloads of Ciba soil to be dumped on his land to use in constructing a play area for his daughter. The highest DDT dust sample other than the McIntyre property for which no known special transport mechanism exists (a sample collected from the Wells property approximately two miles south of the McIntyre home on U.S. Highway 43) had a reading of 1,160 ppb, or less than 2% of the concentration of DDT found at the McIntyre homestead. Based on this data, it is no wonder that Dr. Langseth characterized the McIntyre dust sample as "the odd-ball result in the community." (Tr., at 406.)

activities (with attendant usage of pesticides) in the area of the house. (*Id.* at 362.) According to Dr. Langseth, “you could easily have fugitive dust escaping from the tilled fields” or farm workers coming into the house from the fields with DDT-laced dust on their clothes. (*Id.* at 363-64.)⁴² Furthermore, even if there were an airborne pathway of DDTr contamination emanating from the Ciba facility, Dr. Langseth testified, the vast difference in DDTr levels between the McIntyre home and other testing locations in the class area shows that “there would pretty much have to be another source for that particular property.” (*Id.*)

The four-plus acres comprising Lot 8 include both the family homestead and certain farmland located “out from the house ... out in the field.” (Tr., at 211.) McIntyre testified that he had never used “DDT or DDT chemicals” on Lot 8 during the time period in which he had owned it. (*Id.* at 205.)⁴³ But McIntyre also indicated that his sister (who owns the parcel with

⁴² That said, the only evidence concerning an agricultural source of contamination for the McIntyre homestead is the aerial photographs showing the proximity of that home to fields where agricultural activities have been carried out for many years, as well as Dr. Langseth’s opinion that the existence of nearby agricultural activities is “prime” among potential alternative sources of contamination. (Tr., at 364; Exhs. D-50 through D-65.) Defendants’ aerial photography expert, Grip, testified that row crops or agricultural land were in close proximity to the McIntyre homestead in the 1950s and 1960s, continuing through the present day. (Tr., at 287-90.) But even if there was no agricultural use of DDT on the McIntyre properties, Dr. Langseth remained of the opinion that the McIntyre dust sample “doesn’t fit with the pattern of the rest of the data” and “whether [his] comment on agricultural use is correct or not, there’s something unusual about that data point.” (Tr., at 463.)

⁴³ No one asked McIntyre during the Hearing how long he had owned Lot 8; however, a collection of deeds submitted into evidence suggests that Lot 8 was conveyed to McIntyre and his sister via Administrator’s Deed in May 2002. (Exh. P-129; Tr., at 205.) This is consistent with McIntyre’s testimony that he and his sister received it when another sister of theirs passed away, and the administrator of that estate had the property deeded to McIntyre and his sister. (Tr., at 210.) DDT had been banned some 30 years prior to that conveyance. Therefore, McIntyre’s testimony that he had not used DDT on Lot 8 during the time that he had owned it is not particularly helpful in assessing whether DDT had ever been applied to that parcel. Furthermore, in their opening statement, defense counsel cited McIntyre’s interrogatory responses at Exhibit D-4 to show that he had used pesticides, insecticides and herbicides for 25 years on property that he had previously farmed. (Tr., at 264.) But Exhibit D-4 is simply a seven-page excerpt from McIntyre’s deposition, and does not include interrogatory responses. (*See* doc. 348, at Exh. 4.) Those interrogatory responses apparently not appearing in the record, defense counsel’s bare, unsupported representation regarding McIntyre’s use of pesticides will

him in joint tenancy with right of survivorship) has rented and is presently renting part of Lot 8 out to a farmer named David Odom who is planting corn in that field. (*Id.* at 212, 214; Exh. P-129.)⁴⁴ According to McIntyre, Odom has been leasing and paying rent on part of Lot 8 for four to five years. (*Id.*) Previously, McIntyre farmed the fields on Lot 8 himself and sold corn that he grew on that lot. (*Id.* at 213-14.)

According to McIntyre, Ciba had never informed him that Lot 8 was contaminated and if Ciba had told him that, he “would have wanted it cleaned up or paid for the damages.” (*Id.* at 207.) McIntyre also indicated that he was unaware of any statements made by Ciba relating to contamination, and that he has never talked to Ciba about contamination of his property or the McIntosh community. (*Id.* at 215.) McIntyre does not have documentation showing that Lot 8 has declined in value because of Ciba contamination; however, he testified that “[i]t would stand to reason it would be worth less on the market” if his property contained Ciba chemicals. (*Id.* at 227.)

2. *The Proposed Class Area.*

As stated *supra*, plaintiffs’ Motion for Class Certification identifies a proposed class boundary consisting of a circle with an approximately 2.1 mile radius, as well as a spur of approximately one-half mile in width, jutting slightly more than one mile from the western edge of the circle. (Exh. A.) The Ciba plant is not centered in the circle, but rather occupies much of its northeastern quadrant. Plaintiffs’ proposed class definition specifically excludes the Olin property to the south of the Ciba facility; therefore, after excising the large Ciba and Olin sites, the class area primarily consists of the so-called River Road community located due south of Ciba and Olin, as well as property west of the Ciba/Olin industrial complex, running along Olin Road, River Road, and Topton Road. The southeastern portion of the circle is truncated by a bend in the Tombigbee River, and plaintiffs do not seek inclusion in the class of any properties

not be considered here.

⁴⁴ McIntyre took pains to explain that it is his sister who leases part of Lot 8 and his sister who receives and keeps the rent money, and that McIntyre does not lease Lot 8 to anyone. (Tr., at 214.) But this distinction is devoid of legal significance, inasmuch as it is quite clear from the record that Lot 8 is a single parcel of land that McIntyre and his sister own in joint tenancy. (Exh. P-129; Tr., at 210.)

located across the River from the Ciba site. This circle-and-spur design will be referred to herein as the “Proposed Class Area.”

Plaintiffs’ expert, Marco Kaltofen, played a central role in delineating the Proposed Class Area. Kaltofen explained that, in defining that area, he drew a boundary line that “would enclose the majority of the positive samples for DDT and BHCs and give [him] the smallest area.” (Tr., at 82.) He added the western spur “based on the finding of very high levels of DDT at the location on the former Weaver property that’s to the west of the center of McIntosh.” (*Id.*)⁴⁵ Aside from the Weaver property, no other positive samples of DDT or BHC were reported anywhere else in the “spur” section of the Proposed Class Area along Tipton Road; rather, the spur was created solely to accommodate the Weaver property. Yet Kaltofen testified that the DDT concentrations measured at the Weaver property were so high that “the mechanism for producing the DDT detection at that level must have been different” than for other locations where DDT was found. (*Id.*)⁴⁶ In Kaltofen’s opinion, the reading of 40,200 ppb of DDT for the soil sample taken on the Weaver property was higher than could be explained by surface water or airborne transport, such that “[c]learly it was transported in bulk to that location.” (*Id.*) According to Kaltofen, there “was obviously some form of DDT waste or DDT product that was carried to that location.” (*Id.* at 83.) In his report, Kaltofen expanded on his analysis of the Weaver anomaly by indicating his understanding that bulk quantities of DDT had been stored by the property owner at that location prior to the 1972 DDT ban. (Exh. P-73, at 12.)⁴⁷

⁴⁵ In designing this Proposed Class Area, Kaltofen relied exclusively on the field data from the ground, not on any air modeling calculations of wind dispersion. (Tr., at 95.)

⁴⁶ In this regard, Kaltofen’s reasoning neatly tracks, and in fact corroborates, Dr. Langseth’s testimony that the even higher reading in the dust sample from the McIntyre home was so out of line with other readings in the area that it implies a different pathway of contamination. (Tr., at 363.) Both the Weaver soil sample and the McIntyre dust sample appear to be “outliers” in the sense that their observed DDT levels are far in excess of other off-site samples in their respective media.

⁴⁷ There was some indication at the Hearing that bags of DDT were stored on the Weaver property, and that children would play on the bags, causing DDT dust to be released. (Tr., at 120.) Excerpts from the deposition of Earl Weaver confirm that, when he was a child, there were bags of DDT “in the back piled sky high ... for months and years,” and that he and his playmates played in those bags of DDT “all the time,” causing DDT dust to go “all over the

In addition to the Weaver site, there was information suggesting a different transport mechanism for another location. The Et Tawil property located within the Proposed Class Area approximately one mile west and slightly south of the boundaries of the Ciba plant yielded two dust samples showing concentrations of 2,100 ppb of DDT_r and 870 ppb of DDT_r, respectively. (Exhs. P-172, D-118.)⁴⁸ Kaltofen testified that his understanding was that the Et Tawils had arranged for two truckloads of soil to be taken from the Ciba property and placed on their property, where they utilized it to create a play area for their daughter. (Tr., at 105, 124.) Kaltofen allowed that the transport mechanism responsible for the DDT_r readings at the Et Tawil property was different from the air dispersion scenario he had described. (*Id.* at 105-06.)⁴⁹

The Proposed Class Area includes approximately 500 residences. (Tr., at 84.) However, plaintiffs do not seek certification of a class that is inclusive of every property owner in the Proposed Class Area; rather, their class definition is confined to individuals or entities “who owned non-income producing real property” within that area as of August 25, 2003. (Plaintiffs’ Brief, at 22-23.) It is those property owners for whom plaintiffs seek certification of a class pursuant to Rule 23. (Tr., at 29.)

IV. Rule 23 Standard.

The Motion for Class Certification is governed by the standards set forth in Rule 23, Fed.R.Civ.P. *See Valley Drug Co. v. Geneva Pharmaceuticals, Inc.*, 350 F.3d 1181, 1187 (11th Cir. 2003) (explaining that Rule 23 furnishes the “legal roadmap” which courts must follow in assessing propriety of class certification). “For a district court to certify a class action, the

garden, went all over the yard, went all over us and everybody.” (E. Weaver Dep., at 178.) The bags were physically located right behind the house, in “[t]he same place where they went and got soil samples.” (*Id.* at 187.) After playing in those bags, Weaver reported that his eyes and mouth would burn and the dust would coat his body.

⁴⁸ The 2,100 ppb reading was the highest DDT_r reading of any dust sample other than that from the unoccupied McIntyre home.

⁴⁹ The Court understands that a wrongful death lawsuit has been filed in Alabama state court by the Et Tawil family relating to the death of the daughter from a brain stem myoma. (Tr., at 239-40.) No personal injury issues have been joined in the instant litigation, which is confined exclusively to claims of contamination-induced diminution in property values. (*E.g.*, Plaintiffs’ Brief (doc. 330), at 23.)

named plaintiffs must have standing, and the putative class must meet each of the requirements specified in Federal Rule of Civil Procedure 23(a), as well as at least one of the requirements set forth in Rule 23(b).” *Klay v. Humana, Inc.*, 382 F.3d 1241, 1250 (11th Cir. 2004); *Valley Drug*, 350 F.3d at 1188 (“Failure to establish any one of [the Rule 23(a)] factors and at least one of the alternative requirements of Rule 23(b) precludes class certification.”). It is well established that “[t]he burden of proof to establish the propriety of class certification rests with the advocate of the class.” *Valley Drug*, 350 F.3d at 1187; *see also Unger v. Amedisys Inc.*, 401 F.3d 316, 320 (5th Cir. 2005) (“The party seeking certification bears the burden of establishing that *all* requirements of Rule 23 have been satisfied.”); *Gregory v. Finova Capital Corp.*, 442 F.3d 188, 190 (4th Cir. 2006) (similar); *Richards v. FleetBoston Financial Corp.*, 235 F.R.D. 165 (D. Conn. 2006) (similar).⁵⁰

The Rule 23(a) requirements are as follows: (i) numerosity, such that “the class is so numerous that joinder of all members is impracticable”; (ii) commonality, such that “there are questions of law or fact common to the class”; (iii) typicality, such that representative plaintiffs’ claims are typical of those of the class; and (iv) adequacy, such that the representative plaintiffs “will fairly and adequately protect the interests of the class.” Rule 23(a), Fed.R.Civ.P.; *Prado-Steiman ex rel. Prado v. Bush*, 221 F.3d 1266, 1278 (11th Cir. 2000) (describing numerosity, commonality, typicality and adequacy elements). The purpose of Rule 23(a) is to ensure that the bond between class representatives and other class members is sufficiently strong to justify lashing the fortunes of all class members to those of the named representatives. *See Cooper v. Southern Co.*, 390 F.3d 695, 713 (11th Cir. 2004); *see also Wright v. Circuit City Stores, Inc.*, 201 F.R.D. 526, 535 (N.D. Ala. 2001) (explaining that Rule 23(a) “acts as a lens through which the court looks to ensure that the interests and claims of the representative plaintiff match those of the putative class”). A class action “may only be certified if the trial court is satisfied, after a

⁵⁰ A district court’s ruling on a class certification motion will be reviewed on appeal for abuse of discretion. *See Cooper v. Southern Co.*, 390 F.3d 695, 711 (11th Cir. 2004) (“Questions concerning class certification are left to the sound discretion of the district court.”); *Hines v. Widnall*, 334 F.3d 1253, 1255 (11th Cir. 2003) (district court decision on class certification will not be disturbed as long as it remains within Rule 23 parameters, even if appeals court would have resolved issues differently).

rigorous analysis, that the prerequisites of Rule 23(a) have been satisfied.” *General Telephone Co. of Southwest v. Falcon*, 457 U.S. 147, 161, 102 S.Ct. 2364, 72 L.Ed.2d 740 (1982); *see also Unger*, 401 F.3d at 321 (“District courts are required to take a ‘close look’ at the parties’ claims and evidence in making [a] Rule 23 decision.”); *Cooper v. Pacific Life Ins. Co.*, 229 F.R.D. 245, 256 (S.D. Ga. 2005) (“The Court must conduct a ‘rigorous analysis’ of the claims and evidence presented to determine whether class certification is appropriate.”).⁵¹

If the Rule 23(a) prerequisites are satisfied, class certification is permissible only if plaintiffs also satisfy one or more prongs of Rule 23(b). Here, plaintiffs invoke Rule 23(b)(3), which allows a class to be certified if both common questions of law or fact predominate over questions affecting only individual members, and a class action is superior to other methods for fair and efficient adjudication of the controversy.

At this preliminary stage, the Court may not pass on the merits of plaintiffs’ claims. *See, e.g., Cooper*, 390 F.3d at 712 (repeating well-worn admonition that Rule 23 does not authorize court to conduct preliminary merits inquiry in making class certification determination); *Morrison v. Booth*, 763 F.2d 1366, 1371 (11th Cir. 1985) (concurring with district court’s assessment that it “could not conduct a preliminary inquiry into the merits of a suit in order to determine whether it may be maintained as a class action”). But this rule of thumb does not compel the Court to reflexively shun all merits-related issues in rendering a Rule 23 opinion. To the contrary, this Circuit’s jurisprudence recognizes that merits and Rule 23 issues are often intertwined, such that addressing Rule 23 criteria often requires some foray into the merits. *See*

⁵¹ In conducting the requisite “rigorous analysis,” the district court may look beyond the Complaint to consider the parties’ supplementary evidentiary submissions, which in this case amount to hundreds of exhibits and two days of live testimony. *See Castano v. American Tobacco Co.*, 84 F.3d 734, 744 (5th Cir. 1996) (indicating it is “necessary” for district court to go beyond pleadings for Rule 23 analysis, “as a court must understand the claims, defenses, relevant facts, and applicable substantive law in order to make a meaningful determination of the certification issues”); *Wright*, 201 F.R.D. at 534 (“In determining whether to certify a class, a court may consider both the allegations of the complaint and the supplemental evidentiary submissions of the parties.”). A corollary to the “rigorous analysis” requirement for Rule 23 determinations is that district courts must not unquestioningly accept plaintiffs’ evidence and argument. *See, e.g., Rhodes v. Cracker Barrel Old Country Store, Inc.*, 213 F.R.D. 619, 671 (N.D. Ga. 2003).

Cooper, 390 F.3d at 712; *Love v. Turlington*, 733 F.2d 1562, 1564 (11th Cir. 1984) (prohibition on merits determinations at Rule 23 stage “should not be talismanically invoked to artificially limit a trial court’s examination of the factors necessary to a reasoned determination” under Rule 23). By making an informed assessment of the parties’ evidence at the class certification stage, a trial court does not erroneously reach the merits of the litigation. *See Cooper*, 390 F.3d at 712-13. Earlier this year, the Eleventh Circuit made this point even clearer by announcing that “it is appropriate to consider the merits of the case to the degree necessary to determine whether the requirements of Rule 23 will be satisfied.” *Heffner v. Blue Cross and Blue Shield of Alabama, Inc.*, 443 F.3d 1330, 1337 (11th Cir. 2006).⁵²

V. The Named Plaintiffs Cannot Represent the Class.

A. Named Plaintiffs Fall Outside Class Boundaries.

A bedrock requirement running through the Rule 23(a) framework is that class certification is not appropriate unless one or more class representatives actually belong to the proposed class. As the Supreme Court explained in the context of a Rule 23(a)(4) adequacy of representation discussion, “[a] class representative must be part of the class” in order for that element to be satisfied. *Amchem Products, Inc. v. Windsor*, 521 U.S. 591, 625, 117 S.Ct. 2231, 138 L.Ed.2d 689 (1997).⁵³ This principle is consistent with long-standing caselaw providing that Rule 23(a)(4) demands that a class representative “possess the same interest and suffer the same

⁵² Similarly, another appellate court recently explained that “[t]he preliminary inquiry at the class certification stage may require the court to resolve disputes going to the factual setting of the case, and such disputes may overlap the merits of the case.” *Blades v. Monsanto Co.*, 400 F.3d 562, 567 (8th Cir. 2005). “[S]uch disputes may be resolved only insofar as resolution is necessary to determine the nature of the evidence that would be sufficient, if the plaintiff’s general allegations were true, to make out a prima facie case for the class.” *Id.*

⁵³ This requirement has been echoed by numerous courts. *See, e.g., Prado-Steiman*, 221 F.3d at 1279 (observing that Supreme Court has “repeatedly held that a class representative must be part of the class”) (citations omitted); *Deiter v. Microsoft Corp.*, 436 F.3d 461, 466 (4th Cir. 2006) (class representative must be part of the class to be given trust and responsibility imposed by Rule 23); *Cavin v. Home Loan Center, Inc.*, --- F.R.D. ---, 2006 WL 1313191, *3 (N.D. Ill. May 10, 2006) (“In order to satisfy typicality, the plaintiff must be a member of the named class”); *Richards*, 235 F.R.D. at 169 (Rule 23(a)(4) requires that class representative be part of the class). Plaintiffs’ counsel admitted as much in their opening statement, acknowledging that “a class representative should be a member of the class.” (Tr., at 27.)

injury as the class members.” *East Texas Motor Freight System, Inc. v. Rodriguez*, 431 U.S. 395, 403, 97 S.Ct. 1891, 52 L.Ed.2d 453 (1977). The notion that a class representative cannot represent a class to which he does not belong is also implicit in the commonality and typicality requirements of Rule 23(a)(2) and (3); indeed, commonality and typicality tend to merge with the adequacy-of-representation factor because all examine “whether the named plaintiff’s claim and the class claims are so interrelated that the interests of the class members will be fairly and adequately protected in their absence.” *Falcon*, 457 U.S. at 157 n.13; *see also McClain v. Lufkin Industries, Inc.*, 187 F.R.D. 267, 279 (E.D. Tex. 1999) (explaining that commonality, typicality and adequacy “tend to overlap and intertwine” such that they may be collectively referred to as the “nexus requirement”); Wright & Miller, *Federal Practice and Procedure*, Civ.3d § 1769 (courts have interpreted both Rule 23(a)(3) and Rule 23(a)(4) as requiring that class representatives’ interests be coextensive with those of the class). Simply put, there can be no legally sufficient nexus between individual and shared claims if the purported class representative is not even a member of the class that he purports to represent, thereby undermining adequacy of representation (Rule 23(a)(4)) and typicality (Rule 23(a)(3)) because the named plaintiff’s interests are not aligned with those of the class.

Here, it is uncontested that plaintiffs Fisher, Byrd and Reed do not own property within the borders of the Proposed Class Area designated by plaintiffs’ counsel. For that reason, those individuals are not a part of the class, cannot satisfy Rule 23(a) considerations of typicality and adequacy, and are ineligible to serve as class representatives.

That leaves McIntyre. He clearly does own property within the geographic boundaries of the Proposed Class Area, as his declaration identified seven such parcels. (Exhs. P-90, P-130.) All or substantially all of the evidence presented at the Hearing concerning McIntyre’s property centered on Lot 8, the 4.3-acre parcel on which the old deserted homestead stands and the location from which a dust sample showing a DDT concentration of 62,480 ppb was extracted. The Court is unaware of any positive samples for DDT or BHC taken from any of McIntyre’s parcels other than Lot 8. But Lot 8 plainly falls outside the definition of the Proposed Class Area, which plaintiffs have structured to include not only a geographic component, but also a restriction that only properties which are “non-income producing” may qualify their owners for class membership. The uncontroverted evidence is that a portion of Lot 8 has been leased for

some time for corn farming, and generates rental income to McIntyre's sister, who co-owns Lot 8. Under any reasonable construction of the term, Lot 8 is and has long been an "income-producing" parcel;⁵⁴ therefore, Lot 8 cannot be considered to be within plaintiffs' definition of the Proposed Class Area. For that reason, McIntyre cannot bootstrap eligibility to represent the class on that parcel, and the high levels of DDT_r detected on Lot 8 are of no more pertinence to these class certification proceedings than "detects" for DDT_r that fall outside the geographic boundaries of the Proposed Class Area.

B. Plaintiff McIntyre Lacks Standing.

Of course, McIntyre's holdings within the geographic scope of the Proposed Class Area are not confined to Lot 8.⁵⁵ Rather, he owns six other parcels ranging in size from 0.74 acres to 12 acres, in the immediate vicinity of Lot 8 and within the boundaries of the Proposed Class

⁵⁴ Defendants repeatedly argued in both their briefs and at the Hearing that Lot 8 was income-producing and therefore could not be considered for class certification purposes. (Defendants' Brief (doc. 347), at 14; Tr., at 250.) Plaintiffs never offered any rejoinder that Lot 8 is not an income-producing parcel under their definition of the Proposed Class Area, and did not even mention the issue in their reply brief. At most, McIntyre stated in his Hearing testimony that his sister leases Lot 8 and his sister receives the rent that it generates. The recipient of the rental income from that parcel is not relevant to whether Lot 8 is "income-producing." If Lot 8 yields rental income, then it is income-producing and outside the Proposed Class Area regardless of whose pocket or bank account ultimately receives such income.

⁵⁵ In arguing that McIntyre has standing, plaintiffs cite *LaBauve v. Olin Corp.*, 231 F.R.D. 632 (S.D. Ala. 2005) and state, "This [C]ourt has previously held that contamination decreases property values." (Reply Brief, at 1.) This statement misinterprets and distorts the *LaBauve* opinion. The Court did not hold in *LaBauve* that contamination always or necessarily decreases property values, as a matter of law. Rather, *LaBauve* merely states that "common sense dictates that a property's value will decline if it is contaminated with pollutants in concentrations that may cause adverse human health effects" for purposes of satisfying the injury-in-fact element of standing. 231 F.R.D. at 651. Moreover, the Court took pains in *LaBauve* to limit that statement to prevent parties from taking undue liberties with it. In particular, the *LaBauve* opinion makes clear that it does not hold that the plaintiff's "property value has been impaired by the elevated mercury concentration." *Id.* at 651 n.43. Plaintiffs also offer an unsupported blanket assertion in this case that "Once a property is contaminated, it is devalued. The exact amount of pollution on the property is irrelevant." (Plaintiffs' Brief, at 50.) The notion that any minute level of contamination (*e.g.*, 1 part per trillion) automatically devalues a property is not supported by any law or expert testimony, and is both counterintuitive and highly suspect.

Area. Certain of these parcels do not produce income, inasmuch as they consist either of timber that McIntyre does not harvest for income, or of farmland that McIntyre uses to grow crops for his own family, not for sale. (Exh. P-90, at 2.) Thus, it appears that plaintiffs would predicate McIntyre's status as a class representative on his ownership of six parcels of land other than Lot 8, at least some of which do not produce income.

"[I]t is well-settled that prior to the certification of a class ... the district court must determine that at least one named class representative has Article III standing to raise each class subclaim." *Prado-Steiman*, 221 F.3d at 1279; *see also Veal v. Crown Auto Dealerships, Inc.*, --- F.R.D. ---, 2006 WL 844561, *3 (M.D. Fla. Mar. 30, 2006). Simply put, a plaintiff cannot represent a class unless he first shows that he has standing to raise the claims of the class. *See Murray v. U.S. Bank Trust Nat'l Assn.*, 365 F.3d 1284, 1288 n.7 (11th Cir. 2004). For that reason, "any analysis of class certification must begin with the issue of standing." *Griffin v. Dugger*, 823 F.2d 1476, 1482 (11th Cir. 1987); *see also Hines v. Widnall*, 334 F.3d 1253, 1256 (11th Cir. 2003). To have standing, a plaintiff "must have suffered an injury in fact – an invasion of a legally protected interest which is (a) concrete and particularized, and (b) actual or imminent, not conjectural or hypothetical." *London v. Wal-Mart Stores, Inc.*, 340 F.3d 1246, 1251 (11th Cir. 2003) (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560, 112 S.Ct. 2130, 119 L.Ed.2d 351 (1992)).⁵⁶ In that regard, "mere apprehension of speculative future injury is simply not sufficient to satisfy the Article III injury-in-fact requirement." *LaBauve v. Olin Corp.*, 231 F.R.D. 632, 650 (S.D. Ala. 2005).

After review of the record, the Court discerns no evidence that McIntyre has sustained or is in imminent danger of sustaining an injury-in-fact as to any of his parcels within the Proposed

⁵⁶ *See also Lewis v. Casey*, 518 U.S. 343, 349, 116 S.Ct. 2174, 135 L.Ed.2d 606 (1996) (applying principles of standing to explain that "[i]t is the role of courts to provide relief to claimants, in individual or class actions, who have suffered, or will imminently suffer, actual harm"); *Church v. City of Huntsville*, 30 F.3d 1332, 1340 (11th Cir. 1994) (class lacks standing unless at least one named plaintiff is in real and immediate danger of being personally injured by challenged practice); *Lynch v. Baxley*, 744 F.2d 1452, 1456 (11th Cir. 1984) (observing that if a named plaintiff does not show that he has sustained or is immediately in danger of sustaining a real, direct injury that is not conjectural or hypothetical, then he may not seek relief on behalf of the class).

Class Area. As discussed above, Lot 8 was found to have DDT_r contamination, but that parcel is excluded from the Proposed Class Area by the “non-income producing” limitation. And the other six parcels, which apparently do fit the definition of the Proposed Class Area, are devoid of any evidence of actual or imminent DDT_r or BHC contamination. McIntyre is unaware of any chemical contamination on any of his six parcels of property other than Lot 8. (Tr., at 228.) Plaintiffs’ various charts do not depict contamination at any of McIntyre’s properties other than Lot 8; in fact, the only other samples taken from McIntyre’s property that appear on plaintiffs’ master sampling map were a dust sample and a soil sample, both of which registered nondetect for DDT_r and are not listed as having been tested for BHC. (Exh. P-105.)⁵⁷

In the absence of any showing (which has not been made) that any of McIntyre’s non-income-producing property within the geographic boundaries of the Proposed Class Area is actually contaminated or in imminent danger of being contaminated with DDT_r or BHC, and in the absence of any showing that he has incurred any injury other than contamination of his property, plaintiffs have failed to establish that McIntyre has sustained an injury-in-fact. That deficiency deprives McIntyre of standing to represent the putative class against Ciba. There being no named plaintiff with standing to represent the class in these proceedings, plaintiffs have failed to satisfy the fundamental requirement under *Prado-Steiman* that at least one named class representative have Article III standing to raise each class claim. Class certification is therefore inappropriate.

⁵⁷ Plaintiffs do not articulate any theory under which McIntyre could have sustained an injury-in-fact by means other than actual contamination of his parcels with DDT or BHC; therefore, the Court will not formulate their arguments for them. See, e.g., *Pinto v. Universidad De Puerto Rico*, 895 F.2d 18, 19 (1st Cir. 1990) (“the court is under no duty to exercise imagination and conjure what a plaintiff might have alleged, but did not, and do counsel's work for him or her”); *Lyes v. City of Riviera Beach, Fla.*, 126 F.3d 1380, 1388 (11th Cir. 1997) (explaining that “the onus is upon the parties to formulate arguments”); *LaBauve v. Olin Corp.*, 231 F.R.D. 632, 642 (S.D. Ala. 2005) (“[t]here is no burden upon the district court to distill every potential argument that could be made based upon the materials before it”) (citation omitted). In opposition to defendants’ standing arguments, plaintiffs’ only response is that “[s]ampling from the lots he owns proves that substantial levels of DDT are present in the dusts in the house on the property.” (Reply Brief, at 1.) But that argument rests exclusively on the Lot 8 sample, which is excluded for purposes of evaluating McIntyre’s standing because Lot 8 produces income and is therefore beyond the scope of the Proposed Class Area.

C. The Court Is Not Obligated to Restructure the Class Sua Sponte.

As reflected by the foregoing analysis, there is a disconnect between the named plaintiffs and the proposed class, inasmuch as: (a) three named plaintiffs do not own property within the geographic limits of the Proposed Class Area; (b) McIntyre's Lot 8 is an income-producing property and therefore outside the Proposed Class Area; and (c) there is no evidence of actual or imminent DDT or BHC contamination on McIntyre's properties that do lie within the Proposed Class Area, so he has no injury-in-fact and no standing. To bridge this chasm, plaintiffs implied during the Hearing that this Court should simply modify the class definition to accommodate any infirmities in plaintiffs' proposal. For instance, plaintiffs stated that "[R]ule 23 is a flexible procedure that does contemplate ... that as discovery developments occur, the class perhaps can be expanded or contracted. ... [T]here may be a potential expansion but probably not that large." (Tr., at 17-18.) In so arguing, counsel indicated that future testing data might support expansion of the class. (*Id.* at 18.) Counsel also suggested that "we ultimately do intend after further sampling is done to perhaps seek a modified definition" of the class. (*Id.* at 18-19.) In fact, counsel stated in its opening that "we now believe that the class should be expanded perhaps 10 to 15 percent to accommodate additional evidence of the presence of both DDT and BHC." (*Id.* at 29.) In their reply brief, plaintiffs trumpeted newly received sampling results of named plaintiffs' properties outside the Proposed Class Area, with the implication being that the Court could simply redraw the class boundary to incorporate those locations. (Reply Brief (doc. 359), at 1-2; *see also* Tr., at 21.) Plaintiffs also imply that the Court should devise subclasses that plaintiffs have never identified or requested as necessary "to reduce divisiveness and satisfy" Rule 23. (Plaintiffs' Brief, at 35.)⁵⁸

There is support in the case law for the notion that district courts have discretion to limit or modify proposed class definitions, and that a class definition requires ongoing refinement and give-and-take. *See Turner v. Murphy Oil USA, Inc.*, 234 F.R.D. 597, 611 (E.D. La. 2006)

⁵⁸ In post-Hearing filings, plaintiffs made even clearer their assumption that the Court could simply retool the class definition to erase any flaws it might be deemed to have. Specifically, plaintiffs argued: "If the Court believes another method should be utilized for distinguishing between types of properties ..., the Court can order Plaintiffs to substitute more generic property types" in their existing proposed class definition. (Doc. 378, at 5.)

(“district courts enjoy discretion to limit or modify class definitions to provide the necessary precision”).⁵⁹ But plaintiffs have not cited, and the Court has not located, any persuasive authority requiring a district court to rewrite a class definition and redraw a class boundary submitted by plaintiffs’ counsel to expand the class to encompass individuals excluded by the plain terms of the proffered class definition. Plaintiffs chose to craft their class definition so that not a single parcel of land owned by a class representative and showing positive readings for DDT or BHC lies within the scope of the proposed class. The Court does not read the line of authority referenced above as obligating it unilaterally to expand a class definition in a manner that might prove more advantageous to plaintiffs. Having selected and litigated the class definition of their choice, plaintiffs must live with that choice. The Court rejects any suggestion that plaintiffs’ Motion for Class Certification compels the undersigned to scrutinize the vast universe of all possible class definitions in the vicinity of McIntosh to ascertain whether any of them might pass Rule 23 muster, then select the broadest one that satisfies all Rule 23 prerequisites. The Rule 23 inquiry is not an exercise in determining whether it is theoretically possible to construct a class definition as to which class certification might be justified.⁶⁰ Plaintiffs have delineated a particular class definition in their Motion, and it is that singular

⁵⁹ See also *Pitt v. City of Portsmouth, Va.*, 221 F.R.D. 438, 443 (E.D. Va. 2004) (“Even after a certification order is entered, the judge remains free to modify it in the light of subsequent developments in the litigation.”) (citation omitted); *In re Select Comfort Corp. Securities Litigation*, 202 F.R.D. 598, 604 (D. Minn. 2001) (district courts have “broad authority to define or redefine the class until judgment is entered or to otherwise alter or amend any class certification order before the decision on the merits”); *Shin v. Cobb County Bd. of Educ.*, 248 F.3d 1061, 1065 (11th Cir. 2001) (“The district judge may review his certification order at any time and may consider redefined or more narrowly tailored classes or subclasses.”).

⁶⁰ Nor is the Motion for Class Certification properly granted based on the mere potentiality that future test results might generate the factual predicate necessary to satisfy plaintiffs’ Rule 23 burden. For one thing, “[c]onditional certification of an improper class on a speculative possibility that it may later meet the requirements is improper.” *Schwartz v. Upper Deck Co.*, 183 F.R.D. 672, 675 (S.D. Cal. 1999). For another, this action was filed in August 2003, more than two and a half years prior to the Hearing. If plaintiffs have been unable to secure sampling data to justify Rule 23 certification some 30 months into their lawsuit, there is no reason to believe that future sample results will be more favorable to plaintiffs’ cause or the Rule 23 prerequisites.

definition that is being evaluated here. As to that proffered class, counsel have failed to present a single named plaintiff who belongs to the class and possesses standing to represent the interests of the class. This omission is fatal to the Motion for Class Certification.⁶¹

VI. Class Definability.

Setting aside the infirmities in the named plaintiffs under Rule 23(a)(3) and (4), as well as the standing requirement, class certification would remain inappropriate here because the class is not adequately defined. “In order for a party to represent a class, the class sought to be represented must be adequately defined and clearly ascertainable.” *LaBauve v. Olin Corp.*, 231 F.R.D. 632, 662 (S.D. Ala. 2005) (collecting cases); *see also DeBremaecker v. Short*, 433 F.2d 733, 734 (5th Cir. 1970) (proposed class must be “adequately defined and clearly ascertainable”); *Turner*, 234 F.R.D. at 611 (“A precise definition is essential to identify those entitled to notice and those bound by a judgment.”); *Colindres v. QuitFlex Mfg.*, 235 F.R.D. 347 (S.D. Tex. 2006) (“A class definition must be precise, objective, and presently ascertainable.”). To meet this threshold, a proposed class definition must specify a particular group harmed during a particular time period via a particular manner, such that the district court can utilize objective indicia to determine who is and is not part of the class. *See LaBauve*, 231 F.R.D. at 662; *Bentley v. Honeywell Int’l, Inc.*, 223 F.R.D. 471, 477 (S.D. Ohio 2004). Courts have declined to certify a class where the proposed definition would require individualized fact-finding to identify class members. *See Crosby v. Social Sec. Admin. of U.S.*, 796 F.2d 576, 580 (1st Cir. 1986); *Noble v. 93 University Place Corp.*, 224 F.R.D. 330, 338 (S.D.N.Y. 2004) (class definition is rejected if mini-hearing on merits of each plaintiff’s case will be necessary to ascertain class membership). Simply put, “[a] court should deny class certification where the class definitions are overly broad, amorphous, and vague, or where the number of individualized determinations required to

⁶¹ The same reasoning defeats any argument that the Court must unilaterally identify and designate substitute class representatives that might satisfy the adequacy of representation, typicality and standing prerequisites. To be sure, Rule 23 has been construed as contemplating substitution of non-parties as class representatives under appropriate circumstances. *See In re Telectronics Pacing Systems, Inc.*, 172 F.R.D. 271, 283 (S.D. Ohio 1997). But the Court perceives no authorities placing the onus on it to locate and secure substitute class representatives if those named by plaintiffs’ counsel prove inadequate. Plaintiffs have not requested substitution of their existing class representatives.

determine class membership becomes too administratively difficult.” *Perez v. Metabolife Intern., Inc.*, 218 F.R.D. 262, 269 (S.D. Fla. 2003).

The class definition submitted by plaintiffs does not allow for objective determinations of class membership status for particular property owners, but would instead require individualized fact-finding on a property-by-property basis. To be sure, the spatial boundary of the Proposed Class Area is clearly delineated and it would be a straightforward enterprise to enumerate the properties (and identify their owners) located within those geographic parameters. As described *supra*, however, it is not sufficient for class membership simply to own property in that geographic space; to the contrary, by plaintiffs’ formulation, a property owner belongs to the class only if his real property is “non-income producing,” or more precisely, if it was non-income producing as of August 25, 2003.

The determination that a particular parcel of land was or was not “income-producing” as of August 25, 2003 is problematic. Plaintiffs maintain that this term has a “common-sense objective meaning” that all prospective class members will apply on an “up-front” basis when they receive their class notices, without judicial intervention. (Exh. 380, at 5.) However, closer inspection suggests that large-scale judicial fact-finding will be needed to ascertain whether potential class members are properly classified as in or out of the class. The Proposed Class Area encompasses a relatively sparsely-populated community in a traditionally rural and agrarian part of the state. As a result, many parcels of land (such as McIntyre’s Lot 8) may have had multiple uses at different times, or even at the same time, serving as both residential property and farming or timber property. To the extent that property owners have farmed their properties, inquiry would be necessary as to whether such farming was exclusively for personal use as of August 2003 or whether crops yielded by those activities had been sold or were intended in August 2003 to be sold. With regard to timber-covered properties, it would be necessary to explore whether timber grown on that land had ever been sold and whether the owner had any intent of selling timber growing on the lot as of August 2003. Or what about a storefront that was vacant as of August 2003? Is that property (which the owner had intended and desired to rent) considered income-producing when, as a factual matter, it did not actually generate income for its owner in August 2003 because there was no tenant? These and many other concerns with the “non-income producing” terminology in the proposed class definition were expressed by

defendants' economist, William H. Desvousges, Ph.D., in a 3-page supplemental expert report filed with leave of Court after the Hearing. (Exh. D-250.)

In the face of all this uncertainty, plaintiffs' optimistic argument that prospective class members could be counted on to self-select whether their property is "income-producing" or not vastly oversimplifies the issue and could not reasonably be expected to produce reliable results. Far more likely is that evidence would have to be collected as to numerous property owners in the geographic span of the Proposed Class Area concerning uses of their property in August 2003 and whether it was actually yielding, or was intended to yield, income at that time. Depositions would need to be taken, documents would have to be produced, and arguments would need to be heard, just as was the case for McIntyre to assess whether Lot 8 was or was not "income-producing."⁶² The end result would be a series of mini-trials just to evaluate the threshold issue of which property owners are class members under the definition proffered by plaintiffs. The massive administrative burdens inherent in such an endeavor counteract the efficiency gains that the Rule 23 mechanism is intended to capture. This defect constitutes a separate, independent ground for denying class certification here.⁶³

⁶² Indeed, McIntyre provides a compelling example of the fallacy of plaintiffs' proposal of simply allowing class members to self-designate their parcels. McIntyre's testimony was that his sister (with whom he co-owns Lot 8) had rented part of Lot 8 to a farmer, and that she received the rental income. He stressed that he did not do the renting and did not receive the money. Faced with a form asking him to classify Lot 8 as income-producing or non-income producing, McIntyre would likely have selected the latter option, because he wasn't renting the parcel and he wasn't receiving rent money. Legally, of course, it does not matter whether it was McIntyre or his co-owner that did the renting and received the rent payments, but a layperson with a third-grade education might not be sensitive to that distinction. Thus, McIntyre's designation would likely be incorrect because Lot 8 was income-producing, regardless of his personal noninvolvement in producing or receiving that income. To get an accurate fix on Lot 8's income-producing status, the Court had to step in, review transcripts, listen to McIntyre's testimony, view aerial photography of Lot 8, examine documents related to that parcel, and entertain oral argument. Such an exercise would likely bear repetition for as many as hundreds of other property owners within the Proposed Class Area just to determine whether their land satisfies the "non-income producing" threshold, so as to qualify them for class membership.

⁶³ In determining that plaintiffs have not adequately defined their class, the Court does not adopt defendants' argument that the class definition fails because plaintiffs "do[] not offer any scientific or expert justification for why the 2.1 mile radius around the Ciba plant

VII. Plaintiffs Cannot Satisfy Rule 23(b)(3) Predominance Requirement.

Even if plaintiffs could satisfy the standing, typicality, adequacy of representation, and class definability issues discussed above, and even if all of the other Rule 23(a) elements had been demonstrated in satisfactory fashion,⁶⁴ plaintiffs would still face a daunting hurdle in Rule 23(b). *See Cooper*, 390 F.3d at 720 (even if plaintiff meets all four requirements of Rule 23(a), “certification would still be inappropriate unless the plaintiffs also could satisfy at least one of the requirements of Rule 23(b)”). The only prong of Rule 23(b) that plaintiffs have invoked is Rule 23(b)(3). (Plaintiffs’ Brief (doc. 330), at 61-66; Tr., at 43-44.) A class action may be maintained under Rule 23(b)(3) only if “the court finds that the questions of law or fact common to the members of the class predominate over any questions affecting only individual members, and that a class action is superior to other available methods for the fair and efficient adjudication of the controversy.” *Id.*

A. Legal Standard.

As mentioned, Rule 23(b) requires a showing that common questions predominate over

makes sense” and because “this case would require significant expert testimony to define the class.” (Defendants’ Brief, at 19, 21.) This reasoning fails for two reasons. First, plaintiffs have presented expert testimony that the proposed class boundaries are based on plaintiffs’ theories of wind dispersion of contaminants and the locations in which contamination was discovered. That defendants disagree with plaintiffs’ expert on these matters is not the same as saying that there is no evidence for why the proposed class boundary “makes sense.” Second, the geographic limits of the class definition unquestionably do specify a particular group that plaintiffs contend were harmed during a particular time period via a particular manner. It would be an easy, objective undertaking to determine whether a particular property owner’s lands fall within the geographic scope of the proposed class definition. The Court therefore rejects defendants’ contention that the class definition is inadequate because plaintiffs have come forward with no scientific justification for its spatial boundaries.

⁶⁴ The Court recognizes that defendants have articulated arguments against every one of the Rule 23(a) criteria. (Defendants’ Brief (doc. 347), at 28-38.) Having concluded above that Rule 23(a)(3) (typicality) and Rule 23(a)(4) (adequacy of representation) have not been satisfied here because of discrepancies between the named plaintiffs and the class they purport to represent, the Court will not delve into defendants’ remaining arguments on Rules 23(a)(3) and (4). Moreover, because the Motion for Class Certification suffers from several defects, each of which is sufficient to warrant denial of class certification, the Court need not address Rules 23(a)(1) and 23(a)(2). The Court therefore expresses no opinion as to whether plaintiffs have adequately shown the numerosity and commonality elements of Rule 23(a).

individual questions and that the class action mechanism is a superior method for adjudicating the dispute.⁶⁵ The rationale underlying the predominance requirement is that “[i]t is only where this predominance exists that economies can be achieved by means of the class-action device.” Rule 23(b)(3), Advisory Notes to 1966 Amendment; *see also Blades v. Monsanto Co.*, 400 F.3d 562, 566-67 (8th Cir. 2005) (Rule 23(b)(3) “tests whether proposed classes are sufficiently cohesive to warrant adjudication by representation”).⁶⁶ Although superficially similar, the Rule 23(b)(3) predominance requirement is “far more demanding” than the Rule 23(a) commonality requirement. *Cooper*, 390 F.3d at 722; *see also Jackson v. Motel 6 Multipurpose, Inc.*, 130 F.3d 999, 1005 (11th Cir.1997); *O'Connor v. Boeing North American, Inc.*, 184 F.R.D. 311, 339 (C.D. Cal. 1998) (“For the proponent to satisfy the predominance inquiry, it is not enough to establish that common questions of law or fact merely exist, as it is under Rule 23(a)(2)'s commonality requirement.”). A plaintiff cannot satisfy the predominance requirement if, as a practical matter, resolution of common issues will “break[] down into an unmanageable variety of individual legal and factual issues.” *Cooper*, 390 F.3d at 722 (quoting *Andrews v. American Tel. & Tel. Co.*, 95 F.3d 1014, 1023 (11th Cir. 1996)). Thus, Rule 23(b)(3) is not an appropriate basis for class certification when it appears that most of plaintiffs’ claims will turn on resolution of individual-specific factual queries. *See Cooper*, 390 F.3d at 722.

In *Klay v. Humana, Inc.*, 382 F.3d 1241 (11th Cir. 2004), the Eleventh Circuit instructively set forth and applied the Rule 23(b)(3) predominance standard. The *Klay* court reasoned that “[w]here, after adjudication of the classwide issues, plaintiffs must still introduce a

⁶⁵ One court helpfully differentiated common from individual questions as follows: “If, to make a prima facie showing on a given question, the members of a proposed class will need to present evidence that varies from member to member, then it is an individual question. If the same evidence will suffice for each member to make a prima facie showing, then it becomes a common question.” *Blades*, 400 F.3d at 566. This Court adopts the *Blades* definitions.

⁶⁶ A number of courts have observed that it is necessarily a case-specific analysis to ascertain whether predominance exists. *See, e.g., Select Comfort*, 202 F.R.D. at 610 (“There are no bright line rules to determine whether common questions predominate.”); *Romero v. Producers Dairy Foods, Inc.*, 235 F.R.D. 474, 489 (E.D. Cal. 2006) (“Because no precise test can determine whether common issues predominate, the Court must pragmatically assess the entire action and the issues involved” to make a Rule 23(b)(3) determination.).

great deal of individualized proof or argue a number of individualized legal points to establish most or all of the elements of their individual claims, such claims are not suitable for class certification under Rule 23(b)(3).” *Id.* at 1255. An alternative formulation of the predominance criterion is whether inclusion of more class members would require presentation of significant amounts of new evidence. *Id.* If so, then it is likely that individual issues predominate over their common counterparts. *Id.*

Applying these principles, the *Klay* panel held that the district court abused its discretion in certifying a class under Rule 23(b)(3) where the plaintiffs had suffered “varying types of injury ... through different causal mechanisms, thereby creating many separate issues,” with “[n]o single proximate cause [that] applies equally to each potential class member and each defendant.” *Id.* at 1265 (citations omitted). *Klay* involved state-law claims arising from allegations that the defendants (health care entities responsible for reimbursing physicians in HMOs) had systematically underpaid plaintiffs (a putative class of physicians) on those reimbursements. Classwide proof showed only that defendants had sometimes programmed computers to defraud doctors out of reimbursement funds, through a variety of techniques, but did not show that any particular doctor had been cheated on any particular occasion, or by how much. *Id.* at 1266-67. Thus, even if plaintiffs could prove that defendants conspired against them and sometimes underpaid or delayed payments improperly, each plaintiff would still have to prove independently, by facts specific to him, that his payments had been improperly reduced or delayed. *Id.* at 1268. *Klay* contrasted this scenario with actions in which the Eleventh Circuit upheld class certification where defendants had harmed each putative plaintiff in exactly the same way, albeit not in the same exact dollar amount. *Id.*⁶⁷ In light of this distinction, *Klay* held

⁶⁷ For example, in *Allapattah Services, Inc. v. Exxon Corp.*, 333 F.3d 1248 (11th Cir. 2003), plaintiffs were Exxon dealers who sued Exxon Corp. for overcharging them for fuel purchases by secretly eliminating a promised 1.7 cent-per-gallon discount. Each plaintiff was harmed in the same manner by the same course of conduct, inasmuch as he had been forced to overpay for fuel by 1.7 cents per gallon during the period of the breach. Likewise, in *Roper v. Consurve, Inc.*, 578 F.2d 1106 (5th Cir. 1978), the plaintiffs were credit card holders who contended that their credit card company had charged them usurious interest rates by using an illegal formula to determine when interest accrued. Again, each plaintiff was harmed in the same manner, albeit not in the same amount. The *Klay* court contrasted *Allapattah* and *Roper* with the circumstances of that case, wherein even if plaintiffs could show that defendants had

that “even though the plaintiffs’ breach of contract claims involve some relatively simple common issues of law and possibly some common issues of fact, individualized issues of fact predominate.” *Id.* at 1267.⁶⁸

B. Analysis of Nuisance/Trespass/Negligence Causes of Action.

1. Individual and Common Questions.

Because plaintiffs have identified a variety of causes of action, the Court will divide them into two groups for analytical purposes, with the first group including the non-fraud related claims of nuisance, trespass, and negligence and the second group including the fraud and conspiracy related claims. All claims in the first group are anchored in plaintiffs’ contention that DDT and BHC from Ciba’s facility in McIntosh have contaminated their property and impaired their property values. These claims will certainly rely on some measure of common proof for all plaintiffs, including the following: (a) Ciba’s history of producing DDT at the McIntosh facility from 1952 through 1965 and of producing BHC there in 1953 and 1954; (b) the chemical properties, hazards and toxicity of DDT and BHC; (c) Ciba’s waste disposal practices relating to DDT and BHC; and (d) the potential that such waste disposal practices could cause offsite airborne dispersion of DDT and BHC, producing contamination of surrounding properties 38 to

engaged in unlawful practices, “they would still need extensive individualized proof regarding which plaintiffs have been harmed and in what ways.” 382 F.3d at 1267.

⁶⁸ *Klay’s* resolution of the Rule 23(b)(3) issue is echoed in other federal decisions. *See, e.g., Perez*, 218 F.R.D. at 273 (predominance requirement not satisfied in medical monitoring action where most elements of claims require individualized proof, such that efficiency gained by deciding common elements will be lost by individual determinations); *Noble*, 224 F.R.D. at 339 (“Because Rule 23(b)(3) requires that common issues predominate, courts often deny certification ... where resolving the claims for relief would require individualized inquiries.”); *In re Rubber Chemicals Antitrust Litigation*, 232 F.R.D. 346, 353 (N.D. Cal. 2005) (Rule 23(b)(3) requires plaintiffs to make threshold showing that proof is sufficiently generalized that class action will provide tremendous savings of time and effort); *In re WorldCom, Inc. Securities Litigation*, 219 F.R.D. 267, 287-88 (S.D.N.Y. 2003) (“Predominance will be established if resolution of some of the legal or factual questions that qualify each class member’s case as a genuine controversy can be achieved through generalized proof, and if these particular issues are more substantial than the issues subject only to individualized proof.”).

49 years after Ciba ceased production of these compounds.⁶⁹ Most of these common matters are properly classified as background facts, a backdrop of shared facts that will necessarily exist whenever multiple individuals pursue similar claims against the same defendant. By themselves, these common questions, even if resolved in plaintiffs' favor, are insufficient to establish liability against Ciba on the nuisance, trespass and negligence theories of recovery set forth in the operative iteration of the pleadings.

Irrespective of how these common questions are resolved, the existence and degree of Ciba's liability to a particular plaintiff will turn on the following individual-specific questions: (a) whether that plaintiff's property is contaminated with DDT and BHC;⁷⁰ (b) whether the source of those contaminants is Ciba's McIntosh site, or whether there is a property-specific alternative source that better explains the observed contamination; (c) whether the contamination

⁶⁹ Plaintiffs' briefs and oral arguments rattled off numerous other alleged "common questions" that either are not common or are irrelevant to the class for which certification is sought. (Plaintiffs' Brief (doc. 330), at 47-49; Tr., at 30-31.) For example, many of the alleged common questions relate to surface drainage, groundwater flow, hydrogeology, and the potential for migration of contaminants offsite via those pathways. However, plaintiffs do not seek groundwater or surface water classes here; instead, their theory for class certification is that the wind blew particles containing these contaminants off the Ciba site and into the class area. Thus, plaintiffs have sculpted this case to moot common questions relating to surface water and groundwater. Furthermore, several alleged common questions relate to the dispersion and distribution of contaminants from the Ciba site and whether Ciba is responsible for off-site pollution. But these "common questions" are actually individualized questions whose answers may diverge greatly for particular class members depending on the unique facts and circumstances of their property.

⁷⁰ Plaintiffs argue that "deciding where pollutants are or were has everything to do with environmental science, and nothing to do with individual Plaintiffs." (Plaintiffs' Brief, at 47 n.22.) The Court disagrees. Plaintiffs' "environmental science" testimony at the Hearing was that particles of DDT and BHC might be carried by the wind from the Ciba site to other locations, where they persist in the environment and are blown around further. That "environmental science" tells us nothing about whether Plaintiff X has DDT on his land today, nor does it isolate whether that DDT came from the Ciba plant or whether Plaintiff X's own activities, those of predecessor landowners, or the agricultural activities of nearby farmers might better explain any observed contamination. Plaintiffs' science may offer one potential source and one potential pathway of contamination, but a property-by-property inquiry will unquestionably be necessary to determine whether that source and that pathway have any bearing on the experience of a particular property owner within the Proposed Class Area.

is sufficiently severe to reduce the property's value and, if so, the extent of that diminution in value; (d) whether the property is contaminated by chemicals other than BHC and DDT and, if so, the extent to which any diminution in property value may be attributed to such other chemicals; (e) whether that plaintiff acquired the property prior to or after the alleged diminution in value occurred; and (f) when that plaintiff was first on notice of the contamination and whether the timing of that notice renders his claims time-barred. It is the opinion of the undersigned that these individual issues substantially outweigh the largely background common issues for class certification purposes.

2. *The Weaver and Et Tawil Examples.*

A concrete example using evidence derived from the Hearing will illustrate the point. The parties devoted substantial time to addressing the Weaver and Et Tawil properties, both of which are located within plaintiffs' Proposed Class Area.⁷¹ Plaintiffs found BHC at the Weaver property, but not at the Et Tawil property, even though the latter is two miles closer to the Ciba site than the former. (Exh. P-105.) Plaintiffs also found 40,200 ppb of DDT_r in the soils at the Weaver property and 2,100 ppb of DDT_r in the dust at the Et Tawil property. (*Id.*) However, there was substantial evidence that airborne dispersion from the Ciba site was not the source (or, at least, not the only source) of the DDT_r observed at either location. In fact, the soil sample at the Weaver property was taken from a location where the property owner had engaged in bulk storage of bags of DDT on which children had frequently played, releasing clouds of DDT-laden dust. As for the Et Tawil property, there was evidence that the property owner had brought truckloads of soil from the Ciba site to his property to create a play area for his daughter. Plaintiffs' expert allowed that the Weaver reading was too high to be explained by air transport and that the "more likely reason" was bulk transport and storage of DDT at that location by the property owner. (Tr., at 104-05.) He also testified that the Et Tawil situation was governed by "an additional transport mechanism" (*e.g.*, the truckloads of Ciba soil that the property owner

⁷¹ This example is not unfair to plaintiffs, as it was they who spotlighted the Weaver and Et Tawil properties. Indeed, plaintiffs drew the western spur on the Proposed Class Area specifically for the purpose of capturing the Weaver property within the class definition. (Tr., at 81-82.) Plaintiffs' maps touted the elevated levels of DDT found at those locations, which levels were considerably higher than any other offsite location aside from the McIntyre property.

spread on his land) that was not in harmony with the air dispersion theory. (*Id.* at 105.) And the samples from both properties tested positive for a laundry list of additional contaminants (*e.g.*, heptachlor, aldrin, chlordane, dieldrin) that are not at issue in this case.

This individual-specific evidence reveals the following insights with respect to Weaver and Et Tawil's claims for liability and damages against Ciba: (i) no BHC has been found on Et Tawil's property, so Et Tawil has no basis for seeking to hold Ciba liable based on BHC contamination; (ii) both Weaver and Et Tawil have DDT on their properties, but individual-specific pathways for that DDT demand unique proof of causation by these plaintiffs and render them differently situated than other class members for purposes of establishing Ciba's liability; and (iii) both Weaver and Et Tawil's properties were found to have various other contaminants that are not at issue in this case and that plaintiffs have not linked to Ciba, but that could reasonably account for some portion of any diminution in property value. In short, Weaver and Et Tawil are not cookie-cutter plaintiffs bringing cookie-cutter claims against Ciba for cookie-cutter injuries. Because of their individual circumstances, their claims are markedly different from each other's and (apparently) from those of their would-be fellow class members. Weaver and Et Tawil have been harmed, if at all, in different ways and by different pathways than the class at large.⁷² Common evidence that Ciba used to manufacture DDT and BHC, that those substances are hazardous, that Ciba's waste disposal practices were unsatisfactory, and that particles of DDT and BHC might be carried off-site by the wind barely scratches the surface of establishing successful claims for Weaver and Et Tawil under any of the theories articulated in the Complaint. Common proof clearly would not predominate over individual proof for class members Weaver and Et Tawil in their efforts to prove liability or damages against Ciba.⁷³

⁷² These facts demonstrate that Weaver and Et Tawil are not similarly situated to each other, much less to other class members, and belie plaintiffs' conclusory statement that "the class members are similarly situated." (Plaintiffs' Brief, at 35.)

⁷³ The facts before the Court concerning the Weaver and Et Tawil properties, and particularly the unique circumstances that might have produced DDT contamination at those locations, came to light through the class discovery process, including the deposition of Mr. Weaver. Yet plaintiffs would utilize the Rule 23 mechanism as a cloak to shield class members from such inquiries, as plaintiffs strenuously argue that defendants must not be granted "the right to cross-examine every class member" because no such right exists in class actions. (Plaintiffs'

3. *Individual Proof Substantially Outweighs Common Proof.*

This reasoning may be presented in more systematic terms. Any theory of liability predicated on intrusion of Ciba contaminants on a plaintiff's property (*e.g.*, nuisance, trespass, negligence) finds common issues being overwhelmed by individual issues for four reasons, to-wit: (a) individual proof will be necessary to show the existence of contamination; (b) individual proof will be necessary to show the causation of any observed contamination; (c) individual proof will be necessary on the issue of damages; and (d) individual proof will be necessary to assess defendants' limitations defense. Each of these considerations will be addressed in turn.

a. *Existence of Contamination.*

First, common proof will not show that any plaintiff's property is, in fact, contaminated. In that regard, it appears from sampling data that not every parcel in the Proposed Class Area is contaminated with DDT or BHC; moreover, plaintiffs have come forward with no scientific testimony under which these chemicals would have uniformly blanketed the area of concern.⁷⁴ Without the physical presence of contamination on their property, plaintiffs can establish no liability under a trespass or nuisance theory. *See LaBauve*, 231 F.R.D. at 673. Nor does plaintiffs' evidence show that all non-contaminated parcels are now in imminent danger of becoming contaminated by BHC or DDT that Ciba may have released a half-century ago. Thus, both the existence of contamination and the risk of future contamination will have to be proven on a property-by-property basis.

Brief, at 34.) The facts of this case underscore the injustice and unfairness that would ensue if defendants were precluded from questioning particular plaintiffs. Absent such procedural safeguards, defendants could never have developed evidence concerning the Weaver and Et Tawil properties, and the truth about how those particular properties came to be contaminated would remain hidden. If plaintiffs are correct that class certification would bar defendants from examining each class member as has been done with respect to Weaver and Et Tawil, then that fact weighs heavily against certification of a class.

⁷⁴ To the contrary, Dr. Bedient testified that Ciba contamination would not be uniform across all properties. (Tr., at 322.) Further, there is no testimony, for instance, that airborne dispersion of DDT or BHC from the Ciba site could be reasonably expected to transport it two to three miles to the outermost edges of the Proposed Class Area. At most, plaintiffs' expert testimony is that these particles can be carried by even light winds, and that they persist in the environment, such that they do not break down over time.

b. Causation.

Second, causation will unquestionably be an individual-specific enterprise. The mere presence of DDT or BHC at a location says nothing about causation, for purposes of holding Ciba liable. Common evidence may offer one potential source of those contaminants, but many other explanations may exist that are specific to a particular property, as the Weaver and Et Tawil examples attest.⁷⁵ While DDT and BHC do not appear in nature, there are myriad explanations unrelated to Ciba for why they might be found at a given location. After all, the record shows that DDT was used extensively as an agricultural and household insecticide in the 1950s and 1960s, that BHC was also used as an insecticide and continues to have lawful registered pest control uses today, that numerous properties within the Proposed Class Area are or have been used for agricultural purposes during the time period at issue, that potential class members have stored DDT on their property or trucked potentially contaminated soil onto their property, and that some level of DDT and BHC contamination is expected in Alabama without Ciba wrongdoing.⁷⁶ Sorting among these different potential explanations will necessarily occur

⁷⁵ Plaintiffs cryptically argue that “whether DDT, BHC, Chlordane, and t-nonachlor from the Ciba plant is the source of the contamination in this area is a common question that must be addressed on a class wide basis.” (Plaintiffs’ Brief, at 51.) The Court disagrees. Plaintiffs assume that there is a single classwide answer to this question, but offer no basis for that assumption. Some putative class members may have DDT or BHC on their property that arrived via airborne transportation from the Ciba plant, while others (like the Weavers and Et Tawils) may have had DDT or BHC reach their property from a different source and/or a different pathway altogether. The source or sources of observed contamination on a class member’s property is not a common question.

⁷⁶ Within the Proposed Class Area, both sides’ experts agree, one would have to examine each property to determine the existence, nature, sources and extent of any contamination. (Tr., at 401.) According to Dr. Langseth, “the extremely high variability and intermingling of properties with detects and nondetects means that you really can’t define zones that can be characterized generally.” (*Id.*) Dr. Bedient’s testimony echoed Dr. Langseth’s as to the property-specific nature of any factual inquiry to determine whether a parcel is contaminated, the nature and extent of contamination, and the pathways that produced such contamination. (*Id.* at 322-23.) Thus, both plaintiffs’ and defendants’ expert testimony flatly contradict plaintiffs’ argument that “the many decades over which these wastes have had time and opportunity to migrate have resulted in a homogeneous Class Area.” (Plaintiffs’ Brief, at 50.) The Court has heard no such evidence.

on a property-by-property basis within the Proposed Class Area, in an effort to resolve liability questions.

c. Damages.

Third, there is no dispute that computation of damages will inevitably be a property-specific enterprise. (Plaintiffs' Brief, at 35.)⁷⁷ Unlike in the *LaBauve* case, plaintiffs have made no pretense of presenting expert opinion or other evidence tending to show that "damages can be computed according to some formula, statistical analysis, or other easy or essentially mechanical methods," so as to obviate individualized damages as an impediment to class certification. *Klay*, 382 F.3d at 1259-60.⁷⁸ There is ample precedent for the proposition that individualized damages issues, in and of themselves, do not preclude a finding for Rule 23(b)(3) purposes that common questions predominate. *See, e.g., Allapattah Services, Inc. v. Exxon Corp.*, 333 F.3d 1248, 1261 (11th Cir. 2003). In *Klay*, however, the Eleventh Circuit recognized that "when there are significant individualized questions going to liability ... the need for individualized assessments of damages is enough to preclude 23(b)(3) certification." 382 F.3d at 1260. That is precisely the situation here, as this case features both significant individualized questions going to liability and a need for individualized damage assessments.⁷⁹ Accordingly, the need for property-specific damages calculations militates strongly against certification under Rule 23(b)(3).

⁷⁷ At most, plaintiffs assert that diminution in property value is "quantifiable as a formulaic percentage reduction of the value of the properties in the class" (Plaintiffs' Brief, at 29), without offering expert opinion or record evidence to bolster this representation. Given the multiplicity of individual-specific variables (*e.g.*, presence, locations, types, concentrations and sources of contaminants; duration of ownership; use of land; etc.) that must be taken into account in any valuation computation, plaintiffs' unadorned assurance that a "formulaic percentage reduction" may be readily calculated is unpersuasive.

⁷⁸ Even if plaintiffs had made such a showing by coming forward with a particular benchmark for measuring damages, they still "must show that it could work to prove classwide injury with common evidence." *Blades*, 400 F.3d at 575. No such showing has been made.

⁷⁹ Just as in *LaBauve*, damages calculations here "will hinge on property-specific determinations of (a) whether the property is industrial, residential, commercial, agricultural, public, etc. in nature; (b) whether the property is contaminated; (c) the extent of its contamination; (d) the pathway(s) of exposure; (e) the genesis and duration of its contamination; (f) where on the property the contamination is located; and (g) the portion of that contamination attributable to" *Ciba. LaBauve*, 231 F.R.D. at 676.

d. Limitations Defense.

Fourth, defendants have articulated a limitations defense that threatens to scuttle numerous class members' claims given the lapse of roughly half a century from the time of the alleged contamination until this lawsuit was filed. In particular, the alleged contamination at issue relates to chemicals that Ciba's McIntosh facility has not produced since 1954 (in the case of BHC) or 1965 (in the case of DDT). Yet suit was not filed until 2003, nearly four decades after Ciba's McIntosh site had ceased production of DDT. This posture raises an obvious, substantial question as to whether plaintiffs' claims are timely, or whether they tarried too long before initiating this action. With respect to the fraud claims, Alabama has adopted a discovery rule, such that the two-year limitations period commences "when the plaintiff was privy to facts which would provoke inquiry in the mind of a person of reasonable prudence, and which, if followed up, would have led to the discovery of the fraud." *Auto-Owners Ins. Co. v. Abston*, 822 So.2d 1187, 1195 (Ala. 2001) (citation omitted) (rejecting standard of "actual knowledge" for computing limitations period). A four-year limitations period attaches to the RICO claim. *See McCaleb v. A.O. Smith Corp.*, 200 F.3d 747, 751 (11th Cir. 2000).

The timeliness of any plaintiff's remaining claims, whose limitations periods range from two to six years, must be assessed by reference to federal law, given the preemptive effect of the federal Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. §§ 9601 *et seq.* ("CERCLA"). In particular, CERCLA provides that:

"In the case of *any action brought under State law for personal injury, or property damages*, which are caused or contributed to by exposure to any hazardous substance, or pollutant or contaminant, released into the environment from a facility, if the applicable limitations period for such action (as specified in the State statute of limitations or under common law) provides a commencement date which is earlier than the federally required commencement date, *such period shall commence at the federally required commencement date in lieu of the date specified in such State statute.*"

42 U.S.C. § 9658(a)(1) (emphasis added). The "federally required commencement date" ("FRCD") is defined as "the date the plaintiff knew (*or reasonably should have known*) that the personal injury or property damages ... were caused or contributed to by the hazardous substance or pollutant or contaminant concerned." 42 U.S.C. § 9658(b)(4) (emphasis added); *see also Reichhold Chemicals, Inc. v. Textron, Inc.*, 888 F. Supp. 1116, 1126 (N.D. Fla. 1995) (trigger for

FRCD is when plaintiff became aware of contamination, and it is not necessary that plaintiff know identity of specific pollutants involved).

Thus, the critical legal inquiry for purposes of establishing each plaintiff's limitations period is when he "reasonably should have known" that his property had been damaged by industrial contamination from Ciba. Defendants' unchallenged evidence is that extensive publicity attended the Ciba facility's designation as a Superfund site in 1983, and that certain community organizations in McIntosh launched concerted efforts, amidst media fanfare, to obtain redress from Ciba for alleged contamination to their properties in the mid-1990s. (*See, e.g.*, Exhs. P-51, D-10 through D-18.) As a result, a substantial number of prospective plaintiffs' claims for environmental contamination that allegedly occurred decades ago may be time-barred because those plaintiffs knew or reasonably should have known of the contamination more than six years before suit was filed. But the date on which a plaintiff "reasonably should have known" will necessarily vary for each plaintiff, based on such factors as "(a) whether and when he observed anything out of the ordinary on or near his property that might reasonably have led him to believe it was being contaminated by [DDT or BHC] from [Ciba]; (b) whether and when he participated in any community organizations relating to Olin and Ciba contamination; (c) whether and when he was aware of any representations by [Ciba] relating to the level of offsite contamination and, if so, whether and how he relied upon them; (d) whether and when he or any organization of which he was a member requested relief from [Ciba] for alleged contamination; (e) whether and when he became aware of any news reports regarding alleged contamination emanating from the [Ciba] site; (f) whether and when he sought out legal counsel to pursue potential contamination-related claims against [Ciba]; (g) whether and when he first believed that [Ciba] was contaminating his property; (h) whether and when he believed [Ciba]'s allegedly fraudulent representations regarding offsite contamination; and (i) whether and when he stopped believing such representations." *LaBauve*, 231 F.R.D. at 674.

Responding to defendants' position that this limitations defense weighs against class certification because of its individual-specific nature, plaintiffs dismiss it out of hand as "absurd." (Reply Brief, at 17.) Both the foregoing reasoning and the extant caselaw are otherwise. Courts have found that disparate, individualized assessment of a statute of limitations issue may cause individual considerations to predominate under Rule 23(b)(3). *See LaBauve*,

231 F.R.D. at 674; *O'Connor v. Boeing North American, Inc.*, 197 F.R.D. 404, 414 (C.D. Cal. 2000) ("Based on the individualized, fact-intensive nature of the necessary inquiry in this case, the statute of limitations issues preclude a finding that common issues predominate over individual issues."); *Corley v. Entergy Corp.*, 220 F.R.D. 478, 487-88 (E.D. Tex. 2004) (reasoning that limitations issues defeat predominance because issues of whether individual landowners' claims are timely and whether equitable tolling applies are not amenable to class treatment). Earlier this year, one district court opined that "[w]hile it is settled that the mere existence of individualized factual questions with respect to the class representative's claim will not bar class certification, class certification is inappropriate where a putative class representative is subject to unique defenses which threaten to become the focus of the litigation." *Richards v. FleetBoston Financial Corp.*, 235 F.R.D. 165, 173 (D. Conn. 2006) (citation omitted). In the undersigned's view, the plaintiff-specific timeliness defense could reasonably be expected to become a focal point of this litigation, overshadowing common issues and negating the benefits of the class certification mechanism.⁸⁰

⁸⁰ Plaintiffs attempt to minimize the limitations defense by indicating that in "isolated instances" certain putative class members "perhaps were activists or they participated in some meetings in the 1990s," such that they should have known of the existence and cause of contamination on their properties. (Tr., at 43.) The Court does not share plaintiffs' optimism. There is no evidence that there are only "isolated instances" in which plaintiffs have an FRCD that commenced more than six years prior to this litigation. Even if there are only "isolated instances" of activists amongst class members (and defendants have identified at least five such activists in class discovery alone), the reach of the limitations defense is not confined to activists on the fringes of the class. Ciba contamination received considerable media attention from the 1960s forward, and particularly after the site was declared a Superfund site in 1983. Residents who read those news accounts and noticed symptoms of contamination on their own land may have had objectively reasonable grounds for believing that their properties were contaminated, irrespective of their "activist" status. For example, there is some question as to whether McIntyre's claims are timely, given his testimony that when the wind blew from the direction of the Ciba plant he "could smell the chemical" and could actually see "[c]hemical or fog or something falling on" his property. (Tr., at 206.) For these reasons, the Court cannot agree with plaintiffs that this is a peripheral issue that cannot impact the claims of more than a few scattered class members. Nor is it satisfactory to argue, as plaintiffs do, that if the limitations defense has a widespread impact, "then it should be treated under [R]ule 23(a) as a common defense." (Tr., at 43.) It is not a common defense. It is an individual defense that may be available to the claims of many plaintiffs based on the specific facts relating to those plaintiffs, not common facts for plaintiffs as a whole.

4. *Conclusion.*

In sum, there is undoubtedly a core nucleus of common facts relating to plaintiffs' nuisance, trespass and negligence claims, encompassing such issues as whether Ciba created DDT and BHC wastes; whether, when and how those wastes may have migrated offsite; the pathways of that migration; and the characteristics and impacts of those chemicals. Adjudication of such common factual issues would establish background facts, but little else. Proof of the classwide facts would neither establish Ciba's liability to any class member nor fix the level of damages awarded to any class member. The common facts would not establish a single plaintiff's entitlement to recover on any theory of liability, or even show that a single plaintiff is aggrieved. Instead, after common proof was made, each plaintiff would have to prove individually that his property is contaminated and that the contamination came from Ciba. The Court would have to fix a separate FRCD for each plaintiff. After resolving the individualized contamination, causation, and timeliness issues, the damages inquiry would be carried out at the individual level. Notwithstanding class status, these proceedings would become mired in liability, causation, timeliness and damages inquiries that demand adjudication on a plaintiff-by-plaintiff basis. Far from increasing efficiency, class treatment of this action would create the gross inefficiency of numerous individualized determinations multiplied across hundreds of class members. Simply put, if litigated as a class action, this case would break down into an unmanageable variety of individual legal and factual issues. Given the myriad sources of harm, types of harm, and potential damages resulting from harm, individual issues dwarf the common issues, compelling a vast array of mini-trials if certification were granted. On that basis, the Court holds that questions of law or fact common to the class do not predominate over questions affecting only individual members, and that certification of a class under Rule 23(b)(3) is inappropriate and unwarranted as to the nuisance, trespass and negligence claims.

C. Analysis of RICO and Fraud/Misrepresentation Causes of Action.

Perhaps sensing the Rule 23(b)(3) frailties in their traditional contamination-based claims (trespass, nuisance, negligence), plaintiffs devote considerable effort to demonstrating a protracted pattern of deception by Ciba to regulators and the public at large, bolstering their fraud, misrepresentation, conspiracy and RICO causes of action. (Plaintiffs' Brief, at 12-21 & 26-29; Reply Brief, at 10-17.)

1. Plaintiffs' Evidence of Misrepresentation and Conspiracy.

During the Hearing, plaintiffs emphasized their evidence of misrepresentation and conspiracy, arguing that “the RICO count is a highly significant one” in the Rule 23 analysis. (Tr., at 26.) A few examples will convey the flavor of their misrepresentation evidence. To show a pattern of deception, plaintiffs submit documentation from 1980 showing that a Ciba representative informed the EPA that “there was never any DDT disposed of on site of plant.” (Exh. P-16.) Plaintiffs also point to a purported discrepancy in the number of materials which Ciba told regulators in 1961 that they were producing in McIntosh, versus the number of commercial compounds they were actually producing. (Exhs. P-6, P-46.)⁸¹ As yet another example of alleged deception, plaintiffs claim that in 1986 a Ciba official informed a reporter that no Ciba “waste[] is dissolving in ground or rain water.” (Exh. P-52.) Moreover, in 1983 a Ciba representative told the EPA that the McIntosh facility “does not present a threat to the public health or the environment.” (Exh. P-107.)⁸² It is plaintiffs’ position that all of these statements (and numerous others like them) were dishonest attempts by Ciba to fool regulators and the public as to the existence and extent of its contamination problems. Plaintiffs also make much of certain Baseline Endangerment Assessments performed on Ciba’s behalf in 1988 for submission to regulators. (Exhs. P-68, P-71, P-117.) In their briefs and oral arguments, plaintiffs lambaste these assessments as suffering from flawed assumptions, excluding important

⁸¹ Although plaintiffs presented these exhibits under the heading “Deceiving Regulators and the Public,” there are numerous innocuous potential explanations for the purported discrepancy that would not contemplate any deception by Ciba. The Court need not and will not rule on the legitimacy of plaintiffs’ characterization of these exhibits at this time.

⁸² Exhibit P-107 is one of numerous exhibits that plaintiffs filed with their Reply Brief (doc. 359), just two business days before the Class Certification Hearing. The Court is aware of no reason why plaintiffs could not have presented Exhibit P-107 (and, frankly, most exhibits accompanying their Reply Brief) in their principal brief. “It is well accepted that raising of new issues and submission of new facts in reply brief is improper.” *Schwartz*, 183 F.R.D. at 682; *see also Sweet v. Pfizer*, 232 F.R.D. 360, 364 n.7 (C.D. Cal. 2005) (“the moving party in a motion cannot submit new information as part of its Reply”). Plaintiffs proceeded in derogation of these principles by submitting hundreds of pages of new exhibits with their reply brief, all or nearly all of which were previously available and could have been submitted with their principal brief. In its discretion, the Court will consider these exhibits despite this procedural shortcoming.

considerations, and dramatically underestimating the environmental and health risks posed by Ciba's contamination. (Tr., at 52-53; Plaintiffs' Brief, at 19-21.) The Court makes no findings at this time as to whether any of the statements attributed by plaintiffs to Ciba actually were false or otherwise deceptive, as merits rulings are improper at the Rule 23 stage.

The Court's understanding is that plaintiffs do not allege that Ciba lied to them directly about the presence or absence of contamination. Instead, plaintiffs' position appears to be that Ciba misled government regulators about the nature, scope and extent of the contamination problem at its McIntosh facility, and gave reassurances to media outlets through newspaper interviews, company newsletters and the like that no significant threat to human health or the environment was posed by Ciba's McIntosh site.

With regard to their conspiracy and RICO allegations, plaintiffs contend that Ciba, Olin and others (including their respective environmental contractors) engaged in common schemes to defraud governmental agencies and the public about the extent of environmental contamination in the McIntosh area. (Third Amended Complaint (doc. 212), at Count Eleven.) In particular, plaintiffs' position is that Ciba, Olin and their respective contractors collaborated to present inaccurate and/or misleading risk assessments in 1992. (See Exh. 74; Plaintiffs' Brief, at 26-29.) As plaintiffs' counsel described it, "Olin and Ciba and their contractors were getting together to make sure that all of the evidence with respect to ecological risks were in harmony with each other. They didn't want to be pointing out each other's mistakes." (Tr., at 54-55.)

2. Predominance Analysis.

There are undoubtedly common issues pertaining to the fraud, misrepresentation, RICO, and conspiracy causes of action. As identified by plaintiffs, those common issues include: (a) whether Ciba misled the public by denying that pollution problems existed; (b) whether Ciba manipulated government regulators; and (c) whether Ciba conspired with others to avoid incurring cleanup expenses. (Plaintiffs' Brief, at 48; Tr., at 31-32.) However, plaintiffs do not contend that a common course of fraudulent or conspiratorial conduct is, by itself, sufficient to impose liability against Ciba in all class members' favor, but instead acknowledge that reliance

is an essential element of these fraud-related claims.⁸³ In that regard, all of these claims are predicated on the notion that Ciba's fraudulent activities lulled plaintiffs into inaction, thereby preventing them from avoiding or mitigating the adverse effects of Ciba's campaign of contamination. The theory of liability undergirding these causes of action was set forth by plaintiffs in the Third Amended Complaint (and repeated verbatim in their reply brief on the Rule 23 issues) in the following terms:

"Plaintiffs and members of the putative class as a whole relied on the standardized misrepresentations made in furtherance of the Corporations' fraudulent scheme. As a result, the clean up of the contamination from these Superfund sites has been delayed and the contamination continues to proliferate into the community. Property values are adversely affected and the residents in the surrounding communities are unnecessarily subjected to increased health risks from contaminants from these sites."

(Doc. 212, at ¶ 152; Plaintiffs' Reply (doc. 359), at 6-7.) During the Hearing, plaintiffs reinforced their position by arguing that "[t]he community is essentially lulled into a feeling of well-being and safety" by Ciba's falsehoods and omissions, with "no reason to suspect that they are at any type of environmental risk and ... no reason to believe that their properties have been affected." (Tr., at 233.)

Classwide evidence may establish that Ciba made certain misrepresentations or omissions regarding offsite contamination, and that Ciba conspired with others and engaged in a pattern of racketeering activity to perpetrate the alleged fraud; however, the reliance question boils down to a plaintiff-by-plaintiff assessment. Different plaintiffs will almost certainly have become aware of different representations at different times (if ever),⁸⁴ and will have reacted

⁸³ This concession is consistent with applicable law, which requires for each of these fraud-related claims that plaintiffs establish reasonable reliance on the representations or omissions in question, and injury by virtue of such reliance. *See, e.g., Reynolds Metals Co. v. Hill*, 825 So.2d 100, 105 (Ala. 2002); *Sikes v. Teleline, Inc.*, 281 F.3d 1350, 1361 (11th Cir. 2002) ("reliance is a necessary element of a civil RICO claim based on mail or wire fraud").

⁸⁴ For example, plaintiffs impute fraudulent statements to defendants through a variety of media, including without limitation newspaper articles and statements to regulators that may have been disseminated to the public. An individualized inquiry will be essential to determine which plaintiffs were exposed to which of these methods of communication at which particular times, which of them were even aware of Ciba's purported representations set forth in

differently to such awareness. As such, plaintiffs' fraud-related claims will inevitably devolve into individual-specific inquiries about which representations by Ciba were heard by each plaintiff, whether and how each plaintiff relied on such representations, whether such reliance was reasonable given other information that may have been known by or reasonably available to that plaintiff, and whether and how that plaintiff was damaged by virtue of any such reasonable reliance. These inquiries are all necessarily individualized in scope, and demand the sort of plaintiff-specific evidence that the parties developed at the Hearing in questioning plaintiff McIntyre about his personal interaction with Ciba relating to contamination, his knowledge of Ciba's operations and contamination, his reading habits, what he had heard in the community about Ciba contamination, the activities of his family members in combating alleged contamination by Ciba, and the like. (Tr., at 215-24.)

Thus, the fraud-related claims are characterized by both common proof (concerning the alleged misrepresentations and omissions, the alleged conspiracy, and the alleged pattern of racketeering) and individual proof (concerning reliance and damages). The critical legal question is whether the reliance and damages elements of these claims defeat Rule 23(b)(3) predominance. The factual issue of individual reliance is not necessarily fatal to class certification under Rule 23(b)(3). *See, e.g., Kirkpatrick v. J.C. Bradford & Co.*, 827 F.2d 718, 724-25 (11th Cir. 1987) (deeming Rule 23(b)(3) satisfied as to plaintiffs' misrepresentation claims, inasmuch as "the mere presence of the factual issue of individual reliance could not render the claims unsuitable for class treatment").⁸⁵ That said, even where a common core of facts exists, "a fraud case may be unsuited for treatment as a class action if there was material variation in the representations made ***or in the kinds or degrees of reliance by the persons to whom they were addressed.***" Rule 23(b)(3), Advisory Notes to 1966 Amendment (emphasis added); *see also Clopton v. Budget Rent A Car Corp.*, 197 F.R.D. 502, 509 (N.D. Ala. 2000)

those fora, and how each plaintiff may have reacted to such information.

⁸⁵ *See also Klay*, 382 F.3d at 1258 (observing that "the simple fact that reliance is an element in a cause of action is not an absolute bar to class certification"); *but see Castano v. American Tobacco Co.*, 84 F.3d 734, 745 (5th Cir. 1996) ("a fraud cause of action cannot be certified when individual reliance will be an issue") (*citing Simon v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 482 F.2d 880, 882 (5th Cir. 1973)).

(RICO and fraud claims are not wholly subject to class-wide resolution because each plaintiff must demonstrate reliance); *Pipes v. American Sec. Ins. Co.*, 169 F.R.D. 382, 384 n.2 (N.D. Ala. 1996) (opining that individualized reliance issues almost always militate against class treatment of fraud claims). In sum, then, while fraud claims requiring individual proof of reliance are not *per se* barred from class certification, material differences in the representations made or the reliance of the addressee may render such claims unsuitable for class treatment. In such circumstances, the Eleventh Circuit has repeatedly found class certification inappropriate. *See Heffner*, 443 F.3d at 1344 (“In a variety of contexts, we have held that the reliance element of a class claim presents problems of individualized proof that preclude class certification.”).

Plaintiffs’ attempts to surmount the reliance problem are twofold. First, they emphasize that this is a case involving standardized misrepresentations, in that Ciba is alleged to have engaged in a stream of communications broadcasting essentially the same message to the public giving McIntosh residents a false sense of security. (Reply Brief, at 7.) This assertion does not help plaintiffs because the particular reliance problem that they confront is not that there was material variation in the alleged misrepresentations, but that (for reasons that will be amplified below) there unquestionably was material variation “in the kinds or degrees of reliance by the persons to whom they were addressed.” Advisory Notes to Rule 23(b)(3). Simply put, the existence of facts suggesting standardized representations by Ciba to minimize concerns by regulators and the public over alleged contamination does not obviate the reliance obstacle to (b)(3) certification if there were material differences in kinds or degrees of reliance by plaintiffs on such representations.

Second, plaintiffs’ fallback position is that they should be excused from proof of the reliance element altogether. At the Hearing, plaintiffs argued that they “cannot be expected to prove individual reliance on information that was falsified or omitted.” (Tr., at 232.) But reliance is a required element of their fraud-related claims. Reliance was specifically pleaded in their Third Amended Complaint. And reliance must be proven if plaintiffs are to prevail on the merits of those causes of action. Apparently, plaintiffs wish to prove reliance not on an individualized basis, but through a presumption that all class members relied to their detriment on Ciba’s alleged falsehoods and omissions concerning the existence and degree of contamination. The Eleventh Circuit forbids such presumed reliance in a non-securities context.

See Sikes, 281 F.3d at 1361 (concluding that district court erred in presuming reliance to certify Rule 23(b)(3) class for RICO claim predicated on mail and wire fraud); *Andrews v. American Tel. & Tel. Co.*, 95 F.3d 1014, 1024 (11th Cir. 1996) (citing Eleventh Circuit authority for proposition that “each plaintiff must demonstrate reliance on deceptive conduct in furtherance of the alleged RICO scheme”).

Plaintiffs seek to avert the devastating impact of *Sikes* and *Andrews* on their predominance argument concerning the reliance element by likening their claims to *Klay v. Humana, Inc.*, 382 F.3d 1241 (11th Cir. 2004), a case involving civil RICO and state-law claims arising from allegations that health care entities responsible for reimbursing physicians in HMOs had underpaid those physicians on those reimbursements. Underlying the civil RICO claim in *Klay* were defendants’ representations that they would reimburse the plaintiffs for medically necessary services provided to insureds, and defendants’ representations that they had paid the plaintiffs the proper amounts. *See id.* at 1259. The *Klay* court reasoned that “while each plaintiff must prove his own reliance in this case, we believe that, based on the nature of the misrepresentations at issue, the circumstantial evidence that can be used to show reliance is common to the whole class.” *Id.* In finding that individual proof of reliance might be established by common proof, *Klay* stressed that the misrepresentations were the focal point of the parties’ contractual arrangements, as they formed “the very consideration upon which those agreements are based,” they “go to the heart of these agreements,” and “doctors based their assent upon them.” *Id.* On that basis, the *Klay* facts were deemed distinguishable from “the type of ‘presumed’ reliance we invalidated in *Sikes*,” and the court found that individualized reliance issues did not predominate over common questions. *Id.*

Plaintiffs attempt to squeeze their reliance issue into the *Klay* paradigm to circumvent the “presumed reliance” line of authorities. But the misrepresentations at issue in this case bear no resemblance to those in *Klay*. The alleged misrepresentations in *Klay* went to fundamental assumptions at the core of the commercial transactions between plaintiffs and defendants. It is inconceivable that any physician would have entered into a reimbursement contract with a provider in the absence of reliance on promises that the provider would reimburse the physician the proper amounts owed. In this action, meanwhile, the alleged misrepresentations did not relate in any way to dealings between plaintiffs and Ciba, much less to any assumptions

underlying those dealings. Unlike in *Klay*, it cannot be inferred that no resident of McIntosh would have lived there if he did not rely on Ciba's misrepresentations to the EPA, to ADEM and to the public about the nature and extent of contamination caused by its operations. Many class members may never have been aware of those misrepresentations. Others may have heard Ciba's misrepresentations and disbelieved them. Still others may have acquired their property in the Proposed Class Area after the time period in which these misrepresentations were said to have occurred. For these reasons, the *Klay* analogy is decidedly ill-fitting, and this Court will not construe *Klay*'s reasoning so expansively as to eradicate *Sikes* and *Andrews*. The nature of the alleged misrepresentations in this case does not support an inference that plaintiffs may prove reliance via common evidence; rather, reliance will be a cumbersome plaintiff-specific inquiry.⁸⁶

In the final analysis, the Court is of the opinion that plaintiffs have failed to establish

⁸⁶ Plaintiffs insist that it “does not ‘strain credulity’ to conclude that each Plaintiff in this matter relied upon Defendants’ misrepresentations and assumed that their homes and properties were not being contaminated and that they should continue to rely on Defendants and do nothing.” (Reply Brief, at 9.) The Court cannot agree. Not only would it strain credulity to so conclude, but it would also ignore record evidence to do so. There is substantial evidence that at least certain putative class members formed or joined community activist organizations in the early to mid 1990s demanding that Ciba provide relief from alleged offsite remediation. For example, one putative class member, George Curtis, testified that in 1998, his organization submitted a written proposal to Ciba requesting relocation of McIntosh High School and some 300 families to a distance at least five miles away from the plant site to get them out of contaminated areas. (Exh. D-17, at 98.) That proposal also demanded compensation from Ciba for “any community member who has been in contact, whether direct or indirect, and has suffered from leaks and air contamination.” (*Id.* at 99.) A reporter wrote in 1998 that Curtis believed that Ciba’s chemicals “have seeped insidiously into a neighborhood, contributing to early deaths, killing azaleas and eating at metal roofs and fences.” (Exh. D-14.) These are not the words of a class member who is meekly taking Ciba’s word that his property is not contaminated. This evidence strongly suggests that Curtis and his advocacy group (at least some members of which are putative class members) placed no stock in Ciba’s representations that there was no risk to human health or the environment from its operations. Likewise, McIntyre’s testimony that he could smell the Ciba chemicals wafting over his property and see them falling on his land suggests that any reliance he might have placed in Ciba’s representations of no contamination would have been contrary to his own experience and therefore unreasonable. Faced with this tangible evidence of nonreliance or lack of reasonable reliance among certain plaintiffs, it would be counterfactual to adopt a *Klay*-type holding that common evidence of reliance suffices to prove that each individual plaintiff reasonably relied on the alleged misrepresentations.

with respect to their RICO and fraud-based claims that questions of law or fact common to the class predominate over questions affecting only individual members. Specifically, the Court finds that “[e]ven if it could be shown that the appellants were engaged in a scheme to defraud and made misrepresentations to further that scheme, the plaintiffs would still have to show, on an individual basis, that they relied on the misrepresentations, suffered injury as a result, and incurred a demonstrable amount of damages.” *Andrews*, 95 F.3d at 1025. These individualized issues of reliance, injury and damages will require extensive plaintiff-specific proof that will substantially outweigh the common proof. Because common issues do not predominate, certification of the fraud-related causes of action under Rule 23(b)(3) is unwarranted.⁸⁷

D. Bifurcation / Aggregate Damages Proposal.

Two final issues relating to the predominance analysis must be addressed briefly.

1. Proposed Bifurcation Pursuant to Rule 23(c)(4).

First, in their briefs and at the Hearing, plaintiffs ask the Court to “bifurcate liability and damages” pursuant to Rule 23(c)(4). (Plaintiffs’ Brief, at 24; Tr., at 37, 238.) To be sure, bifurcation has been applied by courts in certain cases. *See, e.g., Shetterly v. Raymark Industries*, 117 F.3d 776, 782 (4th Cir. 1997) (“In a complex tort case such as the one at bar, the district court has discretion to bifurcate the trial to ensure that the case is tried in an orderly fashion without confusion to the jury.”). Here, however, it is not at all clear what plaintiffs have in mind.⁸⁸ To the extent plaintiffs would ask the Court to simply sever the damages portion of the case from the liability portion and certify the latter, such a maneuver would not overcome the

⁸⁷ *See generally Blades*, 400 F.3d at 572-75 (concluding that even if there were common evidence of conspiracy in seed price-fixing case, district court did not err in finding that individualized issues predominated, where considerable individualized proof would be required to show fact of injury because of wide variation in list prices for seeds and individualized market conditions and where plaintiffs’ expert did not show that injury could be proven on a classwide basis with common proof).

⁸⁸ Plaintiffs have offered precious little detail as to how they envision the bifurcation process actually working in this case. During the Hearing, plaintiffs’ sole commentary concerning bifurcation involved the following conclusory statements: “So we have suggested that there be a bifurcation of liability [and] damages. The Court doesn’t have to do it that way, but I think it would be a very effective way of managing this litigation.” (Tr., at 37.)

Rule 23(b)(3) predominance problems because many of the individual-specific issues discussed above go to liability, not damages. To the extent that plaintiffs are asking the Court to bifurcate the issues of Ciba's conduct from all other issues, the result would be chaotic, inefficient and at odds with the principles animating bifurcation in the first place. Suppose one jury decides whether Ciba engaged in the alleged "core conduct" of allowing DDT and BHC to escape via airborne transportation and making misrepresentations about the nature and scope of pollution, while a second jury decides whether Ciba is liable to particular plaintiffs and, if so, in what amount. Such an approach would be terribly inefficient (or worse) because the second jury would invariably have to reexamine the common evidence of wrongdoing by Ciba to determine whether any of that wrongdoing aggrieved a particular plaintiff in a manner entitling him to damages.

If a district court is to bifurcate, it "must carve at the joint." *In re Rhone-Poulenc Rorer Inc.*, 51 F.3d 1293, 1303 (7th Cir. 1995); *see also Castano v. American Tobacco Co.*, 84 F.3d 734, 750 (5th Cir. 1996) ("The Seventh Amendment entitles parties to have fact issues decided by one jury, and prohibits a second jury from reexamining those facts and issues. Thus, [the] Constitution allows bifurcation of issues that are so separable that the second jury will not be called upon to reconsider findings of fact by the first."). Rather than carving at the joints of this litigation, plaintiffs' proposed bifurcation would artificially split hopelessly intertwined factual issues that are not severable, all in the interests of creating a "common evidence" proceeding that would ultimately not decide any plaintiff's claims for relief. In this setting, such a procedural maneuver will not further the purposes of efficient, orderly disposition of cases on which the Federal Rules of Civil Procedure are founded.

More fundamentally, courts have emphatically rejected attempts to use the (c)(4) process for certifying individual issues as a means for achieving an end run around the (b)(3) predominance requirement. As one court put it, "[p]laintiffs cannot read the predominance requirement out of (b)(3) by using (c)(4) to sever issues until the common issues predominate over the individual issues." *Arch v. American Tobacco Co.*, 175 F.R.D. 469, 496 (E.D. Pa. 1997); *see also Castano*, 84 F.3d at 745 n.21 ("Reading rule 23(c)(4) as allowing a court to sever issues until the remaining common issue predominates over the remaining individual issues would eviscerate the predominance requirement of rule 23(b)(3); the result would be automatic

certification in every case where there is a common issue, a result that could not have been intended.”). Rather, the proper interplay between Rules 23(b)(3) and 23(c)(4) is that a class action as a whole must satisfy the Rule 23(b)(3) predominance requirement. If, and only if, it does so, then Rule 23(c)(4) may apply as simply “a housekeeping rule that allows courts to sever the common issues for a class trial.” *Castano*, 84 F.3d at 745 n.21; *see also Rink v. Cheminova, Inc.*, 203 F.R.D. 648, 651 (M.D. Fla. 2001) (following *Castano*). Predominance cannot be manufactured through the nimble use of Rule 23(c)(4), yet that appears to be precisely what plaintiffs seek to accomplish here. Accordingly, the Court cannot accept their contention that shearing individual issues off the case until only common issues remain, and certifying a class for the remainder, is an appropriate or permissible means of compensating for a failure of the case as a whole to comport with Rule 23(b)(3) predominance principles. *See Allison v. Citgo Petroleum Corp.*, 151 F.3d 402, 422 n.17 (5th Cir. 1998) (cautioning that piecemeal certification of class actions distorts certification process and creates unfairness and uncertainty as to what is at stake in the litigation and whether the litigation will actually resolve the dispute).

2. *Proposed Submission of Aggregate Damages to Jury.*

Second, in their reply brief, plaintiffs urge the Court to adopt a trial plan under which the jury will compute only aggregate damages for the entire class area. (Reply Brief, at 4.)⁸⁹ In particular, plaintiffs encourage the Court to “ask[] the jury to determine the amount of diminution in property value to the entire class area. It’s a very straightforward, simplified, appropriate procedure. It works because it determines the defendants’ liability and damages to the entire class of plaintiffs, and then a special master can be used to allocate damages among the specific plaintiffs in the case.” (Tr., at 41.) Again, this procedure would not ameliorate the

⁸⁹ As a procedural matter, this argument is not properly raised because plaintiffs submitted it for the first time in their reply brief. *See Sweet v. Pfizer*, 232 F.R.D. 360, 364 n.7 (C.D. Cal. 2005) (“the moving party in a motion cannot submit new information as part of its Reply”). In *Sweet*, the district court declined to consider a trial plan submitted by plaintiffs for the first time as a new argument in a reply brief in support of class certification. *Id.* at 369. By dropping their *Cook v. Rockwell*-inspired trial plan on the Court and opposing counsel for the first time in their reply brief just two business days before the Hearing, plaintiffs ensured that opposing counsel would not have a fair opportunity to study or respond to this newly raised issue, which could have been presented in their principal brief.

undersigned's Rule 23(b)(3) concerns because the individual-specific considerations are not confined to damages, but rather embrace numerous basic liability issues as well. In any event, the Court fails to see how taking the issue of individual damages away from the jury and requiring some other fact-finder to make the decisions of how to allocate classwide damages would streamline this litigation. For starters, any aggregate damages figure that a jury might construct for the entire class area would be notoriously unreliable and speculative because it would strip out the parcel-by-parcel factors on which any such calculation must necessarily rest. Even setting aside that issue, diverting individual damages issues to a special master would not eliminate the "mini-trials" problem on the question of damages, but would merely shift the arbiter of those "mini-trials" from a jury to a special master. Simply put, the aggregate damages suggestion propounded by plaintiffs has been presented in far too skeletal and cursory a form to appear workable, and would not in any event be sufficient to enable plaintiffs to satisfy the predominance requirement for Rule 23(b)(3) certification.

VIII. Conclusion.

For all of the foregoing reasons, it is hereby **ordered** as follows:

1. Defendants' Motion to Re-Urge Motions to Strike or Exclude Experts Farber and McFaddin (doc. 364) is **granted in part**, and **denied in part**. The Motion is **granted** as to the McFaddin report, and Exhibit P-75 is hereby **stricken** and **excluded** from consideration for purposes of the instant Motion for Class Certification. The Motion is **denied** in all other respects.
2. Defendants' Motion in Limine to Preclude Evidence of Newly Disclosed Sampling Data (doc. 365) is **granted** pursuant to Rule 37(c)(1), Fed.R.Civ.P., and the five dust sample results reported on April 21, 2006 will be **excluded** from the evidence considered by the Court in ruling on Rule 23 issues.
3. The Motion to Strike Affidavit of Dr. Philip Bedient (doc. 366) is **granted**, and Exhibit P-169 is **stricken**.
4. Exhibit P-63 and the references to same in plaintiffs' brief (doc. 300) are **stricken** as irrelevant and scandalous pursuant to the Order dated March 28, 2005.
5. Plaintiffs' post-hearing Notice of Filing Corrected Exhibits (doc. 373) and all

attachments to same are **stricken** as an improper attempt to supplement or revise the Rule 23 record without leave of court.

6. Plaintiffs' Motion for Class Certification (doc. 330) is **denied** for the following reasons: (i) the named plaintiffs have failed to show that they have standing and are part of the class for which certification is sought; (ii) plaintiff McIntyre's claims as the sole class representative satisfy neither the typicality nor the adequacy of representation requirements of Rule 23(a)(3) and (4); (iii) the Proposed Class Area is not adequately defined and clearly ascertainable; and (iv) plaintiffs have failed to show that questions of law or fact common to members of the class predominate over questions affecting only individual members, as is necessary for certification to be proper under Rule 23(b)(3).

DONE and ORDERED this 13th day of July, 2006.

s/ WILLIAM H. STEELE
UNITED STATES DISTRICT JUDGE