UNITED STATES DISTRICT COURT EASTERN DISTRICT OF KENTUCKY SOUTHERN DIVISION PIKEVILLE

SUSAN BARNETTE, et al.,)	
Plaintiffs,))	Civil No. 10-77-ART
V.)	
GRIZZLY PROCESSING, LLC, et al.,))	MEMORANDUM OPINION & ORDER
Defendants.)	
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"I am afraid that I rather give myself away when I explain," said Sherlock Holmes to his companion. "Results without causes are much more impressive." Despite this motto, whenever Watson invariably pushed him for an explanation, Holmes would confess his methodology, identifying each premise, assumption, and inference that led to his conclusion. Similarly, an expert must be able to identify his methodology and its underlying premises and assumptions. If he fails to do so, he may not testify in court. Here, Jack Sparado's methodology fails to meet the requisite standard. Thus, the Court must grant Grizzly Processing and Frasure Creek's *Daubert* motions.

BACKGROUND

The Plaintiffs in this case all live near a coal screening plant in Banner, Kentucky (the "Banner Plant"). The Plaintiffs claim that, starting in 2006, coal dust and noise from the Banner Plant began to interfere with their ability to use and enjoy their residences. R. 17 at 7. So the Plaintiffs sued the two companies that have operated the Banner Plant since the

¹ Sir Arthur Conan Doyle, *The Stockbroker's Clerk*, in The Memoirs of Sherlock Holmes 363 (1893).

problems allegedly began: Grizzly Processing, LLC, which operated the plant from April 2007 to April 2008, and Frasure Creek Mining, LLC, which has operated the plant since April 2008. *Id.* After two rounds of summary judgment, R. 153 (order partly granting and partly denying summary judgment); R. 165 (order partly granting and partly denying the defendants' motion to amend the Court's summary judgment order), the Plaintiffs were left standing with assault and battery claims for nominal damages, trespass claims, and nuisance claims, *accord* Bellwether Information Chart, R. 168-1.

This suit was not the first one filed against Grizzly and Frasure Creek by residents living near the Banner Plant. In 2007, another set of plaintiffs sued both of these defendants in a companion case in Kentucky state court, *Crisp v. Grizzly Processing, LLC & Frasure Creek Mining, LLC*, No. 07-CI-1384 (Floyd Cir. Ct. 2007). Counsel for both the *Crisp* and *Barnette* Plaintiffs retained Jack Spadaro as an expert witness. R. 170-2 at 4 (Dep. at 15–16). Although Spadaro's expert testimony was not needed for the *Crisp* litigation because the parties settled, R. 63-6, the *Barnette* Plaintiffs are headed to trial and intend to offer Spadaro as an expert.

A longtime resident of the world of coal mining and regulation, Spadaro began his career in 1966 as a mining engineer at the U.S. Bureau of Mines (the predecessor to the Mine Safety & Health Administration, or "MSHA") and at a private company in West Virginia. R. 170-2 at 2 (Dep. at 5–6). After teaching mine design and coal preparation at West Virginia University as a professor and research engineer, Spadaro worked in mine safety inspection and regulation for various state governments in Appalachia. R. 170-2 at 2 (Dep. at 6–7). He continued his governmental work at the federal level and began the first of his nearly forty testimonies as an expert witness in 1982. R. 170-2 at 2 (Dep. at 7–8). In 1996,

Spadaro eventually returned to the MSHA as the deputy director of its National Mine Health & Safety Academy and became its director two years later. R. 170-2 at 2 (Dep. at 8). In this capacity, he oversaw and ran the "principal training facility for all federal [MSHA] inspectors." *Crisp* Disclosures, R. 146-2 at 6 (Spadaro's Resume at 1). Since resigning in 2004, he has served as a "consultant and expert witness" in cases throughout the country. R. 170-2 at 3 (Dep. at 9).

In this case, Spadaro intends to testify that Grizzly and Frasure Creek were violating the law "everyday [sic] that they operated for two years" and therefore their fourteen citations represent an "underassessment" of their actual violations from 2006 to 2008.² R. 173 at 12. In coming to this conclusion, the "primary thing" that Spadaro reviewed was the Banner Plant's history of citations. R. 164-5 at 15 (Dep. at 25). He also reviewed the applicable federal and state regulations, the statements of the Kentucky regulator who issued some of the Banner Plant's citations, and the statements of a former Frasure Creek utility worker, Lloyd Lane, about his observations of the Plant while working there. R. 164-5 at 29 (Dep. at 78). Spadaro made only one visit to the area surrounding the Banner Plant on October 27, 2009, and never inspected the Plant's operations. R. 170-2 at 19 (Dep. at 74–75). During this surprise visit to the Plant, he observed several violations unrelated to the Plaintiffs' claims, but did not see any dust emanating from the Plant and escaping from its property—otherwise known as "fugitive dust." R. 170-2 at 20 (Dep. at 77).

Spadaro's proposed opinion prompted Grizzly and Frasure Creek to file motions in limine to exclude Spadaro as an expert witness. R. 169; R. 170. At the November 2, 2011,

² Although Spadaro initially offered seven distinct expert opinions for this case, the Plaintiffs have voluntarily withdrawn all but the one at issue herein. R. 173 at 10.

these motions. In light of that agreement plus Spadaro's multiple depositions on this subject, R. 173-1 (Nov. 4, 2009), R. 170-2 (Oct. 6, 2011), and the full panoply of briefing before the Court, there is more than an "adequate basis" from which to resolve the motions in limine without a *Daubert* hearing. *Nelson v. Tenn. Gas Pipeline Co.*, 243 F.3d 244, 249 (6th Cir. 2001) (citing *Greenwell v. Boatwright*, 184 F.3d 492, 498 (6th Cir. 1999)) (holding that whether to hold a *Daubert* hearing is within a district court's discretion, at least where the issue is "fully briefed" and there is an "adequate basis" in the record "from which to determine the reliability and validity" of the expert testimony). Therefore, these motions are now ripe for decision.

DISCUSSION

There is no question that Sparado's resume sparkles. But a glittery resume and an impressive career do not necessarily open the door to federal court. Rather, courts must ensure that an expert's opinion is reliable. To do so, courts turn to Federal Rule of Evidence 702. Under Rule 702, a court should only admit relevant expert testimony if "(1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case." Fed. R. Evid. 702.

Grizzly and Frasure Creek claim, among other things, that Spadaro's opinion is unreliable because his methodology "falls far short" of what is required in the field. R. 179 at 5. In the face of such a challenge, the Court must perform its "gatekeeping" function and ensure that the expert's testimony "rests on a reliable foundation." *Conwood Co. v. U.S. Tobacco Co.*, 290 F.3d 768, 792 (6th Cir. 2002) (internal citation and quotation marks

omitted). In the case of scientific expert testimony, courts often look to whether the methodology (1) has been tested and subjected to peer review, (2) has a known error rate, and (3) is generally accepted. *Id.* at 792 (citations omitted). And as the parties offering the expert testimony, the Plaintiffs have the burden of showing, by a preponderance of the evidence, that Spadaro's testimony is admissible. *Daubert*, 509 U.S. at 592 n.10. They have fallen short.

1. Spadaro has not relied on "sufficient facts or data" in forming his opinion.

First, Sparado's opinion is not based on "sufficient facts or data." Sparado's conclusion of under-assessment is based primarily on Layne's testimony. Layne told Spadaro that there were "daily problems with dust escaping the coal processing area and going into the surrounding communities." R. 173-1 at 12 (Dep. at 78). From Layne's observations, Sparado concludes that violations should have been issued "everyday [sic] that they operated for two years." *Id*.

But, how does Spadaro get from Point A to Point B? Did he analyze the Plant's operations like state regulators would so he could opine on whether a violation occurred? No. The Plaintiffs admit that the data Spadaro has reviewed is not what state and federal mining regulators typically rely on in determining whether a violation has occurred. R. 173 at 19 (stating that Spadaro's approach is "not necessarily the traditional one that state and federal regulators use in their jobs"); *see also Kuhmo Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 152 (1999) (holding that, when determining the reliability of an expert, courts should look to whether the expert employs the same "rigor" as an "expert in the relevant field"). Indeed, Spadaro explains that the process used to determine whether there is a violation requires a regulator to "do an investigation" and conduct a "visual inspection" of the plant's

"entire operations." R. 169-5 at 47 (Dep. at 91). So did Sparado ever conduct regular visual inspections of the Plant over those two years to justify his findings? No. Did he perform even a few inspections of the Plant's operations and explain how he extrapolated long-term, daily violations from those inspections? No. Spadaro has not inspected the Banner Plant's operations at all, let alone during the two years in which he claims that violations occurred every day. R. 170-2 at 23 (Dep. at 91). Instead, he merely parrots Layne's conclusion and adds the labels "underassessment" and "violation" to it.

Furthermore, Spadaro does not translate any of Layne's observations into specific violations that relate to fugitive dust emissions. Without any explicit chain of reasoning, Layne's sporadic observations are a speculative foundation on which to build a conclusion of two years' worth of daily fugitive dust violations. To be sure, it is true that other witnesses, such as Michael Varnadore, intend to testify about their observations of fugitive dust from the Banner Plant. R. 173 at 13–14. But Spadaro never reviewed Varnadore's or any other witnesses' testimony—besides that of Lloyd Layne and Steve Hall—in forming his opinion. *See* R. 164-5 at 29 (Spadaro Dep. at 78).

Ultimately, the Plaintiffs do not explain why Spadaro's dataset, which would not be enough for a regulator to conclude that there was a violation, is nonetheless sufficient for testifying in a courtroom. A trial is "not the place for scientific guesswork, even of the inspired sort." *Tamraz*, 620 F.3d at 671 (quoting *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 319 (7th Cir. 1996)). "[N]o matter how good' experts' 'credentials' may be, they are 'not permitted to speculate." *Id.* (quoting *Goebel v. Denver & Rio Grande W. R.R. Co.*, 215 F.3d 1083, 1088 (10th Cir. 2000)).

2. Spadaro's opinion is not based on a reliable methodology.

Second, Spadaro's leap from data to theory does not represent a reliable methodology. The Plaintiffs explain that Spadaro reached his conclusion by applying his "research of the evidence and his experience and knowledge of preparation [coal] plant operations." R. 173 at 11. But Spadaro's primary source of data for his conclusion—the Banner Plant's citation history—and state regulator Steve Hall's testimony about the citations are about violations for which the Banner Plant was actually cited. And his own visit to the Banner Plant did not reveal any violations related to the fugitive dust underlying the Plaintiffs' claims. R. 170-2 at 21 (Dep. at 83). Spadaro does not explain how he infers two years' worth of daily violations from the fourteen citations the Banner Plant received, most of which were not related to fugitive dust. See generally Compendium of Citations, R. 169-9.

Nor do Layne's specific observations transform Spadaro's methodology into anything more than speculation. The Kentucky Fugitive Emissions Regulation makes it a violation for a person to "cause or permit the discharge of visible fugitive dust beyond the lot line of the property on which the emissions originate." 401 Ky. Admin. Regs. 63:010 § 3(2) (2011). Layne's observations of dust, however, fall into two limited categories: (1) dust he observed while working within the Plant's property and thus not beyond the "lot line," *see, e.g.*, R. 180-5 at 14 (Dep. at 52–53) (describing that the dust was "so heavy" "on the plant property" that "you couldn't see a truck" that was being loaded); R. 180-5 at 14 (Dep. at 54) (describing the dust as "so heavy that you . . . would have to stop if you were [working] on a piece of equipment" within the Banner Plant), and (2) settled dust that he observed in the town of Allen, *see, e.g.*, R. 180-5 at 3–4 (Dep. at 8–12) (describing settled dust on cars, houses, and other property through the community). None of Layne's observations establish

that dust originated from the Banner Plant and crossed the lot line into the community. And Spadaro does not explain how he infers that the dust Layne observed within the Banner Plant actually crossed the lot line or that the settled dust Layne observed in the community originated from the Banner Plant in violation of the Fugitive Dust Regulation—let alone that such an occurrence happened every day for two years. *Cf.* Steve Hall Dep., R. 173-3 at 4–5 (Dep. at 9–10) (testifying that, to violate the Fugitive Dust Regulation, the dust must migrate from a mining site by "leav[ing] a croppy white line" around the mining site).

It is true, as the Plaintiffs indicate, that an expert is permitted to "tie observations to conclusion through the use of . . . generalized truths" that he has learned through his specialized experience. Kumho Tire, 526 U.S. at 152-53; see also Fed. R. Evid. 702 advisory committee's note (2000) ("In certain fields, experience is the predominant, if not sole, basis for a great deal of reliable expert testimony."). But here, Spadaro neither identifies what generalized truths serve as his unstated premises nor explains what inferences he draws from those generalized truths based on the circumstances of this case. In short, he does not explain why the data he has reviewed leads him to suspect that Grizzly and Frasure Creek committed other violations related to fugitive dust. Indeed, if an expert like Spadaro relies "solely or primarily on experience, then the witness must explain how that experience leads to the conclusion reached . . . and how that experience is reliably applied to the facts." Thomas v. City of Chattanooga, 398 F.3d 426, 432 (6th Cir. 2005) (quoting Fed. R. Evid. 702 advisory committee's note). For example, the Sixth Circuit has held that, even when an expert identifies the generalizations and inferences on which he bases his opinion, a district court abuses its discretion by admitting the testimony when those generalizations and inferences are too speculative and attenuated to support his conclusion. Tamraz, 620 F.3d at 671 (holding that a doctor's conclusion that manganese exposure caused the plaintiff's Parkinson's Disease was inadmissible because the doctor's differential etiology did not reliably show how he ruled in or ruled out various causes of the disease). In this case, Spadaro has not even done that.

Spadaro's conclusion might be a "plausible hypothesis" and "[i]t may even be right." *Id.* at 670. But its accuracy is irrelevant to its admissibility. *Id.* (citing *Daubert*, 509 U.S. at 595) ("The important thing is not that experts reach the right conclusion, but that they reach it via a sound methodology."). Here, the Plaintiffs simply cannot shoulder their burden of closing the "analytical gap between the data and the opinion proffered." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

Imagine that the Court permitted Spadaro to testify. How are Grizzly and Frasure Creek supposed to test Spadaro's methodology? For example, had he observed the dust in the plant, performed some sort of scientific test on the dust in the community, and then explained how they were the same—and thus there was a violation—there would be a way to test his methodology. Indeed, had he simply explained the steps he took to go from Point A to Point B, there might be a way to test his methodology. Here, he has done neither. Rather, Sparado is not using a methodology at all; he is simply saying that if there was dust in the plant and dust in the community, there must have been a violation every day. This is not a methodology. It does not explain why the dust could not have come from elsewhere. It does not explain the magnitude of the violations. Given his lack of methodology, there is no reasonable way for Grizzly and Frasure Creek to test the strength of Spadaro's opinion by cross-examination. Accord Greenwell, 184 F.3d at 502 ("Judges after Turpin, Daubert, Kumho Tire, and Smelser may no longer indulge in this assumption that an expert's

conclusions and reasoning can all be corrected by cross-examination as in the past."). Therefore, permitting Spadaro to testify would circumvent "vigorous cross-examination" and the "presentation of contrary evidence"—the availability of which the *Daubert* Court heavily relied upon in setting out its more "flexible" test for admitting expert testimony. *United States v. Bonds*, 12 F.3d 540, 565 (6th Cir. 1993) (quoting *Daubert*, 509 U.S. at 594, 596).

3. Grizzly and Frasure Creek's Other Arguments

Grizzly and Frasure Creek also argue that Spadaro's opinion is irrelevant because it would not be helpful to the jury, R. 179 at 2, and that he is so biased that "he is incapable of forming an objective opinion in a case involving a coal company," R. 169-1 at 1. Because the Court agrees that Spadaro's opinion is based on insufficient data and an unreliable methodology, the Court does not need to reach these additional arguments.

CONCLUSION

This Court's exclusion of Spadaro's testimony should not be taken as a criticism of Mr. Spadaro. His credentials amply show that he is "intelligent and knowledgeable about the subject matter—immeasurably more so than [this Court]." *Tamraz*, 620 F.3d at 677. But this Court must nonetheless determine whether his testimony is "genuinely scientific, as distinct from being . . . speculation offered by a genuine scientist." *Id.* (quoting *Rosen*, 78 F.3d at 318). In this case, it is the latter.

Accordingly, it is **ORDERED** that the defendants' motions in limine, R. 169 and 170, are **GRANTED**.

This the 31st day of January, 2012.

