

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF KENTUCKY
CENTRAL DIVISION
(at Lexington)

KENTUCKY WATERWAYS)	
ALLIANCE, et al.,)	
)	
Plaintiffs,)	Civil Action No. 5: 17-292-DCR
)	
V.)	
)	
KENTUCKY UTILITIES CO.,)	MEMORANDUM OPINION
)	AND ORDER
Defendant.)	

*** **

Herrington Lake has spanned parts of Boyle, Mercer, and Garrard Counties since 1925, when the Kentucky Utilities Company (“KU”) built the Dix Dam for hydroelectric power generation. *Lakes*, THE KENTUCKY ENCYCLOPEDIA 532 (John E. Kleber ed., 1992). At the northern end of the lake, next to Dix Dam, sits the E.W Brown Generating Station, a coal-fired power plant, and the ponds used to dispose of the coal ash it generates. Plaintiffs Kentucky Waterways Alliance (“KWA”) and the Sierra Club allege that groundwater discharges from the coal ash ponds at E.W. Brown threaten imminent and substantial environmental harm to Herrington Lake. Defendant KU disputes their account, pointing to ongoing remediation efforts and a lack of reliable evidence of environmental harm.

The following four motions are currently pending for resolution: (1) KWA and the Sierra Club’s motion for partial summary judgment, which seeks to establish their standing to sue [Record No. 87]; (2) KU’s motion to exclude the expert opinions of Dr. A Dennis Lemly [Record No. 84]; (3) KU’s motion to exclude the expert opinions of Dr. David M. Janz [Record

No. 85]; and (4) KU's motion for summary judgement [Record No. 86]. For the reasons explained below, both summary judgment motions will be granted. Further, the motion to exclude Janz's testimony will be granted, while the motion to exclude Lemly's testimony will be granted, in part.

I.

A. Factual Background

KU owns and operates the E.W. Brown Generating Station, located near Herrington Lake. [Record No. 16-1] E.W. Brown is a coal-fired power plant and it relies on the 2,400-acre Herrington Lake for water to support its power generation. [*Id.*] In addition to providing water to KU, Herrington Lake serves a recreational purpose. People reside along and visit its shores, and several species of fish—including bluegill, largemouth bass, catfish, and crappie, among others—live within its waters. [Record No. 16-16, p. 22] Fishing, boating, and swimming are among the activities enjoyed at Herrington Lake. [Record Nos. 87-10; 87-13]

KWA and the Sierra Club allege that E.W. Brown threatens environmental harm in portions of Herrington Lake. As the plant generates power, it also generates ash—known as coal combustion residuals (“CCRs”)—during the coal burning process. [Record No. 16-16, p. 9] Two kinds of CCRs are produced by the plant: fly ash (lightweight ash not implicated in this matter) and bottom ash (larger coal ash particles that collects at the bottom of furnaces). [*Id.*] The ash must be removed and disposed of to make room for new coal in a furnace. [*Id.* at 9-10] The disposal of that ash is at issue in this case.

KU disposes of the ash using a sluice system. The process combines the ash with water and transports the mixture to an ash pond, where it sinks. From the 1950s until 2008, KU

directed the ash to the Main Ash Pond. [Record No. 16-16, p. 9–10] It covers 114 acres and contains an estimated six million cubic yards of coal ash. [Record No. 1, ¶ 40] KU also uses the 29.9 acre Auxiliary Ash Pond for this purpose. [*Id.*] The Main Ash Pond is now closed, and the Auxiliary Ash Pond is in the process of being closed. [Record Nos. 16-2; 16-19] Coal ash is also stored in a landfill which was constructed in 2016 on top of the Main Ash Pond. [Record No. 16-16, p. 10]

Finally, KU discharges wastewater directly into the lake.¹ Curds Inlet—adjacent to E.W. Brown—is the destination for this wastewater. Kentucky Pollution Discharge Elimination System (“KPDES”) permits allow wastewater to be discharged directly into Curds Inlet in limited amounts using Outfall 001. [Record No. 16-7] Per Cabinet reports, an average of 5.14 million gallons of wastewater per day flowed from Outfall 001 in October 2019. [Record No. 84-9, at 5] It was eliminated on November 1, 2019. [Record No. 86, p. 11]

Both Kentucky and the U.S. Environmental Protection Agency set regulatory standards for discharges from the ash ponds, particularly regarding any selenium impacts. [*See* Record Nos. 86-3 (2016 EPA Criterion); 86-4 (2013 Kentucky Water Quality Standards).] And when a May 2016 test of fish tissue “identified concentrations of selenium above Kentucky’s recently approved selenium water quality standard for protection of aquatic life from chronic impacts,” the Kentucky Energy and Environment Cabinet (“the Cabinet”) took regulatory action. [Record No. 16-15, ¶ 8] After issuing a notice of violation of regulatory standards to KU, the Cabinet entered into an Agreed Order with KU in January 2017. [*Id.* at ¶¶ 11–12]

¹ Because they are regulated by permit, these discharges are not solid waste pursuant to RCRA. 42 U.S.C. § 6903(27). Thus, while relevant to this proceeding, they are outside the scope of KU’s potential liability.

Specifically, KU agreed to: (1) continue implementing a previously agreed-upon groundwater assessment plan and Main Ash Pond closure plan; (2) continue operating approved remedial measures; (3) produce a corrective action plan regarding assessing health and ecological risks, assessing the sources of selenium impacts, and considering remedial actions; and (4) produce a corrective action plan for closure of the Auxiliary Pond. [*Id.* at ¶¶ 13–15] KU also paid a civil penalty of \$25,000 for the alleged violations. [*Id.* at ¶ 22] KU and its consultant Ramboll have since taken several additional steps.

Corrective Action Plan I (August 2017). KU’s first corrective action plan proposed an assessment of selenium sources, a human health risk assessment, an ecological risk assessment, and evaluation and implementation of additional remedial actions. [Record No. 16-16] The proposals were intended to lead to future remediation efforts. [Record No. 16-20] The Cabinet approved KU’s first plan in March 2018. [Record No. 86-6]

Corrective Action Plan II (June 2017). The second plan was submitted in June 2017. [Record No. 16-19] It proposed closing the Auxiliary Pond, eliminating Outfall 001, working to meet EPA effluent limitation guidelines, and implementing controls for water quality standard compliance. [*Id.*]

Phase I Findings & Phase II Plan (April 2018). Around 200 fish samples were collected from October to December 2017 during Phase I. [Record No. 86-7, p. 4] Ramboll concluded that fish tissue concentrations were below Kentucky’s whole-body criterion and EPA’s ovary criterion. [*Id.* at 5] It further proposed efforts “to fill data gaps identified” in Phase I sampling during Phase II and to address deformities identified in Dr. A. Dennis Lemly’s study (discussed in further detail below). [*Id.* at 6] Those sampling efforts would

focus on Curds Inlet and areas nearby E.W. Brown. [*Id.*] The Cabinet conditionally approved the Phase II plan in June 2018.² [Record No. 86-8]

Phase II Results & Report (June 2019). Phase II's results were presented to the Cabinet in January 2019. [Record No. 86-10] Ramboll evaluated 11 composite samples from 30 adult fish for whole-body selenium concentrations, 12 composite samples from 700 young-of-the-year bluegill for whole-body selenium concentrations, and assessed around 3,600 young-of-the-year fish for deformities. [Record No. 86-9] All adult samples again showed whole-body selenium concentrations below regulatory criteria. [*Id.* at 8] Additionally, Ramboll observed a deformity rate of 0.97%. [*Id.* at 13] Ramboll's report on the Phase II results is pending approval by the Cabinet.

KWA and the Sierra Club allege that these efforts are insufficient. They contend that discharge locations beneath the waterline of Herrington Lake continue to pollute its waters. [Record No. 89-1] Additionally, they assert that KU has failed to investigate the area to determine whether undiscovered discharges occur beneath the waterline. [Record No. 89, p. 4] Expert evidence from Dr. Ralph Ewers concluded that these underwater discharges are likely occurring and are capable of detection, if additional studies are conducted. [*See* Record Nos. 89-1; 89-4; 89-5; 89-6; 87-4.] In their view, the regulatory actions have failed to address these discharges and clean up existing pollutants.

² The Cabinet also conducted its own adult fish sampling in July 2018. It found no fish above regulatory criteria. [Record No. 85-4, pp. 57–98]

B. Procedural Background

After providing the required notice to regulatory agencies, Plaintiffs KWA and the Sierra Club filed their Complaint on July 12, 2017, seeking declaratory and injunctive relief. [Record No. 1] They allege that “toxic constituents of CCR have contaminated groundwater, surface water, and underlying sediments in the vicinity of the plant, including in Herrington Lake and nearby streams.” [*Id.* at ¶ 3] And they further argue that KU’s waste disposal “may present an imminent and substantial endangerment to human health and the environment,” giving rise to liability under the Resource Conservation and Recovery Act (“RCRA”).³ [*Id.* at ¶¶ 79-85] The plaintiffs seek a declaration that KU is in violation of RCRA and an injunction “ordering that KU take all actions necessary to eliminate the endangerment to health and the environment” near E.W. Brown. [*Id.* at pp. 21–22]

This Court dismissed KWA and the Sierra Club’s claims on jurisdictional grounds in December 2017. [Record No. 31] However, that determination was reversed in part by the United States Court of Appeals for the Sixth Circuit in 2018. *Ky. Waterways All. v. Ky. Utils. Co.*, 905 F.3d 925, 938–40 (6th Cir. 2018). On remand, and following nearly twenty months of discovery, the parties have filed motions to exclude and motions for summary judgment. [Record Nos. 84–87]

II.

A court “shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed.

³ Plaintiffs also brought claims under the Clean Water Act [Record No. 1, ¶¶ 70–78], which were dismissed. *See Ky. Waterways Alliance v. Ky. Utils. Co.*, 303 F. Supp. 3d 530, 541–45 (E.D. Ky. 2017), *aff’d in part*, 905 F.3d 925, 932–38 (6th Cir. 2018).

R. Civ. P. 56(a); *see also Celotex Corp. v. Catrett*, 477 U.S. 317, 322–23 (1986); *FTC v. E.M.A. Nationwide, Inc.*, 767 F.3d 611, 629 (6th Cir. 2014). A genuine dispute over issues of material fact exists when “there is sufficient evidence favoring the nonmoving party for a jury to return a verdict for that party.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249 (1986). The key question is “whether the evidence presents a sufficient disagreement to require submission to a jury or whether it is so one-sided that one party must prevail as a matter of law.” *Id.* at 251–52; *see also Harrison v. Ash*, 539 F.3d 510, 516 (6th Cir. 2008).

The party moving for summary judgment bears the burden of demonstrating that no genuine issue of material fact exists. *Chao v. Hall Holding Co.*, 285 F.3d 415, 424 (6th Cir. 2002) (citing *Celotex Corp.*, 477 U.S. at 323). If that burden is met, the nonmoving party must then present sufficient evidence from which a jury could find for it. *Harrison*, 529 F.3d at 516 (citing *Anderson*, 477 U.S. at 252). In doing so, the nonmoving party “must do more than simply show there is some metaphysical doubt as to the material facts.” *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986).

The above standards apply to both pending motions for summary judgment. While KU seeks summary judgment on the merits, KWA and the Sierra Club request a ruling that they have met Article III’s standing requirements. Presented with both a jurisdictional and a merits determination, caselaw requires that the Court apply a different standard to each motion.

In general, at summary judgment the Court views all facts and inferences drawn from the evidence “in the light most favorable to the nonmoving party.” *Black v. Pension Ben. Guar. Corp.*, 983 F.3d 858, 862 (6th Cir. 2020) (citing *Morehouse v. Steak N Shake*, 938 F.3d 814, 818 (6th Cir. 2019)). And parties “may object that the material cited to support or dispute

a fact cannot be presented in a form that would be admissible in evidence.” Fed. R. Civ. P. 56(c)(2). KU did so here in its motions to exclude expert testimony, so the evidence considered in ruling on its motion for summary judgment will consist only of what remains *after* evidentiary issues are sorted out. *Cf. Jahn v. Equine Servs., PSC*, 233 F.3d 382, 387 (6th Cir. 2000) (“Summary judgment is, of course, closely linked with the *Daubert* analysis, although it might conceivably be available even with a different *Daubert* outcome.”).

On the other hand, the standards applicable to the Plaintiffs’ motion for partial summary judgment are supplemented by a different set of caselaw. Plaintiffs asserting standing at this stage of litigation “must set forth by affidavit or other evidence specific facts, which for purposes of the summary judgment motion will be taken to be true.” *Sierra Club v. U.S. EPA*, 793 F.3d 656, 662 (6th Cir. 2015) (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561 (1992)). Accordingly, the Court will first apply this standard in conducting its threshold inquiry of standing. It will then address KU’s motions to exclude, followed by its motion for summary judgment.

III.

Article III of the United States Constitution vests federal courts with “[t]he judicial power of the United States,” but limits its extension to “cases” and “controversies.” U.S. CONST. art. III, §§ 1–2; *see also Simon v. E. Ky. Welfare Rights Org.*, 426 U.S. 26, 37 (1976) (“No principle is more fundamental to the judiciary’s proper role in our system of government than the constitutional limitation of federal-court jurisdiction to actual cases or controversies.”). The doctrine of standing “is part of this limitation.” *Simon*, 426 U.S. at 37.

As such, it “is the threshold question in every federal case.” *Warth v. Seldin*, 422 U.S. 490, 498 (1975).

KWA and the Sierra Club sued here on behalf of their members, and they assert representational (also called “associational”) standing. [Record No. 87-1] An organization demonstrates that representational standing exists when: (1) “its members would otherwise have standing to sue in their own right,” (2) “the interests at stake are germane to the organization’s purpose,” and (3) “neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.” *Friends of the Earth, Inc. v. Laidlaw Evtl. Servs. (TOC), Inc.*, 528 U.S. 167, 181 (2009) (citing *Hunt v. Wash. State Apple Advert. Comm’n*, 432 U.S. 333, 343 (1977)). Only the first requirement (i.e., that KWA and the Sierra Club’s members have standing in their own right) is disputed here. [Record No. 93]

A second three-part test governs whether an organization’s members have standing to sue in their own right:

First, the 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. Second, there must be a causal connection between the injury and the conduct complained of—the injury has to be fairly traceable to the challenged action of the defendant, and not the result of the independent action of some third party not before the court. Third, it must be likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.

Lujan, 504 U.S. at 560–61 (cleaned up). As the parties “invoking federal jurisdiction,” KWA and the Sierra Club bear the burden of proving these elements. *Lujan*, 504 U.S. at 561. And as noted above, they must do so by “set[ting] forth by affidavit or other evidence specific facts, which for purposes of the summary judgment motion will be taken to be true.” *Sierra Club*, 793 F.3d at 662 (quoting *Lujan*, 504 U.S. at 561).

Courts assessing standing may not “raise the standing hurdle higher than the necessary showing for success on the merits in an action.” *Laidlaw*, 528 U.S. at 181. While *Laidlaw* arose under the citizen suit provision of the Clean Water Act, its general rules apply with equal force to citizen suits arising under RCRA. *See, e.g., Interfaith Cmty. Org. v. Honeywell Int’l, Inc.*, 399 F.3d 248, 255–57 (3d Cir. 2005); *Little Hocking Water Ass’n v. E.I. du Pont de Nemours & Co.*, 91 F. Supp. 3d 940, 955 (S.D. Ohio 2015) (collecting cases).

The parties’ main dispute on this issue is whether members of KWA and the Sierra Club have demonstrated injury-in-fact. In *Laidlaw*, the Supreme Court held that “environmental plaintiffs adequately allege injury in fact when they aver that they use the affected area and are persons ‘for whom the aesthetic and recreational values of the area will be lessened’ by the challenged activity.” 528 U.S. at 183 (quoting *Sierra Club v. Morton*, 405 U.S. 727, 735 (1972)). There, evidence from six individuals—members of a plaintiff association—satisfied this standard. *Id.* at 181–183. Those averments came from individuals who lived near the facility at issue in the suit, recreated in the allegedly affected areas, or chose not to recreate in the area (despite a desire to do so) due to the alleged Clean Water Act violations. *Id.*

KWA and the Sierra Club have established injury-in-fact under this standard. They offer sworn testimony from two members: Dalphna Donnelly and Richard Dirksen. Donnelly and her husband own a cabin on Herrington Lake. [Record No. 87-10, ¶ 3] She particularly enjoys swimming in the lake. [*Id.* at ¶¶ 13–14] Donnelly and her guests also often take their pontoon boat to other parts of the lake to swim and enjoy the lake. [*Id.* at ¶ 15] But she avoids the areas near E.W. Brown “because of the polluted water that discharges from the plant there.”

[*Id.* at ¶ 18] In addition to visible discharges from Outfall 001, she expressed concern about “polluted groundwater,” which she describes as “dangerous and alarming.” [*Id.* at ¶ 20] The part of the lake near E.W. Brown, she says, is “unfit for us to enjoy.” [*Id.* at ¶ 19]

Dirksen also owns a home on Herrington Lake which he and his wife use as their primary residence. [Record No. 87-13, ¶ 2] Dirksen and his guests “enjoy[s] swimming, fishing, and boating on Herrington Lake.” [*Id.* at ¶ 9] In recent years, he claims that fish activity has declined and “the fishing is less robust.” [*Id.* at ¶¶ 10–13] Dirksen traces this decline to selenium contamination from E.W. Brown. [*Id.*] The decline in fish activity and fishing “diminishes [his] enjoyment of” the lake. [*Id.* at ¶ 14] Additionally, he is concerned that the decline will decrease the value of his home. [*Id.* at ¶ 15]

These sworn statements meet *Laidlaw*’s criteria. Whether KWA and the Sierra Club can prove that KU’s ash disposal “may present an imminent and substantial endangerment to health or the environment,” 42 U.S.C. § 6972(a)(1)(B), as RCRA requires, is not the question. Rather, “[t]he relevant showing for purposes of Article III standing . . . is not injury to the environment but injury to the plaintiff.” *Laidlaw*, 528 U.S. at 181. The Court finds that both Donnelly and Dirksen have adequately alleged injuries related to the “aesthetic and recreational values” of Herrington Lake. *Id.* at 183 (quotation omitted).

KWA and the Sierra Club have also shown that their members’ injuries satisfy causation and redressability requirements. Regarding causation, KWA and the Sierra Club need not “show to a scientific certainty” that KU’s actions “caused the precise harm suffered by the plaintiffs.” *Am. Canoe Ass’n v. City of Louisa Water & Sewer Comm’n*, 389 F.3d 536, 543 (6th Cir. 2004) (quoting *Piney Run Pres. Ass’n v. Cty. Comm’rs of Carroll Cty.*, 268 F.3d

255, 263–64 (4th Cir. 2001)). Instead, a showing that KU “discharges a pollutant that causes or contributes to the kinds of injuries alleged” satisfies this requirement. *Id.*

KU contests the assertion that “unidentified groundwater pathways” contribute to pollution in Herrington Lake. [Record No. 93, p. 2] But the undersigned notes that, in this procedural posture, KWA and the Sierra Club need not prove the merits of their case, but need only set forth “specific facts, which for purposes of the summary judgment motion will be taken to be true.” *Sierra Club*, 793 F.3d at 662 (quoting *Lujan*, 504 U.S. at 561). Given this evidentiary burden, they have shown that their members’ injuries are fairly traceable to the groundwater flows they allege occur at E.W. Brown.

The requested injunctive relief will also “materially reduce their reasonable concerns about” the alleged endangerment. *Interfaith Cmty. Org.*, 399 F.3d at 257. Both Donnelly and Dirksen claim that “effective remedial actions” would address any concerns they currently have regarding the lake. [See Record No. 87-10, ¶ 26; Record No. 87-13, ¶ 16] The record reflects “more than a substantial likelihood that the relief will remedy” the injuries. *Interfaith Cmty. Org.*, 399 F.3d at 257 (citation omitted).

Both Donnelly and Dirksen “have standing to sue in their own right.” *Laidlaw*, 528 U.S. 181. And there is no dispute that the interests at stake are germane to KWA and the Sierra Club’s purposes and that the participation of Donnelly and Dirksen is not required here. *Id.* Accordingly, the undersigned concludes that KWA and the Sierra Club have met their burden to establish Article III standing.

IV.

Having established the plaintiffs have standing to bring this claim, the Court now turns to KU's evidentiary objections before addressing its motion for summary judgment. KU has filed motions to exclude the expert opinions of two of the plaintiffs' witnesses: Dr. A. Dennis Lemly and Dr. David M. Janz. Specifically, it seeks exclusion of three of Lemly's opinions—(1) that E.W. Brown creates “high hazard” or “moderate hazard” risks to aquatic life near the plant due to various coal ash constituents; (2) that selenium exposure has caused the death of significant numbers of young fish; and (3) that KU's technical risk evaluation is flawed—and the primary conclusion of Janz's rebuttal report—that selenium near E.W. Brown poses an ecotoxicological risk to fish in the area.⁴ [Record Nos. 84, 85]

Federal Rule of Evidence 702 governs both of KU's motions to exclude expert testimony.⁵ That rule states that

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

⁴ The parties debate the scope of these motions. In KWA and the Sierra Club's response to the Lemly motion, they argue that KU seeks only to exclude Lemly's opinion on pre-swim-up mortality, thus leaving the remainder of his biological assessment unchallenged. [Record No. 90, p. 16] KU responds that the biological assessment itself is based on these conclusions. [Record No. 94, p. 2]

Additionally, in their response to the Janz motion, KWA and the Sierra Club point to twenty portions of Janz's testimony they say KU has not objected to. [Record No. 88, pp. 11–13] KU clarifies that because Janz's opinion is primarily based on challenged testimony, [Record No. 85-2, p. 10] it seeks to exclude his “entire opinion regarding ecotoxicological risk.” [Record No. 95, p. 3]

⁵ Neither party has requested a hearing on these issues, and the briefing and record presents “an adequate basis from which to determine the reliability and validity of the experts' opinions.” *Nelson v. Tenn. Gas Pipeline Co.*, 243 F.3d 244, 249 (6th Cir. 2001). Accordingly, the Court determines that no hearing is necessary.

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

Fed. R. Evid. 702. Rule 702 requires the Court to “ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.” *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 589 (1993)

KU’s primary concern here is *reliability*, not relevance.⁶ In general, “[f]our inquiries guide the reliability analysis: Is the technique testable? Has it been subjected to peer review? What is the error rate and are there standards for lowering it? Is the technique generally accepted in the relevant scientific community?” *United States v. Gissantaner*, 990 F.3d 457, 463 (6th Cir. 2021). Additionally, “[r]ed flags that caution against certifying an expert include reliance on anecdotal evidence, improper extrapolation, failure to consider other possible causes, lack of testing, and subjectivity.” *Newell Rubbermaid, Inc. v. Raymond Corp.*, 676 F.3d 521, 527 (citing *Best v. Lowe’s Home Ctrs., Inc.*, 563 F.3d 171, 177 (6th Cir. 2009)). And when “a purported expert’s opinion was prepared solely for litigation, that may also be considered as a basis for exclusion.” *Id.* (citing *Johnson v. Manitowoc Boom Trucks, Inc.*, 484 F.3d 426, 434 (6th Cir. 2007)).

But “no definitive checklist or test” applies to a Rule 702 inquiry. *Daubert*, 509 U.S. at 593; *see also id.* at 594–95 (“The inquiry envisioned by Rule 702 is . . . a flexible one.”).

⁶ KU does not challenge the relevance of the expert testimony or the qualifications of Lemly and Janz. Accordingly, those matters are not discussed here.

Instead, “what matters most” is that “any relevant scientific or technical evidence must be the ‘product of reliable principles and methods’ and must have been ‘reliably applied’ in the case.” *Gissantaner*, 990 F.3d at 463. Any “expert who presents testimony must ‘employ[] in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.’” *Best*, 563 F.3d at 177 (quoting *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999)). This inquiry focuses “solely on principles and methodology, not on the conclusions they generate.” *Daubert*, 509 U.S. at 595.

Courts serve “a ‘gatekeeping role’ in screening the reliability of expert testimony” under Rule 702. *Tamraz v. Lincoln Elec. Co.*, 620 F.3d 665, 668 (6th Cir. 2010) (citing *Daubert*, 509 U.S. at 597). But because any trial in this matter would be a bench trial, the gatekeeping doctrine carries less weight here. *Deal v. Hamilton Cty. Bd. of Educ.*, 392 F.3d 840, 852 (6th Cir. 2004) (“The ‘gatekeeper’ doctrine was designed to protect juries and is largely irrelevant in the context of a bench trial.”). Despite this difference, the Court “is still required to rely only on admissible and reliable expert testimony, even while conducting a bench trial.” *Gonzales v. Nat’l Bd. Of Med. Exam’rs*, 225 F.3d 620, 635 (6th Cir. 2000); *see also* Fed. R. Civ. P. 56(c)(2) (permitting objections to inadmissible evidence at summary judgment). Accordingly, the Court will proceed to address each of KU’s objections under Rule 702.

A. Dr. Lemly’s Expert Opinions

KU first argues that Lemly’s aquatic hazard assessment is not reliable because he failed to follow its stated protocol. [Record No. 84, pp. 10–14] His assessment “is an analysis of the aquatic hazard of CCR pollutants—it determines the degree of danger or risk of chemical

poisoning.” [Record No. 84-2, p. 7] The assessment did not describe toxic impact, but focused instead on the “realistic potential for harm.” [*Id.*] Lemly reviewed “documents pertaining to CCR wastewater releases” and “examined data on the concentrations of 15 primary CCR chemical pollutants measured in groundwater, surface water, aquatic sediments, and biological tissues” in the vicinity of E.W. Brown. [*Id.* at 8]

The assessment compared “measured concentrations” of CCR pollutants to “toxic threshold values⁷ and biological effects criteria” and assigned degrees of hazard. [*Id.* at 8–9] In determining high hazard values for various CCR pollutants, he looked to the EPA and other peer-reviewed sources. [*Id.* at 8–9, 13] Lemly concluded that “contaminants are being released to surface waters, groundwater, and sediments at levels sufficient to poison fish and wildlife.” [Record No. 84-2, p. 23] The assessment did not consider sampling data collected after 2015. [*Id.* at 7] Lemly did not update his assessment with more recent data prior to submitting it. [Record No. 84-3, 55–56]

Lemly claimed to use his own protocol in conducting the aquatic hazard assessment. [Record No. 27-1, ¶ 25] That protocol, which appears in a 1995 paper, “requires a set of data for selenium concentrations measured in five ecosystem components,” including water, sediments, benthic macroinvertebrates, fish eggs, and aquatic bird eggs. [Record No. 84-6, p. 3] “Incomplete data sets . . . will weaken the predictive power of the assessment but it can still be performed.” [*Id.*; *see also* Record No. 84-3, p. 17 (“[T]he assessment would be weakened if one element is missing.”).] Lemly later clarified that the 1995 protocol “should not be used

⁷ “Toxic threshold values are the lowest concentrations of a pollutant that cause physiological damage or mortality of an aquatic organism.” [*Id.* at 8]

if data are missing for more than one ecosystem component.” [Record No. 84-7, p. 3] For example, if “data for both fish and birds were absent, . . . the procedure does not meet its objective and, therefore, is invalid.” [*Id.*]

But Lemly’s aquatic hazard assessment and deposition testimony indicate both fish and bird data were absent from the protocol applied in this case. [Record No. 84-2, p. 8; Record No. 84-3, p. 17 (acknowledging the 1995 protocol was not applied).]. Of course, that alone does not render Lemly’s opinion inadmissible. Scientists presumably choose between multiple reliable methodologies in doing their work, and disputes over testing and results, “generally speaking, provide grist for adversarial examination, not grounds for exclusion.” *Gissantaner*, 990 F.3d at 464. However, KWA and the Sierra Club have not shown that the methodology applied here was a reliable version of the protocols Lemly has used in the past.

First, as noted, Lemly himself indicated that his protocol is invalid if both fish and bird data are not included. [Record No. 84-7, p. 3] Additionally, this version of his protocol has not been peer-reviewed or published. [Record No. 84-3, p. 17] Peer-review and publication are not prerequisites for admission, and general acceptance does not mean “uniform acceptance within the community.” *Gissantaner*, 990 F.3d at 466. But Lemly does not claim that this version of his protocol has been applied in any similar circumstances. This causes the Court to question its general acceptance and raises a concern that the “opinion was prepared solely for litigation,” which “may also be considered as a basis for exclusion.” *Newell Rubbermaid, Inc.*, 676 F.3d at 527 (citing *Johnson*, 484 F.3d at 434 (6th Cir. 2007)).

Taken together, these factors justify exclusion of Lemly’s aquatic hazard assessment. The Court does not doubt Lemly’s qualifications in his field and it will not cast doubt on his

contributions to it. But the record as it stands suggests that the methodology used here was an unreliable version of the 1995 protocol, altered to be invalid by its own terms and designed to fit the data available in this case. *See Brown v. Burlington Northern Santa Fe Ry.*, 765 F.3d 765, 773 (7th Cir. 2014) (“[A]n expert must do more than just state that [he] is applying a respected methodology; [he] must follow through with it.”). Without evidence that this version of Lemly’s protocol is as reliable as the original protocol, the Court is unable to conclude that it can be used to reliably assess aquatic risk for purposes of this action.

KU also argues that the aquatic hazard assessment is not based on scientific principles because it is not representative of actual conditions in the relevant portions of Herrington Lake. [Record No. 84, 14–19] Because the aquatic hazard assessment is not reliable, KU’s motion does not depend on these arguments. However, the use of non-representative data raises concerns that his approach overstates the risks actually present in the data. *See United States v. Lang*, 717 F. App’x 523, 536 (6th Cir. 2017) (“[C]herry-picking data is just as bad as omitting it or making it up altogether.”); *see also Allgood v. Gen. Motors Corp.*, 2006 WL 2669337, at *10 (S.D. Ind. Sept. 18, 2006) (“Questions as to [an expert’s] choice in data sampling for to the heart of his methodology.”). Absent further scientific justification for the choices made in data selection, this factor provides an additional basis for exclusion of Lemly’s opinion.

Lemly’s biological assessment also presents a concern under Rule 702. KU argues that Lemly’s opinion that “the total selenium impact on largemouth bass in Herrington Lake at some locations is currently in excess of 25% population mortality per year” lacks scientific basis. [Record No. 84, pp. 19–24] Unlike the aquatic hazard assessment, Lemly in his

biological assessment sought to “determine if impacts are actually occurring” due to selenium in Lake Herrington. [Record No. 84-2, pp. 114–15] He examined 548 young-of-the-year⁸ (“YOY”) largemouth bass collected over two days in June 2016 and identified various abnormalities or deformities in 12.2% of those examined. [*Id.* at 115] From this examination, he estimated a total teratogenic mortality rate of 3.05%, which “indicates that selenium pollution from coal ash poisoning is having a minimal population-level impact on largemouth bass in Herrington Lake.” [*Id.* at 136] However, due to his expectations of high rates of pre-swim-up mortality, Lemly concluded that selenium impact “is currently in excess of 25% population mortality per year” and found it “likely that site-specific mortality rates could equal or exceed a 50% level” if conditions in Herrington Lake are similar to those observed in other selenium-polluted lakes. [*Id.* at 136–37]

The final two conclusions in the biological assessment are unsupported by the record and inadmissible. Lemly claims that “pre-swim-up effects have been well studied in southeastern lakes and are reported in the scientific literature,” but he offers no research from Herrington Lake to support his opinion in this case. [*Id.* at 136] This testimony is “at most a working hypothesis, not admissible scientific ‘knowledge.’” *Tamraz*, 620 F.3d at 670 (quoting Fed. R. Evid. 702).

As in *Tamraz*, Lemly’s hypothesis regarding pre-swim-up mortality is “plausible,” and “may even be right.” *Id.* But without actual data supporting it in Lake Herrington, the Court will exclude it. *Joiner*, 522 U.S. at 146 (“[N]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data

⁸ A young-of-the-year fish is “only a few weeks old.” [Record No. 84-8, p. 4]

only by the *ipse dixit* of the expert.”); *see also Tamraz*, 620 F.3d at 677 (“A district court judge asked to admit scientific evidence must determine whether the evidence is genuinely scientific, as distinct from being speculation offered by a genuine scientist.” (quoting *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 318 (7th Cir. 1996)) (cleaned up)).

Lemly’s conclusion that 12.2% of YOY largemouth bass sampled display abnormalities, and his estimation of 3.05% total teratogenic mortality derived from that conclusion, are admissible. But the Court will exclude his unsupported opinions that 25% population mortality and 50% site-specific mortality rates exist at Herrington Lake.

Finally, KU objects to Lemly’s opinion that Ramboll’s 2019 ecological assessment is flawed because it failed to apply his “toxic threshold,” which KU argues is not generally accepted. [Record No. 84, 24–25] That report concluded that Ramboll’s assessment did not reflect the actual impacts of selenium exposure for several reasons. [Record No. 84-2, p. 215–32] As relevant to the pending motion, Lemly argued that the report’s failure to apply a 4 mg/kg toxic threshold—instead relying on EPA and Kentucky standards “not fully protective of fish health”—led it to “significantly understate[] the impacts of selenium exposure.” [*Id.* at 215] Under that toxic threshold, derived from his own literature, 100% of samples collected in Herrington Lake would show excessive levels. [*Id.*]

The Court disagrees that Lemly’s use of a different selenium toxic threshold than Kentucky and EPA warrants exclusion. Based on this record, there is little to suggest that Lemly arbitrarily created his toxic threshold. [*See id.* (citing peer-reviewed studies).] Rather, this disagreement appears to be part of a debate within the scientific community. When a methodology is accepted, but not uniformly, “the long-tested cauldron of cross-examination,

not exclusion, is the place to go for accuracy.” *Gissantaner*, 990 F.3d at 466; *see also In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717 (3d Cir. 1994) (“The evidentiary requirement of reliability is lower than the merits standard of correctness.”).

B. Dr. Janz’s Expert Opinion

KU objects to Janz’s expert opinion in its second motion to exclude, arguing that Janz relies on data that is not scientifically useful and ignores key data. [Record No. 85] His report was submitted in March 2020 to review documents related to this matter and answer specific questions regarding expert reports in the record. [Record No. 85-2, p. 4] It utilized the EPA’s 2016 water quality criterion for selenium, which Janz opined is “the most comprehensive selenium guideline worldwide.” [*Id.* at 8] That guideline states that egg data, ovary data, and adult whole-body produce the most accurate results in assessing water quality. [Record No. 84-22] Unable to identify adequate egg data, ovary data, or adult whole-body data, Janz looked to selenium concentration data from whole-body tissue of YOY fish collected in the vicinity of E.W. Brown. [*Id.* at 5–7]

Ultimately, Janz concluded that “there are significant ecotoxicological risks due to selenium exposure of fish species inhabiting the vicinity” of E.W. Brown. [*Id.* at 13] His opinion was “based primarily on whole-body selenium concentrations in resident YOY bluegill sunfish collected from Curds Inlet in 2018” and “secondarily” on Lemly’s finding of 12.2% deformities in surviving YOY largemouth bass. [*Id.*] Like Lemly, he “believe[s] that the actual frequency of deformities” in largemouth bass is greater than 12.2% due to pre-swim-up mortality, which he calls “survivor bias.” [*Id.* at 11] Janz recommended “future monitoring programs.” [*Id.* at 13]

KU argues that, because Janz’s methodology differs from those used by EPA, it is not a reliable method of assessing risk to fish. [Record No. 85, pp. 8–11] Specifically, KU questions his reliance on whole-body tissue of YOY fish, despite EPA’s guideline that other data ensures accuracy. [*Id.*; see also Record No. 84-19, pp. 43–44 (admitting that no risk criteria look to whole-body tissue in YOY fish); Record No. 84-22 (detailing EPA criteria).] As Janz notes, “[s]urprisingly few studies have been conducted investigating direct toxic effects of dietary selenium exposure in young fish.” [Record No. 85-2, p. 10] He claims that additional work is currently underway to examine these issues. [Record No. 84-19, pp. 43–44]

The Sixth Circuit has held that “neither newness nor lack of absolute certainty in a test suffices to render it inadmissible in court.” *United States v. Bonds*, 12 F.3d 540, 561 (6th Cir. 1993). Indeed, “Rule 702 . . . does not require anything approaching absolute certainty.” *Tamraz*, 620 F.3d at 671 (citing *Daubert*, 509 U.S. at 590). But three additional factors lead the Court to conclude that Janz’s opinion should be excluded, based on this record.

First, Janz’s statements suggesting the need for additional research to support the use of this methodology describe “a working hypothesis, not admissible scientific ‘knowledge.’” *Id.* at 670. Second, the Court shares KU’s concern that the EPA criteria could never be “meaningfully applied” if the fact that “adult fish . . . can move throughout Herrington Lake to varying extents” excuses Janz from utilizing available adult-fish data. [*See* Record Nos. 95, p. 7; 85-2, p. 7] Scientists may have good reasons to consider certain data unreliable, and the EPA standards themselves acknowledge that all the data it prefers will not be available in reliable form at all times. [Record No. 84-22] But the reasons given here for avoiding

available adult-fish data, which Janz acknowledges are more accurate under the generally accepted EPA standard, are insufficient.

Third, as explained above, Janz's secondary opinion regarding survivor bias suffers the same deficiencies as the Lemly opinion on which it relies. It is unsupported by data in the record and inadmissible under Rule 702. For these reasons, his opinion that E.W. Brown presents "significant ecotoxicological risks due to selenium exposure" will be excluded.

C. Conclusion

In summary, the Court will exclude the following opinions, and they will not be considered in ruling on KU's motion for summary judgment:

- Lemly's opinion that CCR from E.W. Brown creates a "high hazard" or "moderate hazard" risk to aquatic life in its vicinity.
- Lemly's opinion that total selenium impact on largemouth bass in Herrington Lake is in excess of 25% population mortality per year.
- Lemly's opinion that it is likely that site-specific mortality rates could equal or exceed a 50% level.
- Janz's opinion that selenium in the vicinity of E.W. Brown poses an ecotoxicological risk to fish in Curd's Inlet.

V.

With the above evidentiary objections resolved, the Court turns to KU's motion for summary judgment on KWA and the Sierra Club's only claim: imminent and substantial endangerment under RCRA. 42 U.S.C. § 6972(a)(1)(B). That statute provides that "any person may commence a civil action on his own behalf . . . against any person . . . who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent

and substantial endangerment to health or the environment.” *Id.*⁹ Several courts have previously parsed RCRA’s citizen-suit provision, and four well-established interpretations govern here.

First, “[t]he operative word in the statute is the word ‘may.’” *Parker v. Scrap Metal Processors, Inc.*, 386 F.3d 993, 1015 (11th Cir. 2004). This language authorizes courts to grant “necessary” injunctive relief under RCRA. *Id.* (citation omitted). “While broad, ‘there is a limit to how far the tentativeness of the word *may* can carry a plaintiff.’” *Miller v. City of Fort Meyers*, 424 F. Supp. 3d 1136, 1143 (M.D. Fla. 2020) (quoting *Crandall v. City & Cty. of Denver, Co.*, 594 F.3d 1231, 1238 (10th Cir. 2010)).

Second, “the term ‘endangerment’ has been interpreted by courts to mean a threatened or potential harm, thus, it is not necessary that [a plaintiff] show proof of actual harm to health or the environment.” *Burlington N. & Santa Fe Ry. v. Grant*, 505 F.3d 1013, 1020 (10th Cir. 2007); *see also Parker*, 386 F.3d at 1015. A “reasonable prospect of future harm” triggers RCRA, so long as the below conditions are also met. *Me. People’s All. v. Mallinckrodt, Inc.*, 471 F.3d 277, 296 (1st Cir. 2006).

Third, to be imminent, the endangerment must “threaten[] to occur immediately.” *Meghrig v. KFC W., Inc.*, 516 U.S. 479, 485 (1996). Accordingly, “there must be a threat which is present *now*, although the impact of the threat may not be felt until later. *Id.* at 486 (citation omitted). That said, “the endangerment analysis will focus on the current and future

⁹ Congress has defined the term “person” to cover each party in this matter. 42 U.S.C. § 6903(15).

state” of the area in question, and past conditions will not control “in the face of later evidence.” *Miller*, 424 F. Supp. 3d at 1145.

Fourth, “an endangerment is ‘substantial’ if it is ‘serious.’” *Cox v. City of Dallas*, 256 F.3d 281, 300 (5th Cir. 2001); *see also Parker*, 386 F.3d at 1015 (citation omitted). Courts are “reluctan[t] to quantify the needed level of harm more precisely.” *Me. People’s Alliance*, 471 F.3d at 288; *see also Cordiano v. Metacon Gun Club, Inc.*, 575 F.3d 199, 211 (2d Cir. 2009); *Interfaith Cmty. Org.*, 399 F.3d at 259. Instead, they consider several factors to determine whether a risk of harm will exist absent further remedial action. *See, e.g., Burlington N. & Santa Fe Ry.*, 5050 F.3d at 1021. But evidence of potential harm “remote in time, completely speculative in nature, or de minimis in degree” is insufficient. *Little Hocking Water Ass’n v. E.I. du Pont de Nemours & Co.*, 91 F. Supp. 3d 940, 967 (S.D. Ohio 2015) (citation omitted).

KU first argues that the exclusion of Lemly and Janz’s expert opinions on endangerment to fish in Herrington Lake entitle it to judgment as a matter of law. [Record No. 86, p. 15] KWA and the Sierra Club respond that “pollution that potentially threatens harm to groundwater and surface water, on its own, is sufficient to create ISE liability.” [Record No. 89, pp. 15–16] Both parties are partially correct.

While significant portions of Lemly and Janz’s opinions were excluded here, Lemly’s opinions were not excluded in their entirety. *See supra* Part IV. However, contrary to the plaintiffs’ assertion, “the existence of some level of contamination does not automatically signify an imminent and substantial endangerment.” *Miller*, 424 F. Supp. 36 at 1149. Three additional factors must be considered before the Court may determine that KU is entitled to summary judgment.

A. Causation

Under RCRA, KWA and the Sierra Club must prove that any imminent and substantial endangerment may exist because of KU's "handling, storage, treatment, transportation, or disposal of" solid waste. 42 U.S.C. § 6972(a)(1)(B); *see also Parker*, 386 F.3d at 1014–15. "The term 'solid waste' . . . does not include . . . industrial discharges which are point sources subject to permits under" 33 U.S.C. § 1342, the Clean Water Act. 42 U.S.C. 6903(27). The parties do not dispute that Outfall 001 was a point source subject to a permit under the Clean Water Act. [*See Record Nos. 86, p. 24; 89, p. 18.*] Accordingly, KU argues that KWA and the Sierra Club have presented no evidence establishing "that any 'imminent and substantial' endangerment is solely attributable to wastes other than those discharged from Outfall 001." [Record No. 86, p. 24]

In response, KWA and the Sierra Club point to evidence "that there are likely significant discharges of CCR-contaminated groundwater below the Herrington Lake waterline" which, because KU has not investigated them, "remain unidentified, unmonitored, and uncaptured." [Record No. 89, p. 18] This response does not address the key issue raised by KU. That is: the evidence of potential endangerment in Herrington Lake currently in the record fails to distinguish between permitted discharges and non-permitted discharges.

KWA and the Sierra Club admit that they "have disclosed no expert opinion that excludes permitted discharges from Outfall 001 as the source of for any measured level of bioavailable selenium at E.W. Brown." [Record No. 86-2, p. 6] But any claim that unpermitted discharges of solid waste poses a threat to the environment cannot ignore that 5.14 million

gallons of wastewater were discharged by permit each day while Outfall 001 was operational.

[Record No. 84-9, at 5]

RCRA authorizes a federal court to craft necessary remedies only when the possibility of imminent and substantial endangerment can be traced to solid waste. 42 U.S.C. § 692(a)(1)(B). But it does not trigger liability when more investigation is needed to connect a potential endangerment to a potential unpermitted discharge of solid waste. To order KU to prove its own RCRA liability by investigating possible unpermitted discharges and determining their environmental impact would extend the statute beyond its plain terms.

B. Endangerment to the Environment

KWA and the Sierra Club's remaining evidence of environmental endangerment is also insufficient to survive summary judgment. Two pieces of evidence are most relevant here. First, Lemly's opinion that a 12.2% rate of deformity or abnormality in YOY largemouth bass reflects a total teratogenic mortality rate of 3.05%. [Record No. 84-2, pp. 115, 136] In Lemly's opinion, those numbers indicate that selenium pollution due to coal ash has had "a minimal population-level impact on largemouth bass in Herrington Lake." [*Id.* at 136] Accordingly, this rate proves harm only "de minimis in degree," *Little Hocking Water Ass'n*, 91 F. Supp. 3d at 967, not the possibility of an imminent and substantial endangerment.

The second opinion relevant here is Lemly's conclusion that EPA and Kentucky standards are not the proper marker of environmental harm here. [Record No. 84-2, p. 215] The weight of Kentucky and EPA's regulatory standards is disputed by the parties. As the plaintiffs note, "[p]roof of contamination in excess of state standards may support a finding of liability, and may alone suffice for liability in some cases, but its required use is without

justification in the statute.” *Interfaith Cmty. Org.*, 399 F.3d at 261. KWA and the Sierra Club read *Interfaith*’s gloss on the word “substantial” at its narrowest: courts may not require a plaintiff to prove non-compliance with state standards to succeed on an endangerment claim. [Record No. 89, pp. 15–16]

That rule is only part of the analysis required under RCRA. While the Court may not require KWA and the Sierra club to prove that contamination is in excess of state standards, it may look to compliance with or exceedance of those standards as one factor in assessing their claim. *See, e.g., Tilot Oil, LLC v. BP Prods. N. Am., Inc.*, 907 F. Supp. 2d 955, 968 (E.D. Wis. 2012). And in some cases, even exceedance of state standards will not guarantee liability under RCRA. *See, e.g., id.; Lewis v. FMC Corp.*, 786 F. Supp. 2d 690, 709–10 (W.D.N.Y. 2011). In other words, regulatory agencies may sometimes find violations of regulatory standards before they type of “imminent and substantial endangerment” necessitating a Court’s involvement arises.

Here, taking KWA and the Sierra Club’s remaining evidence, they cannot prove that an imminent and substantial endangerment may exist. Although Lemly opines that current Kentucky and EPA criteria are not sufficiently protective of fish at Herrington Lake [Record No. 84-2, p. 215], that opinion does not necessarily lead to the legal conclusion that the harm is substantial. Indeed, another of KWA and the Sierra Club’s own experts opined that those criteria are fully protective of aquatic life. [See Record Nos. 85-2, p. 8; 84-19, p. 63.] With no evidence that EPA or Kentucky’s selenium standards have been exceeded, and conflicting evidence regarding the weight those standards should carry in determining the substantiality

of harm, KWA and the Sierra Club cannot prove their endangerment claim with the evidence in the record.

C. Remedies

Consideration of remedies to KWA and the Sierra Club (should they prove liability) also is relevant here. RCRA permits two types of equitable relief: “(1) a mandatory injunction that requires a responsible party to participate in cleanup and the proper disposal of waste; or (2) a prohibitory injunction restraining the party from further action violating RCRA.” *Trinity Indus. v. Chi. Bridge & Iron Co.*, 735 F.3d 131, 139 (3d Cir. 2013) (citing *Meghrig*, 516 U.S. at 484); *see also* 42 U.S.C. 6972(a) (permitting a court to order a defendant “take such other action as may be necessary”).

KU argues that the Court should reject this RCRA claim on the merits because the Cabinet “is currently addressing—and will continue to address—the same issues that underlie Plaintiffs’ RCRA claim”. [Record No. 86, pp. 20–23] KWA and the Sierra Club respond that this argument is an attempt to “end-run” the Sixth Circuit’s opinion in this matter. [Record No. 89, p. 22] Again, neither party is correct.

The Sixth Circuit did not address the merits of this matter. *Ky. Waterways All.*, 905 F.3d at 938–40. Rather, it held that Kentucky’s “regulat[ion] of the challenged conduct under Kentucky law” did not deprive the Court of jurisdiction because it was not “one of the three types of actions that would preclude” a citizen suit under RCRA. *Id.* at 938–39. While this ruling dealt with jurisdiction (and not the merits of this action), the Court agrees that to rule for KU here solely due to regulatory actions taken at E.W. Brown and Herrington Lake would be inappropriate at this stage.

But that does not mean the Court must *ignore* the Cabinet’s actions when deciding the merits of the RCRA claim. Most courts have charted a middle course by treating current remediation efforts as a non-dispositive factor. *See Miller*, 424 F. Supp. 3d at 1151 (“Ongoing remediation is not dispositive, but the Court may consider it.”) (collecting cases). Under this line of cases, Plaintiffs must argue that further action is “necessary” if current remediation efforts are “in place and appear to be effective.” *Trinity Indus.*, 735 F.3d at 140; *see also Tilot Oil, LLC*, 907 F. Supp. 2d at 968 (considering “the current state of remediation and lack of evidence as to that remediation being so insufficient as to perpetuate a possible imminent and substantial endangerment” in assessing the merits of a RCRA claim). In this action, KWA and the Sierra Club identify seven reasons why the ongoing remediation efforts are not sufficient to address their concerns. [Record No. 89, pp. 11–12] Those reasons primarily concern alleged unpermitted groundwater discharges, which they argue have not been adequately identified and monitored. [*Id.*]

As KU acknowledges, the Court could order further investigation to assess necessary remedial actions. [Record No. 96, p. 14]; *see, e.g., Me. People’s All.*, 471 F.3d at 280–81, 296–98. But, as explained above, RCRA liability must be established before such relief can be ordered. The requested relief here is targeted more towards further investigation whether KU is liable at all under RCRA. Thus, while comparing the proposed remedy to the Cabinet’s current remediation efforts is by no means dispositive, it is unclear from the record what additional remedies are necessary under RCRA. As noted in *Miller*, “this situation undercuts [Plaintiff’s] position [that] the Court needs to step in at this point. 424 F. Supp. 3d at 1151.

D. Conclusion

The factors above support the entry of summary judgment. KWA and the Sierra Club have presented limited admissible evidence that a risk of endangerment is present, and that evidence does not account for well-accepted regulatory standards. That evidence also fails to distinguish between the effects of permissible and non-permissible discharges. And finally, the ongoing remediation efforts conducted by the Cabinet bolster the conclusion that injunctive relief is not necessary here. The Court could not conclude on this record that coal ash at KU “may present an imminent and substantial endangerment to health or the environment.” 42 U.S.C. § 6972(a)(1)(B).

VI.

Based on the foregoing analysis and discussion, it is hereby

ORDERED as follows:

1. Plaintiffs Kentucky Waterways Alliance and Sierra Club’s motion for partial summary judgment [Record No. 87] is **GRANTED**.
2. Defendant Kentucky Utilities Co.’s motion to exclude Lemly’s expert opinions [Record No. 84] is **GRANTED** in part, and **DENIED** in part.
3. Defendant Kentucky Utilities Co.’s motion to exclude Janz’s expert opinion [Record No. 85] is **GRANTED**.
4. Defendant Kentucky Utilities Co.’s motion for summary judgment [Record No. 86] is **GRANTED**.
5. The bench trial in this matter, currently continued generally, is **CANCELED**, and all deadlines set out in the Scheduling Order [Record No. 46] are **VACATED**.

Dated: May 17, 2021.



A handwritten signature in black ink, appearing to read "Danny C. Reeves".

Danny C. Reeves, Chief Judge
United States District Court
Eastern District of Kentucky