SUPREME COURT OF ARKANSAS

No. 09-1093

AL.: STATE OF LOUISIANA, LOUISIANA ENVIRONMENTAL ACTION NETWORK; SAVE THE OUACHITA; and KENT STEGALL,

APPELLANTS,

VS.

JOINT PIPELINE GROUP, ET AL.; CITY OF EL DORADO WASTE UTILITIES; GREAT LAKES CHEMICAL COMPANY; ARKANSAS POLLUTION CONTROL & ECOLOGY COMMISSION; LION OIL COMPANY, and EL DORADO CHEMICAL COMPANY,

APPELLEES,

Opinion Delivered October 7, 2010

AN APPEAL FROM THE CIRCUIT COURT OF UNION COUNTY. ARKANSAS, NO. CV-2008-292, CV-2008-293, CV-2008-296-6, HONORABLE DAVID FREDRIC GUTHRIE, CIRCUIT JUDGE,

AFFIRMED.

ELANA CUNNINGHAM WILLS, Associate Justice

This is an appeal from an order of the Union County Circuit Court affirming a decision by the Arkansas Pollution Control and Ecology Commission (PC&E or "the Commission") that approved the issuance of a National Pollution Discharge Elimination System (NPDES) permit by the Arkansas Department of Environmental Quality (ADEQ). The appellants are the State of Louisiana,¹ the Louisiana Environmental Action Network

¹Louisiana, as a party, is composed of Louisiana Attorney General Charles C. Foti, Jr.; the Louisiana Department of Environmental Quality (LDEQ); the Louisiana Department of Culture, Recreation, and Tourism (LDCRT); and the Louisiana Department of Wildlife and Fisheries (LDWF).

(LEAN), and Save the Ouachita and Kent Stegall (collectively, STO). The appellees, who were awarded the NDPES permit, are the City of El Dorado Waste Utilities (EDWU), El Dorado Chemical Company (EDCC), Lion Oil Company (Lion), and Great Lakes Chemical Company (Great Lakes); collectively, these appellees are called the Joint Pipeline Group (JPG). In addition, PC&E is an appellee.

On November 16, 2004, the JPG submitted an NPDES permit application to ADEQ for the El Dorado Joint Pipeline project. That same day, EDWU submitted an application to build a pipeline to carry its own treated wastewater, along with that of Lion, Great Lakes, and EDCC, to the Ouachita River. Between September 20, 2004 and November 16, 2004, the four individual members of the JPG submitted applications to modify their existing NPDES permits.² ADEQ issued a public notice regarding the draft permits on March 22, 2006, and on May 18, 2006, it held a public hearing to take comments on them. ADEQ subsequently extended the deadline for submitting comments on the proposals until June 21, 2006.

After receiving and responding to the numerous comments that were submitted, ADEQ issued Permit No. AR0050296 on February 27, 2007. The permit, effective April 1,

² Prior to the application for this permit, Lion discharged its treated wastewater into Loutre Creek; Great Lakes discharged into a tributary of the Ouachita; EDCC had a permit to discharge its treated wastewater directly into the Ouachita River; and EDWU had two treatment plants, one of which discharged into Bayou D'Loutre Creek and the other of which discharged into Flat Creek. In 2003, EDWU received an NPDES permit authorizing it to build its own wastewater pipeline to the Ouachita River. Because of the cost of building its own pipeline, however, EDWU opted to participate in the joint pipeline.

2007, allowed JPG to discharge their combined waste, totaling approximately 20 million gallons per day, through a common pipeline into the Ouachita River 1.5 miles downstream of the H.K. Thatcher Dam in Segment 2D of the Ouachita River Basin. ADEQ also issued modifications to each individual permit that allowed the discharge of wastewater to the Ouachita River through the joint pipeline, and it also issued EDWU a construction permit to build the joint pipeline.

On March 26, 2007, STO filed a Third-Party Request for Commission Review and Adjudicatory Hearing with PC&E; this request was assigned Docket No. 07-006-P. JPG filed a Request for Adjudicatory Hearing and Commission Review on March 28, 2007 (Docket No. 07-007-P). Louisiana filed a Request for Commission Review and Adjudicatory Hearing, which became Docket No. 07-008-P, on March 29, 2007. LEAN filed a similar request on March 30, 2007 (Docket No. 07-009-P). Michael O'Malley, PC&E's Administrative Hearing Officer (AHO), entered Order No. 2 on April 25, 2007, consolidating all of these dockets under Docket No. 07-006-P and setting a briefing schedule and dates for oral argument.

After a seven-day hearing, which lasted from October 29, 2007 until November 6, 2007, the AHO issued Order No. 9 on May 8, 2008 in which it affirmed, for the most part, the joint pipeline permits issued by ADEQ.³ Louisiana, LEAN, and STO all sought review

³ Several issues were reversed and remanded to the Director of ADEQ, but none of those matters are raised in any of the appellants' points on appeal.

of the AHO's decision by the Commission. The Commission, however, entered Minute Order No. 08-23 on June 27, 2008, adopting and affirming, without modification, Order No. 9.

Louisiana, LEAN, and STO then appealed the Commission's decision to the Union County Circuit Court. After a hearing on October 31, 2008, the circuit court entered a judgment on March 31, 2009, affirming the decision of the Commission. The three appellants all filed timely notices of appeal and have now filed separate briefs with this court.

I. Standard of Review

Before addressing the merits of the arguments raised in this appeal, it is crucial to discuss our standard of review for cases arising from decisions of the Commission. Generally, when reviewing administrative decisions, we uphold such decisions if they are supported by substantial evidence and are not arbitrary, capricious, or characterized by an abuse of discretion. *Pine Bluff for Safe Disposal v. Ark. Pollution Control & Ecology Comm'n*, 354 Ark. 563, 572, 127 S.W.3d 509, 515–16 (2003); *Hamilton v. Ark. Pollution Control & Ecology Comm'n*, 333 Ark. 370, 969 S.W.2d 6653 (1998). The appellate court's review is directed, not toward the circuit court, but toward the decision of the agency, because administrative agencies are better equipped by specialization, insight through experience, and more flexible procedures than courts, to determine and analyze legal issues affecting their agencies. *Pine Bluff for Safe Disposal, supra.*

In determining whether a decision is supported by substantial evidence, we review the record to ascertain if the decision is supported by relevant evidence that a reasonable mind might accept as adequate to support a conclusion. *Id.* In doing so, we give the evidence its strongest probative force in favor of the administrative agency. *Id.* The question is not whether the testimony would have supported a contrary finding, but whether it supports the finding that was made. *Id.*; *Ark. Bd. of Exam'rs v. Carlson*, 334 Ark. 614, 976 S.W.2d 934 (1998). Expert testimony qualifies as substantial evidence unless it is shown that the expert opinion is without a reasonable basis. *Ark. State Plant Bd. v. Bullock*, 345 Ark. 373, 48 S.W.3d 516 (2001). As is true for any other factfinder, it is the prerogative of the agency to believe or disbelieve any witness and to decide what weight to accord the evidence. *Pine Bluff for Safe Disposal, supra; Carlson*, 334 Ark. 614, 976 S.W.2d 934.

Appeals from the decisions of the Arkansas Pollution Control and Ecology Commission, however, are not governed by the procedures established in the Arkansas Administrative Procedure Act. *See* Arkansas Code Annotated section 25–15–202(2)(C) (Supp. 2009)⁴; *Pine Bluff for Safe Disposal*, 354 Ark. at 573, 127 S.W.3d at 516. Rather, specific procedures are set forth in Arkansas Code Annotated sections 8–4–223 to –229 (Repl. 2007). *See Tri-County Solid Waste Dist. v. Ark. Pollution Control & Ecology Comm'n*, 365 Ark. 368,

⁴ This statute declares that "[t]he word 'agency' shall not include . . . the Arkansas Pollution Control and Ecology Commission . . . , it being determined by the General Assembly that the existing laws governing those agencies provide adequate administrative procedures for those agencies."

374–75, 230 S.W.3d 545, 550 (2006). Section 8–4–229(a) provides that in any appeal involving a decision by the Commission, "the action of the commission shall be prima facie evidence reasonable and valid, and it shall be presumed that all requirements of the law pertaining to the taking thereof have been complied with." Section 8–4–229(b) provides that "[a]ll findings of fact made by the Commission shall be prima facie evidence of the matters stated therein." Further, under section 8–4–229(c), "[t]he burden of proving the contrary rests upon the party challenging the Commission's action." Thus, to reverse an action of the Commission, it is the appellant's burden to rebut the presumption that the Commission's decision is reasonable and valid and has complied with all the requirements of the law. *Tri-County Solid Waste Dist.*, 365 Ark. at 375, 230 S.W.3d at 550; *Pine Bluff for Safe Disposal*, 354 Ark. at 573, 127 S.W.3d at 516.

II. Arguments of Appellant State of Louisiana

Louisiana raises three primary arguments on appeal, contending that: 1) the permit issued to the JPG was not based on generally accepted scientific knowledge or in accordance with sound engineering practices; 2) ADEQ and the Commission failed to provide Louisiana with sufficient opportunity to review the data upon which the permit was based and to comment upon such data; and 3) ADEQ and the Commission failed to ensure that the discharges under the challenged permits would not compromise Louisiana's water quality.

A. Generally Accepted Scientific Knowledge and Engineering Practices

In its first argument on appeal, Louisiana asserts that the permit issued by ADEQ and affirmed by the Commission was not based on generally accepted scientific knowledge and

engineering practices. This language is found in Arkansas Code Annotated section 8-4-203(d)(2)(B)(i) (Repl. 2007), which provides as follows:

In the case of any discharge limit, emission limit, environmental standard, analytical method, or monitoring requirements, the record of the proposed action and the response shall include a written explanation of the rationale for the proposal, demonstrating that any technical requirements or standards are based upon generally accepted scientific knowledge and engineering practices.

Louisiana urges that the record in this case demonstrates that the permit was based not on generally accepted scientific knowledge and engineering practices, but upon a flawed computer model utilized by the environmental consulting firm employed by JPG to assess the Ouachita River.

JPG hired the consulting firm of GBMc & Associates (GBMc) to evaluate the water-quality impacts of the pipeline's discharge on the Ouachita River and in the Felsenthal National Wildlife Refuge. Roland McDaniel of GBMc testified before the AHO that he conducted a series of toxicity, or biomonitoring, tests to determine whether the permit would comply with the Commission's Regulation No. 2.508, which provides in part that "[t]oxic substances shall not be present in receiving waters, after mixing, in such quantities as to be toxic to human, animal, plant or aquatic life or to interfere with the normal propagation, growth and survival of the indigenous aquatic biota." He explained that the tests consisted of exposing two different species—a fathead minnow and a water flea—to the effluent being discharged from the pipeline for seven days to determine whether the creatures suffered any negative impact form the effluent. McDaniel stated that the results of his testing

showed that not only did the minnow and water flea not die in the effluent, but they grew and reproduced healthily.

In addition to the toxicity testing, GBMc ran a series of computer models to determine the impacts of the effluent. Greg Phillips of GBMc first ran a computer model called Multi-SMP to determine the permit limits for oxygen-demanding substances. Philips initially received a model of the Ouachita River from ADEQ and updated that model with GBMc's own depth data; he then re-ran the models over a twenty-mile-long section of the river with the wasteloads that had been proposed for the joint pipeline. That model indicated that there would be an "oxygen sag" near Moro Bay, but the sag would be well within the water quality limits set for dissolved oxygen and would begin to recover well before the Ouachita reached the Louisiana state border. Phillips noted that the Multi-SMP model was more conservative than many other models, providing more conservative predictions of oxygen than did later model runs.

Around June of 2005, Phillips "started hearing that there may be some concerns over nutrient levels in the river." Accordingly, GBMc ran an EPA-approved computer model called AQUATOX to assess whether the addition of nutrients would have an effect on the growth of plants in the Felsenthal. The purpose of the AQUATOX model was to determine whether the addition of nutrients, such as phosphorus and nitrogen, via the pipeline would produce a change in aquatic plant growth. Comparison of a chart of areas without the additional nutrients with a chart showing the addition of phosphorus and nitrogen showed

that there was not "any effect on plant growth." Phillips explained that, in order to calibrate the AQUATOX model, he collected samples of the biomass from at least two or three locations in Felsenthal.⁵

In addition to the Multi-SMP and AQUATOX models, Phillips utilized two other calibrated computer models: the QUAL2K and the WASP. The QUAL2K model was also intended to measure the impacts of nutrients in the Ouachita River and was used as a comparison to the dissolved oxygen results derived from the Multi-SMP model. The WASP model was used to predict dissolved oxygen levels in the Crooked S Slough on an annual basis; that model, as well as the QUAL2K model, showed that the discharge from the pipeline would not significantly impact oxygen levels.

Despite the model runs, Louisiana remained concerned that the river depths that had been used by GBMc in its modeling did not match a model produced by the Corps of Engineers that showed the river to be much deeper. In response, Phillips increased the river depth in his models and ran them again. Phillips testified that he "took the QUAL2 model results that we had with actual river depth, and . . . just forced the model to include a deeper river, as Louisiana suggested, and we re-ran the model . . . and the results were pretty much the same as they had been in the original report. There was no change." Phillips opined that

⁵ Phillips explained that calibration is "a process by which you go to the field and you collect real water quality data in whatever condition you observe when you're in the field that day. You take that data back and you use it in a water quality model as basically a target for your predictions."

this was because the Ouachita was so deep to begin with, so "that much more depth doesn't have a big bearing on anything in the model."

Phillips testified that his office received a map called a "HEC model" of the river's field depth from the Corps of Engineers to use in connection with the QUAL2K model. Phillips stated that he believed that the Corps' model had been put together back in the early 1980s. After deposition testimony uncovered a problem and after further consultation with the Corps, it was finally discovered that the Corps' model did not represent the two dams—the Thatcher Dam and the Felsenthal Dam—on the river. Since his data "was much newer," however, he believed he could count on his data. Phillips acknowledged that the presence of the two dams would change the hydrology of the river, but he noted that the final modeling that was completed used the actual river depths, and the results reached with the Corps' HEC model were "basically no differen[t]" than the results he reached using the actual depth as measured in the field.

In Order No. 9, the AHO found that the impacts of the Thatcher and Felsenthal dams were taken into account in the modeling, even though one run of the QUAL2K model used the Corps' HEC model that produced incorrect river depths. The AHO further found that GBMc addressed this concern by taking additional river-depth measurements and running the QUAL2K based on the new data. The AHO also pointed out that Louisiana failed to present any modeling evidence of its own to show that the river depths found by GMBc were "so fatally flawed as to be useless." Because the new data and the differences in the river

depths did not impact the results of the Multi-SMP or other QUAL2K models, the AHO concluded that the modeling of the Ouachita River met the standard of "generally accepted scientific knowledge and engineering practice."

On appeal, Louisiana argues that the permits issued by ADEQ were not based on generally accepted scientific knowledge because the Multi-SMP model was inadequate due to a lack of calibration and that QUAL2K computer model utilized by Phillips was based on the Corps of Engineers' model that did not accurately reflect the hydrology of the Ouachita River—i.e., the model was based on a map that did not reflect the presence of the two dams on the river. In support of its argument, it cites testimony from its own expert witnesses who all stated that it was critical to "get the hydrology correct." For example, Richard Duerr of LDEQ testified that "the first thing you have to do with any . . . water quality model is to make sure that the model is hydraulically calibrated. If it's not, it's over at that point." In addition, LEAN's hydrology expert, Eldon Blancher, testified that "if you get the hydrology wrong, then nothing else matters." Louisiana also points to Phillips's testimony wherein he stated that the Corps of Engineers had "given [them] a model that wouldn't have been capable of doing exactly what we were trying to use it for." In essence, Louisiana argues that, because its experts testified that getting the hydrology correct was of critical importance, and because the underlying modeling data was wrong, then the permit was improperly issued.

Louisiana relies on cases such as *State of Ohio v. United States Environmental Protection Agency*, 784 F.2d 224 (6th Cir. 1986), in support of its argument that where an agency relies on a flawed computer model, the resulting permit is not based on sound science and engineering practice, and such reliance renders the decision arbitrary, capricious, and not in accordance with the law. *State of Ohio*, however, involved a situation in which only one computer model was used, and EPA's reliance on that model was demonstrably flawed because, while the model was sensitive to site-specific characteristics, EPA did not validate the model at different sites in accordance with its own guidelines. *State of Ohio*, 784 F.2d at 231.

In the present case, however, multiple computer models were used, and even the QUAL2K model that Louisiana alleges was faulty was run a second time with corrected parameters. Louisiana first complains that the Multi-SMP model was "inadequate" and uncalibrated. Testifying for Louisiana, Barbara Romanowsky, the administrator of LDEQ's water quality assessment division, asserted that the Multi-SMP model had not been calibrated to water quality data, but she also conceded that she did not re-run that model, even though she had all of the model input data, because she did not feel it was an "appropriate model for this circumstance." As noted above, the AHO placed considerable import on the fact that Louisiana did none of its own modeling to rebut or refute the modeling conducted on behalf

⁶ Romanowsky's testimony was also controverted by Michael Corn of environmental consulting firm Aquaeter, who stated that, with the Multi-SMP model, "they actually had measured depths they put into that stretch, so those depths were right on."

of the permit applicants, and the Commission upheld the AHO's findings. Because our statutes place on the challenging party the burden of rebutting the presumption that the Commission's decision is reasonable and valid and has complied with all the requirements of the law, we cannot disagree that Louisiana failed to meet its burden of proof.

Louisiana then takes particular issue with the QUAL2K model, arguing that the permit was not based on good science because the data underlying the computer model was incorrect. The testimony showed, however, that the three other computer models were not based on the Corps' HEC model, but were instead calibrated using actual field measurements. In addition, the evidence also showed that when the QUAL2K model was run a second time after the permit issued, with the correct river depth and velocity information, the results were not substantially different from the first QUAL2K model and continued to show that the discharge from the proposed pipeline would not have an adverse effect on the Ouachita. Moreover, Michael Corn, the president and technical director of an environmental consulting firm called Aquaeter, testified that the presence or absence of the dams in the computer model was "a moot point," because the models that were used took into account the actual changes in depth along the length of the river.

Louisiana attempts to make much of its witnesses' testimony regarding the importance of proper hydrology and asserts that the Commission's disregarding of its experts rendered its decision unsupportable. This court has noted, however, that expert testimony qualifies as substantial evidence unless it is shown that the expert opinion is without a reasonable basis.

Pine Bluff for Safe Disposal, 354 Ark. at 573, 127 S.W.3d at 516 (citing Ark. State Plant Bd. v. Bullock, 345 Ark. 373, 48 S.W.3d 516 (2001)). "As true for any other factfinder, it is the prerogative of the agency to believe or disbelieve any witness and to decide what weight to accord the evidence." Id. (citing Ark. Bd. of Exam'rs v. Carlson, 334 Ark. 614, 976 S.W.2d 934 (1998)).

Here, the AHO—and, subsequently, the Commission—clearly credited Phillips's testimony. The AHO found that

the impact of the Thatcher and Felsenthal dams were taken into account by the modeling, even though one run of the QUAL2K model used the [Corps of Engineers'] HEC model that produced incorrect river depths. GBMc addressed this concern by taking additional river depth measurements and running the QUAL2K based on the new data and the difference in river depths did not impact the results of the Multi-SMP or other QUAL2K models.

In addition, the AHO specifically found that, despite Louisiana's complaints about GBMc's modeling, Louisiana "did not present any modeling evidence to show that the river depths found by GBMc were so fatally flawed to be useless."

As noted above, Louisiana has the burden of proving that the Commission's findings of fact were not prima facie evidence of the matters therein stated. *See* Ark. Code Ann. § 8-4-229(c). Given that it was within the Commission's purview to determine which expert is more credible, Louisiana's argument that its experts disagreed with JPG's expert are simply unavailing and insufficient to satisfy its burden of proof in this case.

B. Sufficient Notice and Opportunity to Be Heard

According to the language of 33 U.S.C. § 1342(b)(3),⁷ a state whose waters may be affected by an NPDES permit has the right to notice of each application for a permit and an opportunity to be heard before a ruling on each application. In its second point on appeal, Louisiana argues that it was deprived of a sufficient opportunity to review the data upon which the permit was based and to comment upon that data. It complains primarily that GBMc's Revised Final Report was issued on February 13, 2007 and emailed to LDEQ on February 15, 2007, but ADEQ demanded that Louisiana review the report and provide comments within five days, or by February 20, 2007. Further, Louisiana alleges that the document that was emailed on February 15 did not contain a readable version of the data sets contained in the appendices to the report and was thus "virtually useless." After receiving the report, Louisiana informed ADEQ that it maintained its objection to the issuance of the permits until it had sufficient time to review the report. ADEQ nonetheless issued the permits on February 28, 2007, and Louisiana did not get a copy of the electronic version of the modeling for the Revised Final Report until May 9, 2007, after the permit had been issued. This, Louisiana contends, deprived it of its right to have a meaningful opportunity

⁷ Section 1342 provides the means by which a state may seek to administer its own NPDES permit program. Section 1342(b) states, in part, that, "[a]t any time after the promulgation of the guidelines required by subsection (i)(2) of section 1314 of this title, the Governor of each State desiring to administer its own permit program for discharges into navigable waters within its jurisdiction may submit to the Administrator [of EPA] a full and complete description of the program it proposes to establish and administer under State law or under an interstate compact."

to review the data upon which the permit was based and comment thereupon, alleging that it would have uncovered the faulty HEC model had it only been given more time.

The AHO and the Commission disagreed with Louisiana's arguments, finding that Louisiana had been actively involved in the permitting process since 2005. The AHO, in his opinion, which was adopted and affirmed by the Commission, noted that Louisiana requested information on GBMc's modeling work at least seven times, and asked ADEQ on at least four occasions to defer issuance of the pipeline permit. In addition, the AHO found that Louisiana submitted comments on the draft permits prior to the extended public comment deadline of June 21, 2006. The AHO further commented that Louisiana received a copy of GBMc's June 1, 2006 Nutrient Model Report and not only commented on the report, but asked for more data and a ninety-day extension of the comment period to make more extensive comments.

Citing the testimony presented by the parties, the AHO pointed out that Richard Duerr of LDEQ had informed the EPA in August 2006 that he intended to conduct a model of the Ouachita from Smackover Creek in Arkansas to Columbia Dam in Louisiana; however, LDEQ did not give him permission to do the modeling. The AHO stated that Louisiana's objections to GBMc's models concerned those things that Louisiana felt was left out of the models, but Duerr testified that he could not reach a conclusion about the potential impact of the pipeline without modeling the river into Louisiana. In addition, Barbara Romanowsky, the water quality assessment administrator with LDEQ, also conceded

that LDEQ had not done any modeling itself, nor did she personally do any modeling or review any of GBMc's models. The AHO found that, because Louisiana did not conduct any modeling itself or present evidence as to what its models might have shown, had it done any, he had "no reason to believe that Louisiana would have submitted any meaningful comments on the Revised Final Report had it been given additional time in which to review it." Accordingly, the AHO concluded that Louisiana had sufficient opportunity to make, and did make, meaningful comments on the modeling reports and draft permits.

The AHO also found that ADEQ had complied with 33 U.S.C. § 1342(b)(5), which is intended to ensure that a state whose waters may be affected by the issuance of a permit has the opportunity to submit written recommendations to the permitting state and, if such recommendations are not accepted by the permitting state, the permitting state must notify the affected state in writing of its failure to accept the recommendations, together with its reasons for so doing. The AHO found that Louisiana's sole "recommendation" to ADEQ was nothing more than a request for additional time to comment prior to ADEQ's decision on the permit application. Thus, because Louisiana did not make any "recommendations" regarding the draft permit that would have required a response from ADEQ, the AHO concluded that ADEQ had complied with 33 U.S.C. § 1342(b)(5). Again, the Commission affirmed these findings.

As noted above, Louisiana argues on appeal that ADEQ's failure to provide it with GBMc's electronic modeling data and to provide a reasonable opportunity to analyze that

data and comment on it was a violation of 33 U.S.C. § 1342(b)(3) & (5), as well as 40 C.F.R. § 122.4 and "the basic tenets of administrative procedure." JPG responds that Louisiana was indeed provided a meaningful opportunity to participate, in the sense that a "meaningful" opportunity means that the proposal must be "sufficiently descriptive of the subjects and issues involved so that interested parties [could] offer criticism and comment." *Northwest Airlines, Inc. v. Goldschmidt*, 564 F.2d 1309 (8th Cir. 1982) (citing *Ethyl Corp. v. Environmental Protection Agency*, 541 F.2d 1 (D.C. Cir. 1976)). According to JPG, the notice need not contain "every precise proposal" that the agency may ultimately adopt. *Id.* at 1319. Rather, the main question for evaluating whether an opportunity for comment is "meaningful" is a determination of whether it is "sufficiently descriptive of the 'subjects and issues involved' so that interested parties [can] offer criticism and comment." *Id.*

Here, JPG asserts that Louisiana had notice of the application and plenty of time to comment, as evidenced by Duerr's testimony that LDEQ received in the mail "a CD containing three QUAL2K files comprising a calibration file, a critical projection without the pipeline discharge and a critical condition projection with the pipeline discharge" sometime in July of 2006, as well as a fax from GBMc on July 13, 2006. JPG also points to Duerr's testimony wherein he stated that his objections to GBMc's models were "just simply things that [he thought] had been left out," but he had no way of knowing whether he would have reached the same results if he had done his own modeling. In essence, JPG contends that Louisiana had more than sufficient information and notice; it simply chose not to develop

anything substantive itself, instead only complaining that it needed more time. Because Louisiana did not demonstrate what it would have accomplished with that extra time, JPG asserts that the AHO correctly determined that it had "no reason to believe that Louisiana would have submitted any meaningful comments on the Revised Final Report had it been given additional time in which to review it."

Given the deference that this court must show to decisions of the Commission, we cannot say that JPG is incorrect. The AHO found—and the Commission agreed—that Louisiana had ample opportunity prior to the issuance of the permit to make its opinions known; further, based on the evidence presented, Louisiana had the information and the opportunity to present its own modeling to contradict that conducted by GBMc, but, for whatever reason, it did not conduct any modeling. Moreover, the allegedly faulty HEC model that Louisiana complains arrived too late was not the only modeling supporting the issuance of the permit, and it became irrelevant after further modeling demonstrated no significantly different results. Having failed to take advantage of the opportunity that was presented to it, Louisiana should not be heard to complain now that it was not given a "meaningful opportunity" to be heard.

In addition, the evidence supported the AHO's conclusion that ADEQ complied with 33 U.S.C. § 1342(b)(5), which, as noted above, provides that an affected state "may submit written recommendations to the permitting State (and the Administrator) with respect to any permit application" and is entitled to notice in writing if the permitting state does not accept

the affected state's recommendations. Louisiana's complaint was that it could not "perform an adequate review [of the Revised Final Report] in such a short time period" and was thus "unable at this time to withdraw our objection." The United States Supreme Court commented in *International Paper Co. v. Ouellette*, 479 U.S. 481 (1987), that section 1342(b) requires that, prior to issuing a state permit, a source State, such as Arkansas here, "must send notification, and must consider the *objections and recommendations* submitted by other States before taking action." *Id.* at 490 (emphasis added). Because Louisiana's "objections" in February of 2007 were nothing more than a request for additional time to review the data, it was not the sort of recommendation contemplated by section 1342(b)(5). Accordingly, the Commission correctly determined that Louisiana had not been deprived of its rights to notice and an opportunity for a hearing.

C. Louisiana's Water Quality Standards

In its third and final point on appeal, Louisiana argues that ADEQ failed to meet the obligations imposed by 33 U.S.C. § 1341(a)(2), which prohibits the issuance of an NPDES permit if the issuing state cannot ensure that the discharge will not affect the quality of any other state. Because the modeling on which JPG and ADEQ relied did not model water quality conditions beyond Felsenthal all the way to the Louisiana border, Louisiana contends that ADEQ failed in its responsibilities under section 1341, 40 C.F.R. § 122.4(d), and 40 C.F.R. § 122.44(d) to ensure compliance with the applicable water-quality standards of affected states.

Louisiana maintains that ADEQ failed to meet its obligation to ensure that its water-quality requirements would not be impaired, noting that GBMc's modeling did not extend more than a mile below the Felsenthal Dam and did not take into account the discharge from the Georgia-Pacific plant at Crossett that flowed into the Ouachita downstream from JPG's proposed pipeline. Louisiana further notes the testimony of Dr. Eldon Blanchard, who spoke of the necessity of modeling all the way to the state line in order to determine the impact of the pipeline's discharge. Urging that the burden is on ADEQ and JPG to show that the water quality in Louisiana will not be impacted by the discharge, Louisiana maintains that ADEQ failed to meet its burden because the evidence showed elevated levels of nutrients and phosphorus from the pipeline will enter Louisiana's waters.

As mentioned above, Louisiana premises its arguments on 33 U.S.C. § 1341(a)(2), 40 C.F.R. § 122.4(d), and 40 C.F.R. § 122.44(d). As an initial matter, Louisiana appears to have misinterpreted 33 U.S.C. § 1341(a)(2). Section 1341(a)(1) provides, in part, as follows:

Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title.

(Emphasis added.) Section 1341(a)(2) goes on to state the following:

Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days

of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that such discharge will affect the quality of its waters so as to violate any water quality requirements in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of such license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency. Such agency, based upon the recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions cannot insure such compliance such agency shall not issue such license or permit.

(Emphasis added.)

The United States Supreme Court has interpreted the language of 33 U.S.C. § 1341(a)(2) as "prohibit[ing] the issuance of any federal license or permit over the objection of an affected State unless compliance with the affected State's water quality requirements can be ensured." *Arkansas v. Oklahoma*, 503 U.S. 91, 103 (1992) (emphasis added). Thus, section 1341(a)(2) appears to apply to applications for federal NPDES permits submitted to EPA, as opposed to state NPDES permits authorized under 33 U.S.C. § 1342(b). *See also id.* at 104 (noting the distinction between "federal permits issued pursuant to §§ [1341(a) and 1342(a)], [and] state permits issued under § [1342(b)]"). Accordingly, Louisiana's reliance on section 1341(a) is misplaced, as this case involves an application for a *state* permit undertaken pursuant to the authority granted to the State of Arkansas by section 1342(b).

Louisiana further argues, however, that the Commission's decision violated 40 C.F.R. § 122.4(d) and 40 C.F.R. § 122.44(d).8 Section 122.4(d) states that no State NPDES permit may be issued "[w]hen the imposition of conditions cannot ensure compliance with the applicable water quality requirements of all affected States." Again, it raises its concerns with the fact that JPG's modeling stopped short of the Louisiana border and did not examine the impact of the pipeline discharge, including nutrients and dissolved oxygen, combined with the existing discharge from the downstream Georgia-Pacific mill.

The United States Supreme Court has noted that, even though a state affected by another state's permitting decision may be impacted by discharges originating in the permitting state, an affected state "only has an advisory role in regulating pollution that originates beyond its borders" and "does not have the authority to block the issuance of the permit if it is dissatisfied with the proposed standards." *Int'l Paper Co. v. Ouellette*, 479 U.S. at 490.

The AHO made specific findings of fact regarding Louisiana's arguments that the permit would not protect its water quality. First, the AHO noted that the Multi-SMP Model demonstrated that the dissolved oxygen levels would return to normal background

⁸ Although Louisiana cites 40 C.F.R. § 122.44(d), it does not set out the text of the regulation or make any significant argument regarding it. Accordingly, we do not discuss it here.

⁹ The restriction set out in 40 C.F.R. § 122.4(d) applies whether the permit is issued by the EPA or by an approved state NPDES program. *See Arkansas v. Oklahoma*, 503 U.S. at 105, n.10.

conditions prior to reaching Louisiana. Thus, the AHO concluded that the results of the Multi-SMP model made it unnecessary to model the pipeline discharge all the way to Louisiana. Second, the AHO found that the QUAL2K model, which looked at the impact of nutrients in the Ouachita River, stopped just past the Felsenthal Dam at LDEQ's request. Pointing out that Louisiana "does not even put nutrient limits in the permits it issues for discharges into the Ouachita River in Louisiana," the AHO concluded that there was no evidence that increased nutrients from the joint pipeline discharge would cause a violation of any water quality standard applicable to the Ouachita River in Louisiana. The Commission adopted and affirmed these findings.

There was substantial evidence supporting the AHO and the Commission's decision in this respect. Richard Duerr of LDEQ testified that "Louisiana has not been limiting nutrients at this point." A TMDL¹⁰ Report prepared by LDEQ, titled "Ouachita River TMDL for Biochemical Oxygen-Demanding Substances and Nutrients" stated that, while the Ouachita is on a court-ordered list of rivers impaired due to nutrients, LDEQ's position was that "when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited." Thus, the TMDL only established load limitations for oxygen-demanding substances and set goals for reducing those substances. In addition, because the models run by LDEQ did not

¹⁰ TMDL stands for "Total Maximum Daily Load." The concept of a TMDL is discussed in more depth in LEAN's first point on appeal, set out below.

indicate that the dissolved oxygen was significantly impacted by increased nutrient discharges, the report "[did] not suggest that a TMDL for nutrients is needed."

Other testimony supported the AHO and Commission decisions. For example, Michael Corn opined that the joint pipeline would not have adverse impacts below Felsenthal because the nutrients that would be responsible for algal growth would be "primarily uptaken in the first twenty miles downstream from the discharge," and that the amounts of inorganic phosphorous, a nutrient, decreased "to close to background levels well below Felsenthal Dam or before the Felsenthal Reservoir."

As noted above, expert testimony qualifies as substantial evidence unless it is shown that the expert opinion is without a reasonable basis. *Ark. St. Plant Bd. v. Bullock*, 345 Ark. 373, 48 S.W.3d 516. Here, the AHO's conclusion, as affirmed by the Commission, that there was no evidence that increased nutrients from the pipeline discharge would cause a violation of Louisiana's water-quality standards was, supported by expert testimony and thus, was supported by substantial evidence.

III. Arguments of Appellant LEAN

LEAN raises two primary arguments on appeal, asserting that the Commission failed to apply the law when it found that the mercury discharge authorized by the permit is legal, and that there is no substantial evidence in the record to show that the joint pipeline discharges ensure compliance with Louisiana's nutrient standards.

A. Mercury Standards

In its first argument on appeal, LEAN contends that the Commission erred in concluding that the mercury discharge authorized by the permit is legal. None of the parties dispute that the Ouachita River is "impaired" due to levels of mercury found in some fish in the river. According to the executive summary accompanying a 2002 TMDL report on mercury levels in the Ouachita Basin, Arkansas, Louisiana, and EPA took a river-basin-wide approach to address the level of mercury in the river and developed a Total Maximum Daily Load (TMDL). The TMDL sets the maximum amount of mercury that pollution sources can discharge into the river each year. LEAN argues that the amounts of mercury allowed to be discharged under the permits is in excess of the TMDL, and therefore, the permits issued in this case are in violation of 40 C.F.R. § 122.4(i).

Section 303(d) of the Clean Water Act (CWA) mandates that states establish a TMDL for each pollutant that causes a body of water to fail to meet water quality standards. 33 U.S.C. § 1313(d)(1)(C). A TMDL is the sum of pollutants that a body of water can absorb from all point and nonpoint sources and still meet water quality standards for its designated

The Arkansas Game & Fish Commission "Regulation for Flowing Waters" advises that people should not eat certain kinds of fish, such as catfish, gar, bowfin, drum, pickerel or largemouth bass, caught in the Ouachita River due to mercury contamination. A separate Game & Fish Commission publication notes that this is due to the fact that these fish tend to feed on other fish, which themselves are contaminated with mercury. Fish such as bream and crappie are preferable to bass "since these panfish eat lots of other things besides fish." This "bioaccumulation" is why people are advised not to eat the larger fish from rivers with mercury advisories.

uses.¹² See 40 C.F.R. § 130.2(i); In re: Cities of Annandale and Maple Lake NPDES/SDS Permit Issuance for the Discharge of Treated Wastewater, 731 N.W.2d 502, 510–11 (Minn. 2007). If a TMDL has been established for a body of water identified as impaired under section 303(d), an NPDES permit may not be issued unless the permitting authority finds that the new source or discharge will not cause or contribute to the violation of water quality standards and will not violate the TMDL. See 40 C.F.R. § 122.4(i); In re: Cities of Annandale and Maple Lake, 731 N.W.2d at 511.

is caused by diffuse sources that are not regulated as point sources and normally is associated with agricultural, silvicultural and urban runoff, runoff from construction activities, etc. . . . In practical terms, nonpoint source pollution does not result from a discharge at a specific, single location (such as a single pipe) but generally results from land runoff, precipitation, atmospheric deposition, or percolation.

EPA Office of Water, Nonpoint Source Guidance 3 (1987).

¹² The term "point source" means "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged." 33 U.S.C. § 1362(14).

Unlike point source discharges, nonpoint source discharges are not defined by the Act. One court has described nonpoint source pollution as "nothing more that a [water] pollution problem not involving a discharge from a point source." *Nat'l Wildlife Fed'n v. Gorsuch*, 693 F.2d 156, 166 n.28 (D.C. Cir. 1982) (internal quotation marks omitted). Moreover, nonpoint sources, unlike point sources, are not subject to the NPDES system. *See Cordiano v. Metacon Gun Club, Inc.* 575 F.3d 199, 220 (2d Cir. 2009). EPA's guidance on nonpoint source pollution notes that nonpoint source pollution

Specifically, section 122.4(i) provides, in relevant part, that no State NPDES permit may be issued

[t]o a new source or new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by sections 301(b)(1)(A) and 301(b)(1)(B) of CWA, and for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate, before the close of the public comment period, that:

- (1) There are sufficient remaining pollutant load allocations to allow for the discharge; and
- (2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.

On appeal, LEAN argues that, because the Ouachita River is in violation of water quality standards for mercury, and the EPA developed a TMDL for mercury in the river, 40 C.F.R. § 122.4(i) prohibits ADEQ from issuing a new permit to discharge mercury into the Ouachita River. LEAN contends that it is "undisputed" that ADEQ did not consider the mercury TMDL when setting the mercury limits in the permit and asserts that, because ADEQ did not take the mercury allocations in the mercury TMDL into account prior to the close of the comment period, the issuance of the permit was contrary to law. Further, LEAN argues that ADEQ did not require the JPG to demonstrate that existing discharges into the Ouachita River are subject to compliance schedules, as required by 40 C.F.R. § 122.4(i)(2), and that ADEQ failed to address whether there are sufficient remaining mercury load

allocations in the mercury TMDL to allow for the joint pipeline discharge. Thus, LEAN maintains that the Commission's decision is illegal because it was affected by errors of law and was not supported by substantial evidence.

At the hearing before ADEQ, Kent Thornton testified that his company, FTN Associates, was called upon by the EPA to do a study of the Ouachita River to prepare a TMDL on mercury. Thornton stated that Arkansas's water quality standards for mercury were set at 12 nanograms per liter, or twelve parts per trillion. He further noted that the purpose of the TMDL was to look at the reductions in mercury required in order to attain or to be below the "fish consumption action level," and that the TMDL for the Ouachita accomplished that. Thornton also pointed out that his analysis of NPDES point sources in the Ouachita watershed indicated that the cumulative loading of mercury from those point-source facilities was less than one percent of the total estimated mercury load. Thornton said that even if the TMDL were to provide a waste load allocation for mercury of zero, the applicable water quality standards for mercury would not be attained in the river because of the very high mercury loadings from nonpoint and background sources.

Thornton further testified that there had been no known "exceedances" of the mercury water quality standard based on testing with detections of 12 nanograms per liter, a comment reflected in the Executive Summary preceding the TMDL, which stated that both Arkansas and Louisiana have numeric mercury water quality standards of 12 nanograms

¹³ See ADEQ Regulation 2.508.

per liter, and there "have been no known violations of the numeric water quality standards." The numeric standard of 12 nanograms per liter was developed by EPA to protect against the bioaccumulation of mercury in fish and to protect humans from consuming aquatic life contaminated by mercury.

Describing the TMDL for the Ouachita, Thornton testified that the load allocation for NPDES point sources was 356 grams of mercury per year, and the load allocation for city municipal wastewater treatment facilities was 586 grams per year. Thus, as the AHO found, the mercury TMDL allocates to all point sources in the Ouachita River 942 grams per year.

Thornton further noted that the TMDL was not intended to set criteria, because the water criteria were already established, but was intended to "look at the load reductions required in order to achieve reduction in the mercury action level for fish tissue mercury concentration." He pointed out that the largest source of mercury in the river was atmospheric, and the relative contribution of the NPDES sources in comparison to the other sources of mercury was less than one percent of the total load.¹⁴ Further, he opined that if ADEQ issued a permit that imposed the water quality criteria as the basis for deriving a permit limit, that would be consistent with the TMDL.

¹⁴ In a similar vein, Joe Nix, a former professor of chemistry at Ouachita University, testified that there was "already mercury [in the Ouachita River] no matter what the input is, [from] a natural source." Nix noted that the average mercury concentration in over 600 rock samples from the Ouachita Mountain area was almost exactly the same as the mercury concentration in sediment taken from the Felsenthal.

Martin Maner, ADEQ's Water Division chief, testified that he was concerned that the permit sought by the JPG should have some mercury limits due to the fact that the Ouachita was impaired for mercury; therefore, he suggested that the permit include a limit of 12 nanograms per liter because he felt "that would be appropriate since that was the number that EPA said should be applicable in the water column." ¹⁵

In addition, testimony was presented that demonstrated that none of the entities seeking to construct the pipeline would actually discharge any mercury; rather, the mercury that would be present in their effluent would come from the Ouachita River itself. Roland McDaniel, a scientist at GBMc, testified that the permit applicants used Ouachita River water as make up water, and if they used the pipeline, that water would go right back into the river. When asked what would happen if the applicants were required to comply with a zero-mercury standard, McDaniel stated that they would "automatically be in violation of the permit because they would be picking it up from the river water to the process and going right back out." Further, McDaniel said that he was "not aware of any mercury sources in any of the processes that any of these facilities use, other than the Ouachita River potential." Similarly, Martin Maner testified that "as far as we know, the analysis that's been done, there's no mercury in any of the discharges . . . according to the level of detection."

¹⁵ We note that EPA withdrew its objections to the issuance of the NPDES permit, concluding that the permit conformed to the guidelines and requirements established by the Clean Water Act and NPDES regulations.

On appeal, LEAN argues primarily that the permit should not have issued because ADEQ did not comply with 40 C.F.R. §122.4(i) by failing to ensure that the pipeline's discharge of mercury would not violate the TMDL established for the Ouachita. As noted above, under section 122.4(i), a permit may not be issued to a new discharger if the discharge "will cause or contribute to the violation of water quality standards." (Emphasis added.) Here, however, there was no proof presented below that the new discharge that was the subject of the permit would "cause or contribute" to any violation of the water quality standards. In fact, the evidence and testimony indicated that any mercury that was discharged into the Ouachita River would originally be sourced from the river itself and would not originate from the industrial processes used by the JPG.

To the extent that LEAN argues that there should have been a zero-mercury limit in the permits, the United States Supreme Court has rejected a construction of the CWA that would prohibit any discharge of effluent that would reach waters already in violation of existing water quality standards. *See Arkansas v. Oklahoma*, 503 U.S. at 107. The Court noted that the statute "does, however, contain provisions designed to remedy existing water quality violations and to allocate the burden of reducing undesirable discharges between existing sources and new sources." *Id.* at 108 (citing 33 U.S.C. § 1313(d)). Thus, the Court continued,

rather than establishing [a] categorical ban [on new discharges of effluent]—which might frustrate the construction of new plants that would improve existing conditions—the Clean Water Act vests in the EPA and the

States broad authority to develop long-range, area-wide programs to alleviate and eliminate existing pollution. *See, e.g.*, [33 U.S.C.] § 1288(b)(2).

Id. We conclude that the decision of the AHO, as adopted and affirmed by the Commission, properly interpreted and applied 40 C.F.R. § 122.4(i).¹⁶

B. Louisiana's Water Quality Standards

In its second point on appeal, LEAN asserts that there is no substantial evidence in the record to show that the joint pipeline discharge will ensure compliance with Louisiana's nutrient standards. LEAN's arguments in this portion of its brief are largely the same as the arguments raised in Louisiana's third point on appeal, discussed above, in that LEAN complains that JPG's modeling stopped short of the Louisiana border, and thus, the JPG applicants failed to demonstrate that their discharge would "not lead to a detectable change in water quality" in the affected state. We reject LEAN's arguments on this issue for the same reasons set out above.

LEAN also complains that the Commission focused only on Louisiana's dissolved oxygen standards, and not on Louisiana's nutrient standard. As discussed above, substantial

that existing dischargers into the Ouachita were subject to compliance schedules pursuant to section 122.4(i)(2), it does not appear that the AHO or the Commission ever made a ruling on that question. Accordingly, this particular issue is not preserved for appellate review. See Seiz Co. v. Ark. State Highway & Transp. Dep't, 2009 Ark. 361, 324 S.W.3d 336 (where the court has no ruling on an issue from either the administrative agency or the circuit court, arguments pertaining to that issue are not preserved for our review); Ark. Wildlife Fed'n v. Ark. Soil & Water Conservation Comm'n, 366 Ark. 50, 233 S.W.3d 615 (2006) (holding that to preserve arguments for appeal, the appellant must obtain a ruling below).

evidence supported the Commission's finding that increased nutriens from the joint pipeline would not cause a violation of any water quality standard applicable to the Ouachita River. For the reasons discussed in that portion of the opinion, we also dismiss LEAN's arguments on this point.

IV. Arguments of Appellant STO

Appellants Save the Ouachita and Kent Stegall (collectively, "STO") raise ten points in their brief on appeal.

A. "Anti-Backsliding" Provisions

In its first point on appeal, STO argues that ADEQ and the Commission erred in finding that the permit issued to the JPG did not violate the "anti-backsliding" provisions of 33 U.S.C. § 1342(o).¹⁷ In essence, STO contends that the effect of the pipeline will be to allow more pollutants to be discharged into the Ouachita River than are presently allowed. This argument is not properly before the court, however. Arkansas Code Annotated section 8-4-205(b)(2) (Repl. 2007) provides that "[n]o interested party requesting a hearing . . . may raise any issue in the hearing that was not raised in the public comments unless the party

¹⁷ Section 1342(o) states, in relevant part, as follows:

In the case of effluent limitations established on the basis of subsection (a)(1)(B) of this section, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 1314(b) of this title subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.

raising the issue shows good cause why such issue could not, with reasonable diligence, have been discovered and presented during the public comment period."

In Order No. 3, entered on June 14, 2007, the AHO noted that the JPG had moved to dismiss numerous issues raised by LEAN and STO because they had not been raised in the public comments. Among these issues was the question of "anti-backsliding." The AHO stated that he had reviewed the comments and determined that there were no specific references to the term "anti-backsliding" and no language describing that objection as a reason to deny the permit. Therefore, the AHO determined that the anti-backsliding issue was not a proper issue for appeal. Because this issue was dismissed from the proceeding below, there is no ruling for this court to review. *See Ark. Contractors Licensing Bd. v. Pegasus Renovation Co.*, 347 Ark. 320, 64 S.W.3d 241 (2001).

B. Regulation 2.504

In its second argument on appeal, STO contends that the permit does not meet the standard set forth in PC&E's Regulation 2.504 for pH. Regulation 2.504 states that, "[a]s a result of waste discharges, the pH of water in streams or lakes must not fluctuate in excess of 1.0 unit over a period of 24 hours and pH values shall not be below 6.0 or above 9.0." STO maintains that the permit, as issued, does not prohibit fluctuations exceeding 1.0 units in a twenty-four hour period. It cites the testimony of Dr. Joe Nix, who stated that pH levels in the water could have an effect on nutrients and the methylation of mercury. STO concedes that the permit establishes that the pH level must remain between 6.0 and 9.0, but

it nonetheless asserts that "no explanation for the range of pH being set as it was is given and no science supports the proposition that setting it at this range will be protective of water quality in the Ouachita River."

STO provides this court with no citation to convincing authority, nor does it point to any evidence or testimony that the pipeline discharge would cause the pH in the Ouachita to fluctuate more than one unit over a twenty-four hour period. In addition, however, STO's own witness, Dr. Nix, testified further that, so long as the pH stayed in the 6.0-to-9.0 range, "you're probably okay as far as making methylmercury." The permit requires pH levels to stay in the 6.0-to-9.0 range, and that range is identical to the requirements of Regulation 2.508. Therefore, we conclude that there is no merit to STO's second point on appeal.

C. Regulations 2.201, 2.304, 2.402, 2.405 and 2.509

In its third point on appeal, STO urges that the permit violates several Commission Regulations in various ways. In particular, STO contends that the discharges allowed pursuant to the permit will add nutrients and mercury to the river, exacerbating existing problems in the water; will degrade the existing use of the water; will produce undesirable aquatic life and result in the dominance of nuisance species; will exceed water quality standards; and will degrade the aquatic habitat.

¹⁸ According to Nix, methylmercury is a neurotoxin "on the order of magnitude of a thousand times more toxic than just plain mercury." The pH level in a body of water "has a play" in methylation, or the process of converting mercury to methylmercury.

Again, however, none of STO's claims of error are supported by any citations to convincing authority. This court has consistently held that we do not consider assertions of error that are unsupported by convincing legal authority or argument, unless it is apparent without further research that the argument is well taken. *See Hanks v. Sneed*, 366 Ark. 371, 235 S.W.3d 883 (2006); *Rainey v. Hartness*, 339 Ark. 293, 5 S.W.3d 410 (1999). In addition, while STO points to testimony that it claims support its contentions, it fails to cite to any specific portion the abstract where the testimony is purported to have been given. Arkansas Supreme Court Rule 4-2(7) requires that "[r]eference in the argument portion of the parties' briefs to material found in the abstract and addendum *shall* be followed by a reference to the page number of the abstract or addendum at which such material may be found." (Emphasis added.) The abstract of this case is 1602 pages long. This court will not pore through every page in order to ferret out the portions of testimony on which a party relies. Accordingly, we decline to address STO's argument on this issue.

D. Regulation 2.407

STO next contends that the Commission erred in finding that the permit meets the standards set out in Regulation 2.407, which declares that taste- and odor-producing substances must be limited to concentrations that will not interfere with the production of potable water, impart an unpalatable flavor to food, or result in offensive odors coming from the water. STO failed to raise this issue in its post-hearing brief, however, and the AHO and Commission never ruled on it. It is the appellant's obligation to raise an issue first to the

administrative agency and obtain a ruling thereupon in order to preserve an argument for appeal. *Hanks v. Sneed*, 366 Ark. at 382, 235 S.W.3d at 890 (where there is no ruling or order for this court to review, we will not address the argument raised on appeal); *Ark. Contractors Licensing Bd. v. Pegasus Renovation Co.*, *supra*.

E. Regulation 2.508

STO's fifth point on appeal argues that the permit violates Commission Regulation 2.508, which, as noted above, provides in part that "[t]oxic substances shall not be present in receiving waters, after mixing, in such quantities as to be toxic to human, animal, plant, or aquatic life or to interfere with the normal propagation, growth and survival of the indigenous aquatic biota." STO points out that the permit will allow the discharge of numerous chemicals such as cyanide, chromium, zinc, nickel, selenium, cadmium, and mercury, and asserts that "insufficient study was conducted by ADEQ to affirmatively determine if the amounts [of those substances] will meet the mandate of Regulation 2.508.

We disagree with STO's contentions. The Commission's decision reflects that "the toxicity evaluation demonstrated that the pipeline effluent, as simulated during the testing, would not cause a violation of the toxicity water quality standards" and concluded that the pipeline permit did not violate Regulation 2.508. This decision was supported by testimony in the record. For example, Roland McDaniel testified as to the toxicity testing, stating that when the test organisms—flathead minnows and water fleas—were exposed to one hundred percent effluent, there was no lethality, and the organisms' growth and reproduction were

unaffected. McDaniel further testified that effluent from the pipeline would not exacerbate the problem with fish kills in the backwater areas of the Felsenthal, because the flow from the pipeline does not "get back into those areas where the fish kills are occurring." In sum, McDaniel opined that the discharge from the joint pipeline would not result in toxicity in the Ouachita River or in the Felsenthal Reservoir. Under our standard of review, this expert testimony constituted substantial evidence to support the AHO and Commission's decision. See Ark. State Plant Bd. v. Bullock, supra.

Although STO argues that ADEQ did not conduct any independent testing of the toxicity levels, it cites no authority that indicates that ADEQ was required to do so. In the absence of any convincing authority, this court will not, as STO suggests, remand the permits to the Commission "with directions that they conduct proper studies to ensure any permit issued not allow the discharge of toxic materials into the Ouachita River." We conclude that the Commission's decision in this regard was supported by substantial evidence.

F. Regulation 2.304

STO's sixth argument on appeal contends that the Commission erred in finding that the permits meet the standards set out in Commission Regulation 2.304 prohibiting significant physical alteration of the habitat within ecologically sensitive waterbodies. Its seventh point urges that the Commission erred in finding that the permit satisfies the same Regulation's requirement that, where significant alterations of habitat are proposed, ADEQ may require an evaluation that assesses practical alternatives to the project, including an

engineering and economic analysis. STO failed to raise these arguments below before the AHO and Commission; further, its post-hearing brief is devoid of any reference to these regulations. Because STO failed to raise the argument below and thus failed to obtain a ruling on them, these arguments are not preserved for this court's review. *See Hanks v. Sneed, supra.*

G. Mercury

In its eighth point on appeal, STO contends that the Commission erred in finding that the permits comply with the Clean Water Act's provisions concerning mercury levels. This argument, however, is little more than a condensed version of the same arguments concerning mercury raised by LEAN and addressed at length herein under section II.A. Because we have already considered and rejected this argument, we need not discuss it further here.

H. "Fishable" and "Swimmable" Standards under the Clean Water Act.

In this point, STO argues that the permit violates 33 U.S.C. § 1251(a)(2), which provides that it is the goal of the CWA that, "wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water be achieved by July 1, 1983." STO maintains that the "evidence . . . was undisputed" that the discharge issued under the permit would render the Ouachita River unfishable and unswimmable in violation of this statute. In support of its claim, STO cites generally to the testimony of several individuals who said that

they would not swim or fish in the river if the discharge were permitted. Once again, however, STO provides no specific citation to the abstract of the testimony, nor does it cite any convincing authority to the effect that testimony from non-expert witnesses that they would not swim or fish in the river constitutes substantial evidence that the permit would violate the Clean Water Act. Arguments unsupported by authority will not be considered by this court. *See Hanks v. Sneed, supra.*

I. Public Comment

STO's final argument is that the Commission erred by modifying the permit without subjecting the modifications to public comment. STO takes particular issue with the fact that the Commission "modified the time frame in which construction could begin to allow for an extension of time pending financing of the project." It urges that it was error for the Commission to make "this and other modifications without first submitting the matter for public comment and input as required by Regulation 2.202."

Once again, however, STO cites nothing in support of its argument. In addition, STO failed to raise these issues in its post-hearing brief, and there is accordingly no ruling on them. As such, we do not address this argument on appeal. *See Hanks v. Sneed, supra.*

V. Conclusion

Our statutory standard of review provides that the action of the Pollution Control and Ecology Commission "shall be prima facie reasonable and valid, and it shall be presumed that all requirements of the law pertaining to the taking thereof have been complied with," and "[a]ll findings of fact made by the Commission shall be prima facie evidence of the matters

stated therein." Ark. Code Ann. § 8-4-229(a)–(b). The burden of proving to the contrary rests with the party challenging the Commission's decision. Ark. Code Ann. § 8-4-229(c). It was thus the appellants' burden to rebut the presumption that the Commission's decision was reasonable and valid and complied with the requirements of the law. *See Tri-County Solid Waste Dist. v. Ark. Pollution Control & Ecology Comm'n*, 365 Ark. 368, 230 S.W.3d 545. We conclude that the appellants simply did not meet their burden in this appeal.

Further, to the extent that there may be ongoing concerns about the impacts of the JPG's discharge of effluent into the Ouachita River, we note that the permit issued by ADEQ contains a "reopener" clause, which provides that

this permit may be reopened for modification or revocation and/or reissuance to require additional monitoring and/or effluent limitations when new information is received that actual or potential exceedance of State water quality criteria and/or narrative criteria are determined to be the result of the permittee's discharge(s) to water body, or a Total Maximum Daily Load (TMDL) is established or revised for the water body that were not available at the time of permit issuance that would have justified the application of different permit conditions at the time of permit issuance.

The decision of the Commission is affirmed.