

ARKANSAS COURT OF APPEALS

DIVISION IV
No. CV-14-699

NUCOR STEEL-ARKANSAS AND
NUCOR-YAMATO STEEL
COMPANY

APPELLANTS

V.

ARKANSAS POLLUTION
CONTROL & ECOLOGY
COMMISSION AND BIG RIVER
STEEL, LLC

APPELLEES

Opinion Delivered: DECEMBER 9, 2015

APPEAL FROM THE ARKANSAS
POLLUTION CONTROL AND
ECOLOGY COMMISSION
[NO. 13-006-P]

AFFIRMED

KENNETH S. HIXSON, Judge

In this environmental-law case, the Arkansas Department of Environmental Quality (“ADEQ”) issued a permit allowing appellee Big River Steel, LLC (“BRS”) to build and operate a new steel mill in Mississippi County, Arkansas. Appellants Nucor Steel-Arkansas and Nucor-Yamato Steel Company (collectively, “Nucor”), who also own steel mills in Mississippi County, opposed the permit and appealed ADEQ’s decision to the Arkansas Pollution Control and Ecology Commission (“PC&E”). PC&E affirmed the permit, and Nucor sought judicial review in the Mississippi County Circuit Court. That court, upon a motion by BRS, transferred the case to the Arkansas Court of Appeals, pursuant to Arkansas

Code Annotated section 8-4-223(d) (Supp. 2015). The operative decision before us is the administrative ruling of PC&E, and we affirm PC&E's decision.

I. *Background*

The BRS permit was issued under the terms of the federal Clean Air Act, which ensures that economic growth will occur in a manner consistent with the preservation of clean air. *See* 42 U.S.C. § 7401 *et seq.* (2014). The Act particularly addresses the pollution dangers posed by “major emitting facilities,” such as the BRS steel mill in this case. These types of facilities are subject to a pre-construction review and may not be built unless, among other things, a permit has been issued containing emission limitations; the permit has undergone a regulatory evaluation; the facility demonstrates that it will employ the best available pollution-control technology; and the facility demonstrates that its emissions will not cause or contribute to excessive air pollution. 42 U.S.C. § 7475 (2014). The preconstruction review is referred to as Prevention of Significant Deterioration (PSD), meaning that it seeks to prevent significant deterioration of the air quality around the proposed construction site.

Under the Clean Air Act and its attendant regulations, the responsibility for the PSD process is shared by state and federal governments. State regulators are charged with conducting the necessary review of PSD applications and issuing the construction and operating permits. In Arkansas, the permitting authority is ADEQ. Ark. Code Ann. § 8-4-203(a) (Supp. 2015). Federal regulators are responsible for establishing air-quality standards, which set limits on the amount of pollution that will be tolerated in a given region. Toward that end, the Environmental Protection Agency (“EPA”) has instituted National Ambient

Air Quality Standards (NAAQS) for certain “criteria” pollutants, which are the most common air pollutants found in the United States. *See* 42 U.S.C. § 7409 (2014); 40 C.F.R. Part 50. Included among the criteria pollutants are the small, fine smoke particles designated as PM_{2.5} (particulate matter with a diameter of 2.5 microns or less). As of March 2013, the EPA’s primary annual air-quality standard for PM_{2.5} was twelve micrograms per cubic meter of air (12 µg/m³).

In January 2013, BRS filed a PSD application with ADEQ to construct and operate a new steel mill near Osceola in Mississippi County. The application stated that the mill would produce up to 3.4 million short tons per year of rolled steel products and would employ two electric arc furnaces and various other components, some of which would be natural-gas fired. Subsequent to its initial application, BRS submitted revised applications in March and June 2013 and asked that its application be processed in “an accelerated timely manner.”

As required by law, BRS’s application included an air-quality analysis, the purpose of which was to demonstrate that the new mill would not have an adverse impact on air quality in the region. Because the mill had not yet been constructed, BRS could only estimate the types and concentrations of pollutants that would be discharged once the mill was operational. To properly estimate the concentration of air pollutants, BRS employed a technique referred to as air-dispersion modeling. Modeling is a complex process that, among other things, uses computer inputs to predict the future emissions of a planned industrial facility. The modeling results, when added to the existing emissions from other nearby plants, yield the concentration of pollutants that will be released into the region’s ambient

air by industrial means. An air-quality analysis must also account for the “background” pollution that exists in the area due to agricultural, vehicular, or other activities. Background pollution is ordinarily measured by a monitor in place at the proposed construction site. However, no such monitor existed in Mississippi County. BRS therefore utilized a “representative” background monitor in Dyersburg, Tennessee, approximately forty miles to the northeast.

BRS’s modeling, along with ADEQ’s confirmatory modeling, predicted that the new mill and its neighboring facilities would emit a PM_{2.5} concentration of approximately 2.56 µg/m³. This figure, when combined with a reading of 9.44 µg/m³ from the Dyersburg background monitor, demonstrated an exceedance or near-exceedance of the 12 µg/m³ federal ceiling for PM_{2.5}. BRS reviewed its data and determined that it could properly reduce some of the inputs it had utilized in its initial modeling run. BRS then repeated the modeling and arrived at a PM_{2.5} level of 11.91 µg/m³—just below the 12 µg/m³ standard. This final air-quality analysis was submitted to ADEQ on June 24, 2015.

The next day, ADEQ issued a Draft Permit that, if finalized, would allow BRS to construct and operate the new mill.¹ The lengthy and data-rich Draft Permit included BRS’s most recent air-quality analysis results for PM_{2.5}. The Draft Permit also required BRS to apply specific pollution-control technology to its emissions from all plant “sources,” such as

¹ Once PSD requirements are met and the facility has been constructed, the applicant may receive an operating permit pursuant to Title V of the Clean Air Act. Arkansas has a unified permit process in which the PSD and Title V permit applications are considered simultaneously.

smokestacks and vents; set forth exact emission limits for each pollutant discharged by each source; and imposed requirements for post-construction testing and monitoring.

The issuance of the Draft Permit triggered a thirty-day public-comment period, during which BRS, the EPA, and any interested third party could present ADEQ with written comments about the draft. Ark. Code Ann. § 8-4-203(e) (Supp. 2015). Appellant Nucor, who had actively followed BRS's application, submitted over forty comments, most objecting to the technical aspects of BRS's modeling and to a perceived bias in ADEQ's evaluation of BRS's application. After reviewing the public comments, ADEQ modified the Draft Permit in some respects, then issued a Final Permit on September 18, 2013. Nucor appealed ADEQ's decision to PC&E pursuant to Arkansas Code Annotated section 8-4-205(b)(1) (Supp. 2015).

II. *Appeal to PC&E*

Nucor's petition to PC&E cited approximately thirty errors that allegedly occurred during the permitting process. Upon receiving the petition, PC&E appointed an administrative hearing officer (AHO) to review Nucor's allegations and conduct the necessary proceedings. *See* Ark. Code Ann. § 8-1-204 (Supp. 2015) (allowing PC&E to employ an administrative hearing officer). Preliminarily, the AHO dismissed several of Nucor's allegations due to procedural deficiencies, such as the failure to raise them in the public comments. *See* Ark. Code Ann. § 8-4-205(b)(2) (Supp. 2015). The remaining issues proceeded to an adjudicatory hearing.

In anticipation of the hearing, Nucor submitted pre-filed testimony from its manager of environmental affairs, Jeffrey Braun, and from three expert witnesses: Yousheng Zeng;

George Schewe; and Kenneth Weiss. In opposition to Nucor, BRS submitted pre-filed testimony from its consultant, Steven Frey, and from its expert witness, Gale Hoffnagle. ADEQ provided pre-filed testimony from its permit writer/engineer, Shawn Hutchings, and its Air Permit Branch Manager, Thomas Rheume. In addition to giving pre-filed testimony, these witnesses, along with ADEQ Director Teresa Marks, testified in person at the adjudicatory hearing, which was held over a four-day period in February 2014. The substance of the witnesses' testimony will be discussed later in this opinion, in connection with the arguments on appeal. But, essentially, Nucor's experts testified, *inter alia*, that BRS was not justified in using Dyersburg, Tennessee as a representative monitor for background PM_{2.5}; that ADEQ's review of BRS's application was superficial and unsatisfactory; that BRS and ADEQ ignored certain inputs or used incorrect inputs in the modeling process; and that proper modeling would have shown an exceedance of the air-quality standards for PM_{2.5}. BRS and ADEQ witnesses, by contrast, testified that Dyersburg, Tennessee was a proper representative site for background PM_{2.5} and that all legal requirements for modeling and ADEQ review were otherwise met.

Following the hearing, the AHO issued a recommended decision on March 20, 2014. *See Ark. Code Ann. § 8-1-203(c)(2) (Supp. 2015) (requiring the AHO to administer the hearing and, after due deliberation, submit a recommended decision to the Commission).* The AHO's recommended decision covered sixty-nine pages, discussed the evidence and the parties' arguments at length, and counseled affirmance of the BRS permit. Nucor responded with a request for oral argument before PC&E's Commissioners, challenging virtually every aspect of the AHO's recommended decision. After a brief oral argument on

April 25, 2014, the Commissioners voted to adopt the AHO's decision. That same day, PC&E issued a minute order affirming the BRS permit and adopting and affirming the AHO's recommended decision in full. Nucor then appealed to the Mississippi County Circuit Court, pursuant to Arkansas Code Annotated sections 8-4-222 and -223(a) (Supp. 2015).

III. *Judicial Review*

Once the case arrived in circuit court, BRS filed a motion to transfer the appeal to the Arkansas Court of Appeals, pursuant to the recently enacted Arkansas Code Annotated section 8-4-223(d). This statute provides that, upon the filing of a motion by the owner of the business involved in the permit process, an appeal to circuit court "shall be transferred to the Arkansas Court of Appeals." The Mississippi County Circuit Court granted the transfer, bringing the current appeal before this court. We begin by addressing Nucor's arguments concerning our standard of review.

IV. *Standard of Review*

Nucor's first argument is that our court should review PC&E's decision "sitting essentially as a circuit court." This argument stems from the above-mentioned section 8-4-223(d), which allows a "bypass" of the circuit court in favor of a direct transfer to the Arkansas Court of Appeals. We do not interpret the statute as requiring our court to act as a circuit court.

Section 8-4-223(d) was enacted as part of Act 1021 of 2013. The Act's preamble states that its purpose was, in part, to allow a "direct appeal" to the Arkansas Court of Appeals in order to "streamline" the review of PC&E rulings. When interpreting a

legislative enactment, our courts have looked to the preamble of an act to determine its purpose and intent. See *Okla Homer Smith Furn. Mfg. Co. v. Larson & Wear, Inc.*, 278 Ark. 467, 646 S.W.2d 696 (1983); *Two Bros. Farm, Inc. v. Riceland Foods, Inc.*, 57 Ark. App. 25, 940 S.W.2d 889 (1997). In light of the preamble to Act 1021, the only reasonable interpretation of section 8-4-223(d) is that it was intended simply to expedite the process of bringing a PC&E ruling forward for appellate review. We discern no intent to divest the appellate court of its ordinary function or to have it assume the posture of a circuit court.

Nucor points out that, had the appeal from PC&E's ruling remained in circuit court, that court could have allowed Nucor to present additional testimony. See Ark. Code Ann. § 8-4-227(c)(1)(B) (Supp. 2015). Accordingly, Nucor has asked this court to preserve that opportunity and to allow discovery for the purpose of developing additional evidence. This same request was presented to our court in several motions filed prior to the submission of the case. At that time, we rejected Nucor's request and denied its motion for reconsideration.² We stand by our rulings on Nucor's motions.

It is correct that Arkansas Code Annotated section 8-4-227(c)(1)(B) grants authority to the *circuit* court to hear additional evidence. See Act 1021 of 2013, § 7. However, that statute does not grant the same authority to the appellate court. As discussed above, we will review this matter as an appellate court, and not as a circuit court. So, while we understand

² Our supreme court also denied Nucor's petition for a writ of certiorari directed to this court.

Nucor's concern over losing the opportunity to present additional evidence, we decline to revisit this issue.³

Next, Nucor argues that our court should review PC&E's ruling de novo. We decline to do so. It is not our role in an administrative appeal to conduct a de novo review of the record. *See Ark. Bev. Retailers Ass'n v. Langley*, 2009 Ark. 187, 305 S.W.3d 427. Rather, we review administrative appeals with great deference to the agency's expertise, based on our recognition that such agencies are better equipped by specialization, insight through experience, and more flexible procedures to determine and analyze legal issues affecting them. *See Pine Bluff for Safe Disposal v. Ark. Pollution Control & Ecology Comm'n*, 354 Ark. 563, 127 S.W.3d 509 (2003). Agency decisions will be upheld if they are supported by substantial evidence and are not arbitrary, capricious, or characterized by an abuse of discretion. *Id.* On appeal, we give the evidence its strongest probative force in favor of the agency's findings. *Id.* Even where issues of law are concerned, we often accord deference to the agency's ruling, particularly when reviewing the agency's interpretation of statutes or its own rules and regulations. *See Lamar Outdoor Advert. v. Ark. Hwy. & Transp. Dep't*, 86 Ark. App. 279, 184 S.W.3d 461 (2004).

Given the above authorities, a de novo review is not appropriate in this appeal from an administrative agency. Furthermore, a de novo review would be inconsistent with Arkansas Code Annotated section 8-4-229 (Repl. 2011), which provides that, in any appeal involving a PC&E order, the agency's action shall be "prima facie evidence reasonable and

³ We note that Nucor does not develop an argument as to the constitutionality of section 8-4-223(d).

valid.” The same statute provides that all findings of fact by PC&E shall be prima facie evidence of the matters stated therein and that the burden of proving the contrary shall be upon the appellant. This statute unquestionably requires a deferential review of PC&E rulings, which is inconsistent with a de novo review.

Nucor nevertheless maintains that the separation-of-powers doctrine requires us to conduct a de novo review because PC&E’s ruling constituted a quasi-judicial act. *See City of Ft. Smith v. McCutchen*, 372 Ark. 541, 279 S.W.3d 78 (2008) (holding that, while a court may not conduct a de novo review when an administrative agency has acted in a legislative or executive capacity, a court may conduct a de novo review of an agency’s quasi-judicial ruling). Here, PC&E’s ruling on the issuance of a regulatory permit was an exercise of executive function, hinging on executive discretion, and was not a quasi-judicial ruling. *See Enviroclean, Inc. v. Ark. Pollution Control & Ecology Comm’n*, 314 Ark. 98, 858 S.W.2d 116 (1993); *Ark. Comm’n on Pollution Control & Ecology v. Land Developers, Inc.*, 284 Ark. 179, 680 S.W.2d 909 (1984). Thus, a de novo review would be improper. *McCutchen, supra*. The traditional, limited standard of review utilized in administrative appeals therefore applies. *See La. v. Joint Pipeline Grp.*, 2010 Ark. 374, 373 S.W.3d 292; *Tri-County Solid Waste Dist. v. Ark. Pollution Control & Ecology Comm’n*, 365 Ark. 368, 230 S.W.3d 545 (2006).

V. Procedural Matters During PC&E Review

Nucor contends next that PC&E committed several procedural errors in its review of the ADEQ permit decision. First, Nucor argues that PC&E did not conduct a de novo review as required by Arkansas Code Annotated section 8-1-203(c)(3)(A)(i) & (ii) (Supp. 2015). We see no error. As allowed by law, PC&E appointed the AHO to conduct a review

of ADEQ's permit decision. The AHO duly received testimonial and documentary evidence and carried out a de novo review based on that proof. In doing so, the AHO acted as PC&E's agent, Ark. Code Ann. § 8-1-203(c)(1) (Supp. 2015), and therefore met the requirements of the law on behalf of PC&E.

Nucor insists, however, that PC&E's minute order, which adopted the AHO's recommended decision, should have set forth specific findings of fact. No statute requires this. Moreover, Nucor's analogy to Workers' Compensation law on this point is not well founded. The Workers' Compensation Commission may adopt its ALJ's findings and conclusions, thereby making those findings and conclusions its own. *See Curt Bean Transp., Inc. v. Hill*, 2009 Ark. App. 760, 348 S.W.3d 56.

Taking another approach, Nucor argues that PC&E's Commissioners could not possibly have familiarized themselves with the AHO's recommended decision and his voluminous record because the PC&E minute order was issued only eight days after closing briefs were filed by the parties. It appears to us that the Commissioners had more than eight days in which to assess and understand the materials in the case—PC&E had earlier received the AHO's detailed decision and Nucor's request for oral argument, which was over 100 pages in length and meticulously explained Nucor's arguments for reversal of the permit. Regardless, we decline to speculate on the length of time required for the Commissioners to render their decision.

Next, Nucor argues that the AHO imposed an erroneous burden of proof during the adjudicatory hearing. The AHO correctly stated that Nucor had the burden of proving by a preponderance of the evidence that BRS's permit did not meet the requirements of

the law. *See* Ark. PC&E Reg. 8.616(B). And, on appeal, Nucor acknowledges that it had the burden of proving a deficiency had occurred in the Final Permit or in the permitting process. However, Nucor contends that the AHO erred in requiring it to prove not only that a deficiency occurred but that the deficiency was so material that it would have caused an exceedance of air-quality standards.

We note at the outset that Nucor does not discuss any specific instances in which the AHO imposed an enhanced burden of proof. Moreover, Nucor cites no authority and makes no convincing argument for the proposition that PC&E lacks the authority to determine whether an error is so immaterial that reversal is not required. It is Nucor's burden to demonstrate reversible error, *Stevens v. SEECO, Inc.*, 2015 Ark. App. 322, and we will not develop an appellant's argument on appeal. *Orintas v. Point Lookout Prop. Owners Ass'n*, 2015 Ark. App. 648. We therefore affirm on this point.

Nucor also claims that the AHO rendered his decision based on an "improper separation" of the issues. According to Nucor, the AHO ruled that certain, individual deficiencies in the permit process had a negligible effect on air-quality standards but failed to consider the cumulative impact of all deficiencies. While the AHO did, in some instances, cite the de minimis effect of an alleged deficiency, it was generally done as an alternative reason for rejecting Nucor's arguments. We therefore see no reversible error. Moreover, as will be seen in our upcoming discussion of the issues, only one point will be affirmed based on the negligible effect of any possible error.

Lastly, we address Nucor's argument that the AHO improperly dismissed some of the paragraphs in its petition for review on procedural grounds. The AHO found that some

of Nucor's allegations were barred by not having been raised in the public comments. *See* Ark. Code Ann. § 8-4-205(b)(2) (providing that a third party cannot raise an issue in a PC&E hearing if the issue was not first raised in the public comments, unless he can show good cause why he could not, with reasonable diligence, have discovered and presented the issue during the comment period). Others were dismissed for being too general in nature, *see* Ark. Code Ann. § 8-4-205(b)(3) (providing that a request for a PC&E hearing must include a complete and detailed statement identifying the legal and factual objections to the permit), or for incorporating allegations from other sources. *See* Ark. PC&E Reg. 8.603(c)(1)(c).

On appeal, Nucor argues that the procedural dismissals were based on a hyper-technical application of the above-mentioned statutes and regulations. However, Nucor's brief does little more than set forth a list of paragraph numbers that were dismissed; it provides no explanation as to why the dismissals warrant reversal. As stated above, it is Nucor's burden to demonstrate reversible error, *Stevens, supra*, and we will not develop an appellant's argument on appeal. *Orintas, supra*.

Nucor also contends that the AHO improperly excluded certain witness testimony as it pertained to the dismissed paragraphs. However, Nucor does not proffer the substance of the testimony or explain how it was prejudiced by the testimony's exclusion. *See Turner v. N.W. Ark. Neurosurgery Clinic*, 84 Ark. App. 93, 133 S.W.3d 417 (2003) (holding that we will not reverse the exclusion of evidence in the absence of a demonstration of prejudice). Consequently, we affirm the dismissals and the exclusion of evidence.

VI. *Alleged Misrepresentation*

During the permit-application process, BRS provided ADEQ with certain “emission factors,” which estimated the quantity of a particular pollutant that would be emitted from each particular emission source. For example, with regard to emissions from the plant’s natural-gas-fired equipment, BRS submitted a PM_{2.5} emission factor of .00052 pounds per one million BTUs (.00052 lb./MMBTU). According to BRS consultant Steven Frey, BRS did not submit any emission factor to ADEQ unless the manufacturer of the natural-gas-fired equipment—SMS Siemag (SMS)—confirmed that the factor could be achieved. ADEQ, in turn, relied on BRS’s representation that the emission factors were achievable. Consequently, ADEQ accepted the factors and used them in the Draft Permit as the PM_{2.5} emission limits for the steel mill’s natural-gas-fired sources.

After the Draft Permit was issued, and during the thirty-day public-comment period, SMS sent emails to BRS stating that it was “unknown if such low [emission] values can be achieved at all by the affected units,” and that “we cannot guarantee that the required PM figures can be achieved.” BRS did not notify ADEQ that SMS had expressed doubts about the achievability of the emission limits.

When the Final Permit was issued, Nucor appealed to PC&E. The parties then conducted discovery, and Nucor obtained the SMS emails as part of over 90,000 pages provided by BRS. During the adjudicatory hearing, Nucor admitted the emails into evidence through BRS’s expert Gale Hoffnagle. Mr. Hoffnagle said he had never seen the emails but that it would be important for regulators to know the achievability of emission

factors. He also testified that he believed BRS's stated emission limits could be met and that, at some point after the emails were sent, the engineers must have confirmed achievability.

Following the hearing, Nucor asked PC&E to make a finding that BRS's permit should be revoked based on BRS's failure to disclose SMS's concerns about the emission limits. The AHO declined to do so, ruling that "even if a misrepresentation occurred in this case" PC&E was not authorized to revoke BRS's permit. As authority for this ruling, the AHO cited Arkansas Code Annotated section 8-4-204 (Repl. 2011), which provides that ADEQ has the power to revoke, modify, or suspend a permit on the ground of misrepresentation. (Emphasis added.) Nucor urged PC&E's Commissioners to reject the AHO's ruling, arguing that the AHO had abdicated his duty to revoke the permit. PC&E instead affirmed.⁴

On appeal to this court, Nucor seeks reversal of PC&E's decision on the ground that BRS concealed material information from ADEQ during the application process and from the public during the comment period. However, PC&E made no finding as to whether a misrepresentation occurred. It ruled only that it lacked the legal authority to revoke BRS's permit.

A finding or conclusion by a lower tribunal, if not attacked on appeal, must stand as a basis for affirmance. *See generally Sheppard v. Ark. Alcoholic Bev. Control Bd.*, 2014 Ark. App. 604, 447 S.W.2d 614; *Camp v. State*, 66 Ark. App. 134, 991 S.W.2d 611 (1999). In its

⁴ Around this time, Nucor sent correspondence to ADEQ Director Teresa Marks demanding that ADEQ revoke, suspend, or modify BRS's permit. When Marks did not respond, Nucor sought a writ of mandamus in Pulaski County Circuit Court. The court refused to grant the writ, noting that the AHO had not found that a misrepresentation occurred and that the Director's decision on the matter was discretionary.

opening brief, Nucor addresses the alleged misrepresentation but fails to challenge the AHO's finding that PC&E was not authorized to revoke BRS's permit. Nucor's opening brief contains no argument that PC&E erred in finding that it lacked authority to revoke the permit. The only sentence in Nucor's opening brief that might be interpreted as raising this issue states as follows:

It was also an abuse of discretion for PC&E not to initiate its own investigation or to remand the matter to ADEQ to determine precisely who knew what and when about this matter and to take such further action as is required by law upon determining the full extent of the concealment and cover-up.

This sentence appears at the end of Nucor's substantive argument on the misrepresentation issue and is simply a conclusory statement on its position that there was misrepresentation in the permitting process. It does not refer to, or in any way challenge, the AHO's lack-of-authority finding. At oral argument, Nucor's counsel was asked to point out where in its opening brief Nucor argued that the AHO's lack-of-authority finding was error. He responded by stating that he would provide that information to the court after the arguments, and he filed a letter to the court later that day. But counsel misapprehends the issue, demonstrating only that Nucor preserved a separate argument regarding the standard of review.

Thus, Nucor failed to attack the only finding the AHO made on the issue, i.e., that it lacked authority to revoke the permit. Consequently, we affirm this point without reaching the underlying misrepresentation allegations. *Sheppard, supra*; *Camp, supra*. Moreover, an appellant must cite authority and demonstrate error by making a convincing argument as to why the tribunal erred and why reversal is required. *See Orintas, supra*; *Parker v. Parker*, 97 Ark. App. 298, 248 S.W.3d 523 (2007). Because Nucor failed to make any argument for

reversal as to the AHO's lack-of-authority finding, it clearly has not carried its burden of presenting convincing argument and authority supporting its position.⁵ We therefore affirm on this point.

VII. *Air-Quality Analysis*

We now turn to Nucor's many arguments pertaining to the air-quality analysis and the modeling that BRS performed in connection with its PSD application. We first address Nucor's claim that BRS's analysis incorrectly employed Significant Impact Levels (SILs).

SILs are screening methods adopted by the EPA in an effort to exempt an applicant from conducting a full analysis of certain pollutants when the predicted levels of those pollutants are below certain concentrations. In January 2013, while BRS's application was pending, a federal circuit court vacated some portions of the EPA's SIL regulations. See *Sierra Club v. Env. Prot. Agency*, 705 F.3d 458 (D.C. Cir. 2013). Nucor contends that, in light of the *Sierra Club* holding, BRS incorrectly employed SILs in its air-quality analysis (although PM_{2.5} did receive a full analysis).

The AHO dismissed this argument on the ground that it was procedurally barred by not having been raised in the public comments as required by Arkansas Code Annotated section 8-4-205(b)(2). We affirm that ruling. Nucor's Comment 30, on which it relies, challenged BRS's usage and placement of receptors in its significance modeling. However, the comment does not raise the issue that the SILs have been vacated and are no longer applicable.

⁵ Nucor argued in its reply brief that the lack-of-authority finding was erroneous, but we have previously held that an argument developed for the first time in a reply brief comes too late. *Orintas, supra*.

Nucor also argues that BRS's air-quality analysis was flawed because it did not consider "secondary" PM_{2.5} formation. By way of explanation, PM_{2.5} may be emitted directly from a mill's emission sources, or it may develop secondarily in the atmosphere through chemical reaction of certain precursors, such as nitrogen oxides and sulfur dioxide, which are also emitted from the mill. The AHO ruled that BRS had no legal obligation to account for secondary PM_{2.5} in its air-quality modeling.

Since the onset of its regulation of PM_{2.5} in 1997, the EPA has struggled with the issue of secondary formation. According to Nucor, a 2008 EPA rule required a PSD applicant to model secondary formation, which would naturally lead to an increase in PM_{2.5} concentration. However, the requirements of the 2008 rule are not clear, and BRS expert Gale Hoffnagle testified that there was no legal authority that required such modeling. Indeed, subsequent EPA documents indicate that unresolved issues have remained as to whether secondary formation must be modeled and, if so, by what method. In March 2013, the EPA issued a draft guidance memorandum in which it noted that its preferred air-quality model, AERMOD, did not account for secondary formation. The draft therefore included recommended approaches for assessing the impact of secondary formation. However, an accompanying letter stated that the draft was a statement of preliminary recommendations; that it was not yet considered final guidance; and that it contained no binding, enforceable requirements.

At the adjudicatory hearing, Nucor's experts testified that modeling of secondary PM_{2.5} was required and that ADEQ should have followed the EPA's draft guidance and insisted on such modeling before issuing the BRS permit. However, ADEQ Director Teresa

Marks testified that ADEQ considered the EPA guidance to be nonbinding. Still, ADEQ engineers were concerned enough to email the EPA and ask how to approach the issue of secondary formation. The EPA did not respond. Later, after the Draft Permit was issued, the EPA made thirteen comments regarding changes that should be made in the permit. None involved secondary formation of PM_{2.5}.

Based on the foregoing, and giving due regard to the administrative agency's expertise, we see no abuse of discretion or error of law on this point. It is unclear whether any authority required the modeling of secondary PM_{2.5}, and we will not reverse an agency's interpretation of statutes and regulations unless the interpretation is clearly wrong. *Lamar Outdoor Advert.*, *supra*. Further, there was substantial evidence that ADEQ was not required to follow the EPA guidance on an issue, much less *draft* guidance. We therefore reject Nucor's argument.

Next, Nucor challenges BRS's decision to use Dyersburg, Tennessee, as a representative location for monitoring background PM_{2.5}. The Clean Air Act generally requires pre-construction air-quality monitoring for a period of one year preceding the permit application. 42 U.S.C. § 7475(e)(2); 40 C.F.R. 52.21(m)(1)(iv). However, if there are no monitors located in the vicinity of the proposed construction that can be used to obtain the necessary background concentrations, a regional site may be used. 40 C.F.R. Part 51, Appx. W at 8.2.2(c). A regional site is one that is located away from the area of interest but is impacted by similar natural and distant man-made sources. *Id.*

Here, Mississippi County had no monitor to measure background PM_{2.5}. BRS therefore used the monitor at Dyersburg, and ADEQ accepted Dyersburg as a representative

location. Nucor's experts criticized the use of Dyersburg and proposed the use of a monitor located in Marion, Arkansas. However, BRS and ADEQ witnesses testified that Dyersburg was similar to Mississippi County in land use, population, and terrain, and was therefore a proper representative monitoring site. PC&E credited the testimony of BRS and ADEQ witnesses, as was its prerogative. *Williams v. Ark. State Bd. of Physical Therapy*, 353 Ark. 778, 120 S.W.3d 581 (2003). We therefore affirm on this point.

Nucor further contends that BRS failed to model all of the steel mill's emission sources. According to BRS's permit application, the proposed mill contained approximately 100 sources of pollutant emissions, including sixteen sources from the mill's melt shop. It is undisputed that BRS neglected to model the sixteen melt-shop sources. One of Nucor's experts, Mr. Schewe, testified that he ran a model that included all omitted sources and that the result showed an exceedance of the PM_{2.5} air-quality standards. However, BRS's expert, Mr. Hoffnagle, calculated that the omitted sources would only have increased the PM_{2.5} concentration level by .004 µg/m³, meaning that no exceedance of air-quality standards would have occurred. PC&E accepted Mr. Hoffnagle's analysis, and we defer to the agency's expertise on this matter. The credibility and the weight of the evidence is within the administrative agency's discretion. *Williams, supra*.

We next address Nucor's claim that BRS's air-quality analysis did not properly consider a phenomenon known as "building downwash." Downwash occurs when turbulence forms as air tries to pass around a building. When an emission source is located close enough to the turbulence, the emitted exhaust plume may be mixed closer to the ground, resulting in a higher pollutant concentration. BRS's modeling correctly

incorporated the downwash characteristics of its own buildings. Yet Nucor contends that the downwash characteristics of other, nearby industries, such as the Bunge Grain Elevator, should also have been incorporated into the modeling. PC&E ruled that it knew of no legal authority for the proposition that BRS was required to consider downwash from other facilities. Given that Nucor has not demonstrated that PC&E erred in this conclusion, we see no basis for reversal.

The Bunge Grain Elevator also figures in the final point under this topic. As mentioned earlier, BRS's initial modeling runs predicted that its mill, along with nearby industries would generate a PM_{2.5} concentration level of 2.56 µg/m³. Upon receiving these results and discussing the matter with ADEQ, BRS consultant Steven Frey reassessed his modeling. One of the inputs he had used in his modeling was the PM_{2.5} emission level generated by the Bunge facility. The original inputs for Bunge used data derived from a twenty-four-hour-per-day operation. Frey determined that Bunge did not operate twenty-four hours per day, and therefore the PM_{2.5} emissions from Bunge were overestimated. Frey then reduced the Bunge emission data to represent a twelve-hour-per-day operation. By using this new data, BRS's subsequent PM_{2.5} modeling calculation was reduced to 2.47 µg/m³. PC&E ruled that the adjustment was acceptable because it was more representative of the actual operating hours of the grain elevator.

Nucor contends that BRS did not follow the EPA modeling guidance in making the Bunge adjustment. It cites a footnote to a table in 40 C.F.R. Part 51, Appendix W, as authority that BRS's model was required to use an actual, two-year average for Bunge's operating hours. However, that regulation also allows for the exercise of professional

judgment by the permitting authority in the modeling of nearby facilities. Given the testimony that the adjustment was more reflective of Bunge's actual operation, and that BRS sought ADEQ approval before making the adjustment, we decline to reverse in light of our limited review.

VIII. *Errors Affecting Public Comment*

State regulators must provide an opportunity for public comment on the information submitted by the applicant for a new-construction permit. 40 C.F.R. §§ 51.161(b)(2) & 51.166(q)(2)(ii). Accordingly, PC&E regulations state that no permit shall be issued unless the public has first had the opportunity to comment on the information submitted by the applicant and on ADEQ's analysis of the effect of the new construction on the region's air quality. Ark. PC&E Regs. 18.306(A) & 19.406(A). In addition, ADEQ must submit a Statement of Basis setting forth the legal and factual basis for the Draft Permit. Ark. PC&E Reg. 26.506. Nucor argues that, for several reasons, the public in this case was denied the chance for meaningful and informed comment on BRS's application and on the Draft Permit.

We first dispose of Nucor's arguments that public comment was thwarted by the alleged misrepresentations of emission achievability; the failure to model secondary PM_{2.5}; the use of SILs; and the Bunge Grain Elevator adjustment. In light of our earlier holdings that no reversible error was demonstrated with regard to these very matters, there is likewise no basis for reversal under this heading.

For its remaining arguments, Nucor first contends that ADEQ made improper changes in the Draft Permit regarding certain Nitrogen Oxide values. We disagree. The

Draft Permit originally showed that BRS demonstrated a one-hour Nitrogen Oxide value of 37.6 $\mu\text{g}/\text{m}^3$. During the comment period, BRS stated that this figure was erroneous and should have been 181.8 $\mu\text{g}/\text{m}^3$, which was still below the federal ceiling of 188. ADEQ made the change, and the Final Permit reflected the 181.8 figure. Clearly, ADEQ made an open and above-board correction of what appears to be a mere scrivener's error. We therefore see no reason to hold that the correction adversely affected the public's ability to comment.

Secondly, Nucor cites a change made in the Final Permit regarding BRS's Greenhouse Gas (GHG) emissions. BRS's final application proposed a limit of .0723 tons of GHG per ton of liquid steel produced per year for certain operations. ADEQ placed this limit in the Draft Permit. However, after the Draft Permit was issued, BRS made a comment seeking a higher limit. BRS stated that the limit in the Draft Permit was based on an anticipated product mix, which, if changed, could produce higher emissions. BRS therefore asked ADEQ to increase the limit to .155 tons of GHG per ton of liquid steel to reflect a "worst case production output." The Final Permit contained the revised limit.

Without belaboring the point, we agree with PC&E that Nucor has not shown that a change in a Draft Permit, made by ADEQ in response to a public comment, requires the public-comment period to begin anew. Nucor's expert, Dr. Zeng, acknowledged that ADEQ incorporates changes into the Final Permit, based on public comments, and that the changes do not necessarily "have to go back out" for public comment. We affirm on this point.

IX. *Other Allegations of Error*

Nucor claims that BRS and ADEQ used improper emission factors to estimate the emissions that would be discharged from certain plant sources. The EPA has a clearinghouse designated as AP-42, on which air-quality modelers may draw to obtain standardized emission factors. In this case, BRS and ADEQ did not use AP-42 but instead used factors developed by the Minnesota Pollution Control Agency. The Minnesota factors were much lower, and Nucor's experts testified that they were unreliable and unachievable. However, BRS and ADEQ witnesses stated that the Minnesota figures were reliable and were actually developed by EPA. PC&E credited BRS's and ADEQ's testimony, and we defer to the agency's decision on the credibility of witnesses and weight to be given their testimony. *Williams, supra.*

Nucor also argues that the emission rates from "several natural-gas combustion sources" were increased in the Final Permit but were not remodeled. However, Nucor's brief does not identify these sources or otherwise provide us with sufficient information to conduct a review of this point. We therefore will not reverse. *See Orintas, supra.*

Finally, Nucor argues that BRS and ADEQ failed to conduct an appropriate additional-impact analysis. As part of the PSD process, an applicant must conduct an analysis of any impairment that its facility will cause to soil and vegetation and to visibility. The applicant must also assess the air-quality impact as a result of general commercial, residential, industrial, and other growth associated with the new plant. 40 C.F.R. 52.21(o). BRS's growth analysis reads as follows:

The project being proposed by BRS will have no effect on construction and growth impacts. During the construction phase, BRS will employ various techniques to

minimize the potential impact on the surrounding environment. The primary focus will be to reduce the formation of fugitive type particulates that may be generated during the construction phase.

The construction and operation of the proposed steel plant should not result in any noticeable residential growth in the area. Commercial growth is anticipated to occur at a gradual rate in the future. However, this growth will not be directly associated with the proposed plant in Mississippi County. The proposed plant should have a positive impact on the economic climate of Osceola by providing jobs for the area workforce.

Nucor's expert, Mr. Schewe, offered his opinion that the above analysis should have been more "robust." However, PC&E discounted that opinion because Schewe had no expertise in economic-growth analysis and did not conduct an economic analysis of the Mississippi County area. Further, ADEQ witness Thomas Rheume testified that there were no legal guidelines for performing an additional-impact growth analysis and that the analysis submitted by BRS was consistent with the level of detail in past analyses received by ADEQ. Thus, as with other issues in this case, we recognize the specialization and experience of PC&E on these matters and, due to our limited review, affirm PC&E's ruling.

Affirmed.

ABRAMSON and VAUGHT, JJ., agree.

Dover Dixon Horne PLLC, by: *Mark H. Allison*; and *Bradley Murchison Kelly & Shea LLC*, by: *David R. Taggart*, Pro Hac Vice, for appellants.

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