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## ALABAMA COURT OF CIVIL APPEALS

OCTOBER TERM, 2007-2008

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2050974

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Alabama Department of Environmental Management

v.

Alabama Rivers Alliance, Inc.,  
and Friends of Hurricane Creek

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2050995

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Tuscaloosa Resources, Inc.

v.

Alabama Rivers Alliance, Inc.,  
and Friends of Hurricane Creek

Appeals from Montgomery Circuit Court  
(CV-04-1052)

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MOORE, Judge.

The Alabama Department of Environmental Management ("ADEM") and Tuscaloosa Resources, Inc. ("TRI"), appeal separately from the Montgomery Circuit Court's judgment reversing an order of the Alabama Environmental Management Commission ("AEMC") that upheld the issuance of a mining permit to TRI. The appeals have been consolidated for the purpose of issuing one opinion. We affirm.

#### Procedural History

On December 17, 2001, ADEM issued National Pollutant Discharge Elimination System ("NPDES") Permit No. AL0074012 ("the permit") to TRI for mining operations in Tuscaloosa County. Thereafter, on January 8, 2002, two environmental groups, Alabama Rivers Alliance, Inc., and Friends of Hurricane Creek (collectively referred to hereinafter as "ARA"), petitioned for an administrative hearing in order to contest the issuance of the permit. In support of its petition, ARA alleged that the discharge resulting from TRI's mining operations would contribute to an existing violation of water-quality standards and was therefore prohibited by law. The case was forwarded to the administrative hearings division

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of the Office of the Attorney General for assignment of an Administrative Law Judge ("ALJ") to serve as the hearing officer in this matter. On January 28, 2002, TRI filed a motion to intervene; the ALJ assigned to hear the case granted that motion on January 31, 2002.

After a hearing and a review of the evidence presented, the ALJ issued a report on February 11, 2004, in which he determined that Hurricane Creek and the North Fork of Hurricane Creek were impaired because of excessive amounts of iron and aluminum and high turbidity. Based on that determination, the ALJ recommended that the AEMC grant ARA's appeal and overturn ADEM's issuance of the permit. Thereafter, ADEM and TRI filed objections to the hearing officer's recommendations.

On March 19, 2004, the AEMC held a hearing after which it entered an order rejecting the ALJ's recommendations, findings of fact, and conclusions of law. The AEMC then adopted its own findings of fact and conclusions of law. Specifically, the AEMC's order stated, in pertinent part:

"(1) Biota in the watershed of the North Fork of Hurricane Creek are impaired in places, particularly in Weldon Creek.

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"(2) There is no evidence in the record that these impairments are due to iron, aluminum or turbidity.

"(3) Permitted discharges of iron, aluminum or suspended solids from the mine at issue cannot, therefore, cause or contribute to the impairment of biota at the site of this mine.

"(4) There is no evidence that the discharge of iron, suspended solids or aluminum from this mine have caused or contributed to the impairment of biota at or downstream from this mine.

". . . .

"(8) There is no evidence that this permit is not consistent with applicable EPA [Environmental Protection Agency] requirements, and not in accordance with State law and applicable State rules and regulations.

". . . .

"There being neither record evidence that the discharges from the [TRI site] will cause or contribute to violations of either numeric or narrative biological state water quality standards, nor record evidence that iron, aluminum and suspended solids will cause or contribute to a violation of narrative biological standards, the subject permit is therefore APPROVED, subject to the following modifications:

"(1) Once an approved TMDL [total maximum daily load of pollutants] has been established for all streams on the 303(d) list<sup>1</sup> in this watershed, this permit will

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<sup>1</sup>The 303(d) list refers to § 303(d) of the Federal Clean Water Act, which is codified at 33 U.S.C. § 1313(d).

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be reopened and evaluated to determine if the permitted discharges are acceptable.

"(2) Based on this review, the permit will be upheld as is, or modified to support the TMDL, or denied until such time as it can be demonstrated that the permit will support the TMDLs.

"(3) The permit holder will continue supplemental monitoring for aluminum throughout the permit term. ..."

On April 19, 2004, ARA appealed the AEMC's order to the Montgomery Circuit Court, pursuant to Ala. Code. 1975, § 22-22A-7(c)(6). After a review of the parties' arguments, the transcript of the hearing before the ALJ, and the evidence presented to the ALJ, the circuit court entered a judgment on April 21, 2006, reversing the decision of the AEMC. That judgment stated, in pertinent part:

"The AEMC made ten findings of fact in its Order rejecting the Administrative Law Judge's Recommendations. The first findings of fact at issue concern whether the receiving waters are 'impaired,' as defined by Alabama law, because of excessive amounts of iron, aluminum, and turbidity. For permitting purposes, waters are impaired when state water quality standards are exceeded or violated. The reason this first issue is important is that, as [ARA] and ADEM acknowledge, if the receiving waters exceed or violate state water quality standards, the discharges allowed by the Permit cannot contribute to that violation. See Ala. Admin. R. 335-6-6-.04 (stating that a discharge from a new source cannot 'cause or contribute to a violation of water quality

standards' and in this case, the parties do not dispute that TRI is a 'new source' under this regulation). In other words, if the receiving waters are in such a degraded condition that they are already in violation of state water quality standards, then ADEM cannot issue a permit that would further contribute to that violation, i.e., further degrade the receiving waters.

"The AEMC found that the North Fork of Hurricane Creek is in violation of state water quality standards. However, it concluded that 'there is no evidence in the record that these impairments are due to iron, aluminum, or turbidity.' (AEMC Order p. 2). This finding is clearly erroneous. Not only is there ample evidence in the record that the impairment is due to 'iron, aluminum, or turbidity' but also this Court could discern little to the contrary. For example, the AEMC's finding ignores the testimony of [ARA's] experts and the 303(d) list. The 303(d) list specifically states that the subject waters are impaired due to iron, aluminum, or turbidity.

"The impact of this initial erroneous finding infected the remainder of the AEMC's order. Based on the incorrect determination that the waters are not impaired due to iron, aluminum, or turbidity, the AEMC concluded that additional discharges of iron and aluminum would not further degrade the waters. On the other hand, if, as the ALJ determined, the waters were impaired due to iron, aluminum, and turbidity, then additional such discharges would further imperil Hurricane Creek. In fact, this is what the evidence showed.

"The decision o[f] the AEMC was built upon a flawed foundation. To state that 'no' evidence existed that the impairment was caused by iron, aluminum, or turbidity ignores the substantial record compiled by the ALJ. The decision of the AEMC is Reversed."

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On May 17, 2006, ADEM and TRI filed a joint motion to alter or amend the circuit court's judgment; in that motion, they requested that the circuit court remand the case to the AEMC to make additional findings and to stay enforcement of the judgment while the case is on remand. In support of their motion, they attached the affidavit of Richard Hulcher, the chief of the permits/compliance unit of the field operations division of ADEM. In Hulcher's affidavit, he testified that the Environmental Protection Agency ("EPA") had published a total maximum daily load ("TMDL") of pollutants for Hurricane Creek and its tributaries and that the issuance of TRI's permit was consistent with that TMDL. The May 17, 2006, motion was denied by operation of law after 90 days. Rule 59.1, Ala. R. Civ. P. On August 25, 2006, and August 29, 2006, respectively, ADEM and TRI filed notices of appeal with this court; those appeals have been consolidated.

#### Standard of Review

"Except where judicial review is by trial de novo, the agency order shall be taken as prima facie just and reasonable and the [circuit] court shall not substitute its judgment for that of the agency as to the weight of the evidence on questions of fact, except where otherwise authorized by statute. The [circuit] court may affirm the agency action or remand the case to the agency for taking additional

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testimony and evidence or for further proceedings. The [circuit] court may reverse or modify the decision or grant other appropriate relief from the agency action, equitable or legal, including declaratory relief, if the [circuit] court finds that the agency action is due to be set aside or modified under standards set forth in appeal or review statutes applicable to that agency or if substantial rights of the petitioner have been prejudiced because the agency action is any one or more of the following:

"(1) In violation of constitutional or statutory provisions;

"(2) In excess of the statutory authority of the agency;

"(3) In violation of any pertinent agency rule;

"(4) Made upon unlawful procedure;

"(5) Affected by other error of law;

"(6) Clearly erroneous in view of the reliable, probative, and substantial evidence on the whole record; or

"(7) Unreasonable, arbitrary, or capricious, or characterized by an abuse of discretion or a clearly unwarranted exercise of discretion."

Ala. Code 1975, § 41-22-20(k).

"'[A] presumption of correctness attaches to a decision of an administrative agency due to its recognized expertise in a specific area.' Alabama Dep't of Env'tl. Management v. Wright Bros. Constr. Co., 604 So. 2d 429, 432 (Ala. Civ. App. 1992) (quoting Shell Offshore, Inc. v. Baldwin County

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Comm'n, 570 So. 2d 698, 699 (Ala. Civ. App. 1990)).  
... In reviewing the determination of the [AEMC],  
this court applies the same standard of review as  
the trial court. Dawson v. Alabama Dep't of Env'tl.  
Management, 529 So. 2d 1012 (Ala. Civ. App. 1988),  
cert. denied, 529 So. 2d 1015 (Ala. 1988), overruled  
on other grounds by Ex parte Fowl River Protective  
Ass'n, 572 So. 2d 446 (Ala. 1990)."

Alabama Dep't of Env'tl. Mgmt. v. Kuglar, 668 So. 2d 809, 811-  
12 (Ala. Civ. App. 1995).

#### Discussion

According to the Alabama Water Pollution Control Act,  
Ala. Code 1975, § 22-22-1 et seq., the AEMC is charged with  
issuing permits for the discharge of pollutants into the  
waters of the State. See Ala. Code 1975, § 22-22-9(g). In  
February 2001, TRI applied for such a permit to operate a  
surface coal mine in Tuscaloosa County adjacent to the North  
Fork of Hurricane Creek ("the North Fork").

Alabama Admin. Code (ADEM), rule 335-6-6-.04, provides:

"An NPDES permit shall not be issued to a person  
proposing any of the following discharges:

".....

"(j) a discharge from the operation of a new source  
or the operation of a new discharger, if the  
discharge from its operation will cause or  
contribute to a violation of water quality  
standards."

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It is undisputed that the TRI mining site is a new source. Thus, we are charged with determining whether, at the time the permit was issued, the North Fork was in violation of water-quality standards and, if so, whether the discharges from TRI's mining operation would cause or contribute to a violation of water-quality standards.

I. Whether the North Fork Is In Violation of State Water-Quality Standards

A. State Water-Quality Standards

According to the testimony of Lynn Sisk, the chief of the water-quality branch within the water division of ADEM, Alabama water-quality standards for surface waters are designed to protect the different designated uses that the State has assigned to its waters and to restore those waters when they are not adequate for their designated uses. There are seven water-use classifications for waters of the State of Alabama. See Ala. Admin. Code (ADEM), rule 335-6-10-.03. The classified use of the North Fork is "fish and wildlife." Sisk testified that there are numeric or narrative criteria, in addition to a promulgated antidegradation policy, that are adopted by the State to ensure that waterways are adequate for their designated use. Waters that are not supporting their

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designated use are considered to be impaired waters. A body of water that has a classified use of "fish and wildlife" is a body of water that is suitable for fishing, propagation of fish, aquatic life, and wildlife. See Ala. Admin. Code (ADEM), rule 335-6-10-.09(5)(a).

Sisk testified that impaired waters, or those that are determined not to be supporting their designated uses, are added to the "303(d) list." See note 1, supra. ADEM is responsible for identifying those waters within the State of Alabama for which technology-based limits<sup>2</sup> alone do not ensure attainment of applicable water-quality standards to avoid placement of those waters on the 303(d) list. In determining whether a stream is impaired, or should be added to the 303(d) list, ADEM uses chemical criteria, fish consumption and shellfish-harvesting advisories,<sup>3</sup> and biological-assessment data. With regard to chemical criteria, a body of water is

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<sup>2</sup>Technology-based effluent limitations are established under the Clean Water Act, 33 U.S.C. § 1313(d), for different categories of discharges and are codified in the Code of Federal Regulations for different categories such as coal mining. These limitations establish the minimum level of treatment of wastewater required by the law.

<sup>3</sup>Fish consumption and shellfish-harvesting advisories were not available for the North Fork and, therefore, are not at issue in this case.

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considered to be not supporting its designated use if more than 25% of the monitored chemical data exceeds the applicable water-quality standards. When 10% to 25% of the chemical measurements exceed the water-quality standards, the body of water is considered to be partially supporting its designated use. Biological-assessment data involves an assessment of the biological health of a stream; a body of water is considered to be not supporting its designated use if the number of macroinvertebrates inhabiting the body of water are determined to be low and the chemical/physical field data indicates impairment of the biological health of the body of water.

Water-quality-based effluent limitations ("WQBEL") are limitations that are placed in a permit to ensure that surface-water-quality standards are maintained when the technology-based effluent limits are not sufficient to meet those standards. WQBELs include both "narrative" and "numeric" water-quality standards. Ala. Admin. Code (ADEM), rule 335-6-10-.06, establishes "Minimum Conditions Applicable To All State Waters" as follows:

"The following minimum conditions are applicable to all State waters, at all places and at all times, regardless of their uses:

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"(a) State waters shall be free from substances attributable to sewage, industrial wastes or other wastes that will settle to form bottom deposits which are unsightly, putrescent or interfere directly or indirectly with any classified water use.

"(b) State waters shall be free from floating debris, oil, scum, and other floating materials attributable to sewage, industrial wastes or other wastes in amounts sufficient to be unsightly or interfere directly or indirectly with any classified water use.

"(c) State waters shall be free from substances attributable to sewage, industrial wastes or other wastes in concentrations or combinations which are toxic or harmful to human, animal or aquatic life to the extent commensurate with the designated usage of such waters."

Furthermore, for the classification of "fish and wildlife," Ala. Admin. Code (ADEM), rule 335-6-10-.09(5)(e)2., requires that "[s]ewage, industrial wastes or other wastes shall not cause the pH to deviate more than one unit from the normal or natural pH, nor be less than 6.0, nor greater than 8.5." Rule 335-6-10-.09(5)(e)9. also addresses turbidity:

"There shall be no turbidity of other than natural origin that will cause substantial visible contrast with the natural appearance of waters or interfere with any beneficial uses which they serve. Furthermore, in no case shall turbidity exceed 50 Nephelometric units above background. Background will be interpreted as the natural condition of the receiving waters without the influence of man-made or man-induced causes. Turbidity levels caused by

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natural runoff will be included in establishing background levels."

ADEM has not, however, established numeric standards for either iron or aluminum.

Alabama Admin. Code (ADEM), rule 335-6-6-.14, requires NPDES permits to include certain conditions, including technology-based limits. Additionally, Ala. Admin. Code (ADEM), rule 335-6-6-.14, provides:

"(3) Each NPDES permit shall include conditions meeting the following requirements where applicable:

". . . .

"(e) Other requirements in addition to or more stringent than promulgated effluent limitations guidelines or standards under Sections 301, 304, 306, 307, 318, and 405 of the FWPCA [Federal Water Pollution Control Act] shall be included where necessary to:

"1. achieve water quality standards established under Section 303 of the FWPCA and (AWPCA) Code of Ala. 1975, § 22-22-9(g) (1984);

"(I) limitations must be applied to control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an exceedance of a narrative or numerical water quality standard;

"(ii) procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the discharge, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity) and where appropriate the dilution of the effluent in the receiving water shall be considered when determining whether a discharge will cause, have reasonable potential to cause, or contribute to an exceedance of a narrative or numerical water quality standard;

"(iii) when the Director determines that a discharge will cause, have reasonable potential to cause, or contribute to an exceedance of a narrative or numerical water quality standard for an individual pollutant, the permit shall contain a discharge limit for that pollutant;

"(iv) except when it can be determined using the methods described in 335-6-6-.14(3)(e)1.(ii), that chemical specific limits are sufficient to attain and maintain the narrative toxicity water quality standard, the permit shall contain effluent limits for whole effluent toxicity sufficient to attain and maintain the narrative standard.

". . . .

"(f) Toxic Pollutants. Limitations established under subparagraphs 335-6-6-.14(3)(a), (b), or (e), to control pollutants meeting the criteria

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listed in subparagraph 335-6-6-.14(3)(f)1. of this rule shall be included. Limitations will be established in accordance with subparagraph 335-6-6-.14(3)(f)2. An explanation of the development of these limitations shall be included in the permit rationale and (if prepared) fact sheet. Permit conditions for toxic pollutants shall be in accordance with the requirements of 40 CFR Part 129 (1994).

". . . .

"3. When no individual water quality standard exists for a substance that the Director determines to be present in concentrations that represent a potential to cause a violation of a narrative water quality standard(s), limitations on the discharge of the substance shall be based on the review of any applicable data available to the Department. Information that may be considered includes, but is not limited to the following:

"(I) EPA water quality criteria or other EPA documents that suggest or predict an acceptable instream pollutant concentration,

". . . .

"(iii) scientific information available to the permit writer."

In a document entitled "Ambient Water Quality Criteria for Aluminum, 1988," the EPA offered a "derivation of ambient water quality criteria for the protection of freshwater aquatic organisms." The EPA limited the criteria to a pH

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range between 6.5 and 9.0, given as a 4-day average concentration that should not exceed .087 milligrams per liter (mg/l) more than once in 3 years on average and a 1-hour average concentration that should not exceed .75 mg/l more than once in 3 years on average. In 2000, the EPA acknowledged in a footnote in a document entitled "Nationally Recommended Water Quality Criteria" that it is aware of field data indicating that many high-quality waters in the United States contain more than .087 mg/l of aluminum.

Effluent limitations of iron and total suspended solids ("TSS") are promulgated in 40 C.F.R. § 434.45; specifically, § 434.45 provides that the maximum for any 1 day should be limited to 6.0 mg/l of iron and 70 mg/l of TSS and that the average of the daily values for 30 consecutive days should not exceed 3 mg/l of iron and 35 mg/l of TSS with a pH of 6 to 9 throughout.

B. Application of State Water-Quality Standards to Hurricane Creek, the North Fork, etc.

1. The 303(d) list

"'Section 303(d)' refers to Section 303(d) of the 'Clean Water Act' ('CWA'), i.e., the Federal Water Pollution Control Act Amendments of 1972, Pub.L. 92-500, 86 Stat. 846, which amended the Federal Water Pollution Control Act of 1948 (Act June 30,

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1948, c. 758, 62 Stat. 1155); that section is codified at 33 U.S.C. § 1313(d). The operation of Section 303(d) was succinctly summarized by the United States District Court for the District of Columbia in Bravos v. Green, 306 F. Supp. 2d 48 (D.D.C. 2004):

"Nonpoint source pollution is primarily regulated by the States through the water-quality approach. Section 303(d) of the CWA requires each State to identify and rank those waters within its boundaries where technology-based controls are inadequate to attain quality water standards. Such substandard waters are termed "water quality limited segments" ("WQLSs") and are listed on a State's § 303(d) list. The State must submit documentation to its EPA Regional Administrator supporting its decision to list, or not list, waters on its § 303(d) list. For each body of water identified on its § 303(d) list, the State must establish the body's total maximum daily load ("TMDL"). Simply stated, "[a] TMDL is the maximum amount of a pollutant that can be added to a waterbody (its 'loading capacity') without exceeding water quality standards." Each TMDL must "be established at [a] level[] necessary to attain and maintain the applicable narrative and numerical [water quality standards ('WQS')], with seasonal variations and a margin of safety [taking] into account any lack of knowledge concerning the relationship between effluent limitations and water quality."

"306 F. Supp. 2d at 51 (footnote and citations omitted). Under current federal law, a 'Section 303(d) list' of a state's impaired waters must be prepared by state environmental authorities and

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revised every two years. See 40 C.F.R. § 130.7(d) (2004)."

Alabama Dep't of Env'tl. Mgmt. v. Legal Env'tl. Assistance Found., Inc., 922 So. 2d 101, 110-11 (Ala. Civ. App. 2005) ("LEAF").

The North Fork appeared on the final 303(d) list for the State of Alabama in 2002; it was listed for metals, specifically aluminum, noting the sources of the impairment as "surface mining abandoned." Hurricane Creek appears on the list for aluminum, iron, and turbidity; the sources of pollution are listed as "surface mining abandoned" and land development. Both the North Fork and Hurricane Creek also appeared on the 303(d) list in 1998 and in 2000 for the same reasons.

Both ADEM and TRI argue that inclusion on the 303(d) list is not conclusive evidence of impairment. At the administrative hearing, TRI presented an exhibit entitled "EPA list of waters and pollutants of concern added to Alabama's 303(d) list." In the comment section of that document, the response to a comment concerning the EPA's February 11, 1999, "Public Notice Excluding Decision on Tensaw River, Baldwin County," included the following language:

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"The commenter should recognize that the § 303(d) list is merely an identification of impaired waters and is used by EPA and ADEM for planning purposes, but does not by itself implicate any rights, responsibilities, or duties of third parties or the public. It is a planning tool to assist governments in establishing priorities and may also provide the public with general information regarding water quality. EPA ... does not agree that the identification and listing of waters which do not meet water quality standards under the CWA [Clean Water Act] constitutes a restriction of any sort. The Section 303(d) list is a list of impaired waters which constitutes a planning tool for the purpose of prioritizing government decisions regarding the need and timing of Total Maximum Daily Loads (TMDLs). There are no restrictions affecting the people and the State of Alabama with respect to such identification and listing."

In LEAF, this court cited Missouri Soybean Ass'n v. Missouri Clean Water Commission, 102 S.W.3d 10, 23-25 (Mo. 2003), in a footnote for the proposition that the § 303(d) list of impaired waters does not establish standards of conduct having the force of law. 922 So. 2d at 111 n.2. In the present case, Richard Hulcher testified that the 303(d) list is a planning document and that ADEM performs the same comprehensive review to determine whether a permit should be issued regardless of whether the affected body of water has been placed on the 303(d) list. Hulcher explained that a stream may be on the 303(d) list because there was information

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available, perhaps a sampling or an observation, that would lead ADEM or the EPA to prioritize the stream, look at it more closely, and then determine if that stream is in fact impaired.

Despite the testimony and exhibits offered by ADEM and TRI, there was countervailing evidence regarding the import of listing a body of water on the 303(d) list. First, Shane Jordan, the NPDES inspector at ADEM who was responsible for writing TRI's permit, testified that the 303(d) list must be considered by the permit writer. As part of ADEM's permit-review process, Jordan designated the North Fork as a "Tier I water." A Tier I water is currently degraded or not currently meeting its classification, according to Jordan, which meant that he considered the North Fork to be not meeting its designated use and, thus, that he considered it to be properly included on the 303(d) list. In performing the required antidegradation review for the permit, Jordan identified aluminum as a pollutant impairing the North Fork, and he also noted that there was a reasonable probability that the new or increased discharges caused by the TRI mining operations would cause or contribute to a violation of state-water-quality

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standards. Lynn Sisk agreed that, generally, the 303(d) list is the first thing that a permit writer should check when reviewing a permit application. Thus, although we recognize that the inclusion of a body of water on the 303(d) list is not conclusive evidence of impairment, we do consider it to be persuasive evidence, particularly when considered in combination with other evidence of impairment.

## 2. Chemical samples and bioassessments

Hurricane Creek is approximately 32 miles long. Weldon Creek, located upstream of the North Fork, flows into the North Fork, which, in turn, flows into Hurricane Creek. Weldon Creek and the North Fork are part of the same watershed. Beth Wentzel, a former watershed-restoration specialist for ARA, coauthored a profile of Hurricane Creek, in which a sampling site of the North Fork is listed as impaired for macroinvertebrates based on research conducted by ADEM in 1999 and the EPA in 2000.

A "Hurricane Creek Watershed Stream Bioassessment Report" authored by the EPA in November 2000 noted that samples taken from the North Fork sampling station indicated that the North Fork was severely impaired for macroinvertebrates, based on

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research conducted by ADEM in 1996 and 1997 and research conducted by the EPA in 2000. Furthermore, it stated as a conclusion that, based on a comparison of the macroinvertebrate communities reflected in the samples taken from the North Fork sampling station to the macroinvertebrate communities reflected in the samples taken from a reference site, the North Fork did not fully support the water-quality classification of "fish and wildlife." A draft report authored by the EPA entitled "Hurricane Creek Watershed Water Quality Sampling Report from July/August of 2002" indicated that the North Fork was severely impaired. Assessments of Hurricane Creek in that report revealed that samples taken from 11 of 19 study stations exceeded the federal ambient chronic-water-quality criterion for freshwater aquatic life for aluminum of .087 mg/l, samples from 4 of the 19 stations exceeded the federal ambient chronic-water-quality criterion for freshwater aquatic life for iron of 1 mg/l. It was noted in the report that "drought and low flow conditions during August 2002 were a major factor affecting the consistently lower habitat evaluation scores at all stations." Aluminum values at the North Fork sampling site were higher than the

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EPA chronic-water-quality criterion for freshwater aquatic life. The report concluded that "there remains an apparent effect on the benthic macroinvertebrate and fish communities well downstream of the confluence of Weldon Creek and Blanchet Branch into Hurricane Creek." Randy Haddock, the field director with the Cahaba River Society in Birmingham, testified that, in his opinion, the EPA's report revealed that the North Fork is impaired.

Amy Sides, the Alabama Watershed Awareness Research and Education (AWARE) Program coordinator for Alabama River Alliance, Inc., testified that she had participated in sampling of the North Fork and that there were very few macroinvertebrates in the North Fork and none in Weldon Creek. She testified that there was not a wide array of biodiversity in the North Fork. Sides testified that ARA's Exhibit 48, which consisted of sampling data from ADEM that had been entered into a spreadsheet by Beth Belk of the EPA, revealed that every sampling of the North Fork except for one exceeded the EPA's recommended water-quality standards for aluminum in a testing period from June 2000 to August 2002.<sup>4</sup>

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<sup>4</sup>Sides's testimony was based on the EPA's recommended standard of .087 mg/l as a 4-day average. Using the EPA's

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Dr. Gerald Vaughan, ARA's expert witness, testified that he had reviewed an EPA water-quality sampling report from Hurricane Creek and that some of the samples showed that certain branches of Hurricane Creek, including the North Fork, were impaired. According to Vaughan, the values collected in the North Fork showed that the stream is impaired for aluminum, iron, and turbidity. Turbidity, he explained, can affect wildlife in different ways; if the cloudy material in the water contains metals, the metals themselves will affect the organisms. Conversely, if the water is simply very cloudy, it could affect the organisms' ability to collect food. Sides testified that turbidity is caused by a combination of dissolved and suspended particles and dissolved minerals or substances in the water.

ADEM and TRI did not offer any evidence suggesting that the North Fork was not impaired. The inclusion of the North Fork and Hurricane Creek on the 303(d) list is prima facie evidence of the North Fork's impairment due to aluminum and Hurricane Creek's impairment due to iron, aluminum, and turbidity. Furthermore, the undisputed chemical and

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acute standard based on a 1-hour average concentration of .75 mg/l, only 2 of the 11 samples exceeded that amount.

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biological evidence supports a finding of impairment in the North Fork and Hurricane Creek. That evidence particularly reveals the excessive presence of aluminum in those bodies of water.

ADEM and TRI argue that the circuit court erred in determining that the AEMC's finding that there was no evidence that the biota of the North Fork are impaired by iron, aluminum, or turbidity constituted clear error. Furthermore, ADEM argues that, in finding that said error infected the remainder of the AEMC's order, the circuit court misconstrued the AEMC's finding, substituted its judgment for that of the AEMC, and failed to defer to the AEMC's interpretations of ADEM's water quality regulations.

ADEM and TRI argue that "given the AEMC's scientific and technical composition the AEMC's Finding of 'no evidence' that iron and aluminum cause the biological impairments means simply that, as a scientific matter, no empirical evidence in the AEMC's record proves ARA's scientific theory." Further, according to ADEM, the circuit court erred in concluding that the AEMC's finding indicated that there was literally no evidence to support the impairment of the stream due to

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aluminum and iron; rather, ADEM asserts, the members of the AEMC were entitled, as scientific and technical specialists, to ignore, scrutinize, and then give due weight to ARA's "opinion evidence." As discussed above, however, the record contained ample evidence, both testimonial and empirical, indicating that the North Fork was impaired due to aluminum and that Hurricane Creek, which the North Fork flows into, was impaired due to iron, aluminum, and turbidity. Furthermore, because there was no evidence presented during the administrative hearing to dispute the evidence indicating that the North Fork was impaired, we are compelled to agree with the circuit court's determination that the AEMC's finding was "clearly erroneous in view of the reliable, probative, and substantial evidence on the whole record."

## II. Whether TRI's Site Will Contribute to the Impairment

Both Wentzel and Sides testified that they had observed orange coating or deposits in the Weldon Creek area. It is undisputed that Weldon Creek is impaired, largely due to previously run mining sites in the area. Wentzel testified that the low quality waters coming out of Weldon Creek may diminish the assimilative capacity that is available in-stream

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at the point where TRI discharges enter the North Fork. According to Wentzel, assimilative capacity is the amount of pollution that can be discharged or contained in a stream without causing problems in-stream or, for example, without causing a violation of water-quality standards.

Dr. Vaughan testified that coal mining affects degradation simply by increasing flow. After mining, according to Vaughan, the response to a storm is exacerbated; the rain events may scour the stream bottom, removing the leaf packs where insects lived and fishes bred. Vaughan testified that he believed the discharges from the TRI mine would cause an increase in sediment or turbidity, iron, and aluminum. He stated that TRI's discharges would cause or contribute to an impairment of the North Fork because runoff will be maintained from that area, there will be increased stream flow from the area, and storm responses will still be exacerbated. Ultimately, Dr. Vaughan stated that adding extra material to an already degraded stream will add to its inability to recover and thereby contribute to an existing impairment.

Dr. Vaughan testified that, at a pH of 6.5 and lower, the metal in the water is mobilized or dissolved, meaning that the

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metals begin to display toxic effects, and the aluminum would bind to the siltation. Also, in the EPA's "Ambient Water Quality Criteria for Aluminum, 1988," the EPA suggested that pH levels be maintained between 6.5 and 9.0. Based on the site's monitoring, there were recorded pH levels of 6.07, 6.27, and 6.03 in the beginning of 2003 in the North Fork. Additionally, there were several readings at exactly 6.5. Although these pH levels were within the permit's limitations, there is evidence indicating that these levels are contributing to the impairment of the North Fork.

Dr. Ramble Ankumah, an Associate Professor of Agricultural and Environmental Sciences at Tuskegee University, testified that the soil around TRI's mining operation contains aluminum. Furthermore, according to Dr. Ankumah, his review of TRI's discharge monitoring reports that were submitted to ADEM indicate that TRI has discharged aluminum into those bodies of water. In Dr. Ankumah's opinion, TRI's discharge monitoring reports reveal several incidences in which the pH of the discharged waters was below 6.5, which indicates the reasonable probability for aluminum to be contained in the discharged waters.

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According to C.W. McGehee, a consultant for McGehee Engineering who was retained by TRI to provide engineering services, the original and revised surface-water projections that his company compiled for TRI revealed that there would be an increase in iron discharges during and after mining at the TRI mine site; in the revised projections, at high flow, there was a projected pH of 5.87 before, during, and after mining. McGehee testified that the TRI mining site would include sediment basins that would be used to dilute the discharge. He testified further that if the sediment basins remain after mining, the basins will continue to be discharge points on the property where the mine is located and the surface water will continue to run off the hillside and into those sediment basins. There had not been a removal plan submitted to the Alabama Surface Mining Commission for removal of the existing basins at the time of the administrative hearing.

ADEM and TRI presented testimony by Richard Hulcher indicating that TRI's permit complies with federal requirements insofar as the permit limits are consistent with and compliant with new source limits for coal mines promulgated by the EPA in 40 C.F.R. § 434. TRI's permit

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limits discharges of iron, manganese, total suspended solids (TSS), and pH. There are no limitations listed for aluminum or turbidity. Furthermore, the section of TRI's permit listing precipitation event discharge limitations states that increases in the volume of a discharge caused by 24-hour precipitation events are exempt from the discharge limitations previously listed, provided that the permittee submits a written claim of exemption to the director.

The issue here is not whether the permit itself complies with State water-quality standards, but, rather, whether the discharge from TRI's operations will "cause or contribute to a violation of water quality standards." The overwhelming evidence in this case indicates both that the North Fork is impaired and that TRI's mining will contribute to that impairment. Expert testimony as well as EPA documents outlining water-quality standards establish that pH levels should be limited between 6.5 and 9.0, particularly when impairments due to aluminum are a concern within a stream. The permit limits for pH are between 6.0 and 9.0. The North Fork was listed on the 303(d) list for aluminum, which, at the very least, is a mechanism meant to heighten attention to

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certain waterways' impairments. The permit writer himself identified aluminum as a pollutant impairing the North Fork as a part of the required review process as well. Regardless, there were no limitations placed in the permit on discharges of aluminum.

Based on the testimony and exhibits provided at the administrative hearing, we are compelled to conclude that TRI's discharges will contribute to the impairment of the North Fork. In fact, the only evidence presented that supports ADEM and TRI's contentions that TRI's mining will not contribute to the impairment of the North Fork lies in the introduction of sediment basins, wherein surface water runoff is to be distilled before flowing into the stream. Those sediment basins, however, are not regulated during precipitation events and there is no plan regarding their removal. Dr. Vaughan testified that the effects on watersheds continue even after reclamation of the mines have been completed. There was no evidence offered by ADEM or TRI to dispute Dr. Vaughan's testimony.

ADEM and TRI argue that, even if the AEMC committed error in finding no evidence of a causal relationship between iron

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and aluminum and biological impairments, that error is harmless because TRI's discharges of iron and aluminum are permissible under ADEM's regulations as long as they will neither cause nor contribute to the impairment. They argue that because those discharges occur in lower concentrations than the permit limitations, they will not contribute to any alleged impairment.

ADEM did not offer any expert witnesses to testify during the administrative hearing. The suggestion that TRI's discharges occur in lower concentrations than water-quality standards is not fully supported by the evidence. Although we concede that a lower concentration of metal per liter of water added to a higher concentration of metal per liter of water will not contribute to an impairment in the receiving water, we are unable to find support for this argument in the record. The permit limits require only that the concentration of metals allowed to enter the stream are within the limitations set by ADEM and the EPA, not that they are lower than those concentrations already existing in the North Fork. ADEM and TRI have presented no evidence of the actual concentrations of metals in the North Fork versus those that their mining

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operations would discharge into the North Fork. Additionally, there was evidence presented indicating that the assimilative capacity of the North Fork would be negatively affected by the waters flowing from Weldon Creek, thereby diminishing their ability to contain pollutants without negatively impacting the water quality of the stream. Finally, the presence of pH levels at or below 6.5 affect the toxicity of aluminum, the discharges of which are not regulated by the permit whatsoever. Thus, it is at best unclear whether the lower concentration of metals will, in fact, negate any impact on the present state of impairment in the North Fork.

Regardless of whether the AEMC's finding that there was no evidence that the North Fork was impaired due to iron, aluminum, or turbidity infected the remainder of the order, we are unable to affirm the AEMC'S decision based on an argument of "harmless error."

"The standard of judicial review applied to rulings of administrative agencies differs from that applied to rulings of trial courts. An appellate court will affirm a ruling of a lower court if there is any valid reason to do so, even a reason not presented to -- or rejected by -- the lower court. See McKenzie Methane Corp. v. M-W Drilling, Inc., 653 So. 2d 982, 984 (Ala. 1995). See also Smith v. Equifax Servs., Inc., 537 So. 2d 463 (Ala. 1988). When reviewing the decision of an administrative

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agency, however, an Alabama court will affirm only if the action and the stated basis for the action are correct.

''[As this court is required to do,] the circuit court ... was required to look to the Commissioner's decision and the reasons she gave for denying reimbursement. Where such decision is shown to be arbitrary and capricious, no posthoc rationalizations or theories for denying reimbursement can correct it.'

"Alabama Medicaid Agency v. Beverly Enters., 521 So. 2d 1329, 1333 (Ala. Civ. App. 1987)."

Ex parte Beverly Enters.-Alabama, Inc., 812 So. 2d 1189, 1195 (Ala. 2001) (emphasis added). Thus, because we find that the AEMC's stated basis for its action -- that there is no evidence that the stream is impaired due to iron, aluminum, or turbidity -- was in error, we are unable to affirm the agency's resulting action.

Finally, ADEM argues that the circuit court erred in reversing the AEMC's order, rather than remanding the cause to the AEMC because, it says, (1) the circuit court should have sought clarification of the finding of fact regarding no evidence of the stream's impairment due to iron, aluminum, and turbidity, and (2) the circuit court should have remanded the cause for consideration of the EPA's new TMDL for the

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Hurricane Creek watershed. Despite ADEM's argument that the AEMC's finding indicated that there was no empirical evidence presented regarding the causation of the North Fork's impairment, rather than no evidence to that end whatsoever, we conclude that the finding of fact, as written, is not ambiguous. Thus, it does not merit clarification from the AEMC. Similarly, we conclude that the circuit court was not in error for failing to remand the action in light of the EPA's TMDL for Hurricane Creek. Richard Hulcher testified that there is a reopening clause incorporated in to each of the permits issued by ADEM that allows ADEM to require modifications to the permits, for example, to comply with newly created TMDLs or more protective standards. The question before the circuit court was whether the permit should have been issued to TRI. Regardless of the permit's potential compliance with a TMDL published after the hearing, the circuit court determined that the great weight of the evidence exhibited that TRI's discharges would contribute to an already-existing impairment in the North Fork. The inclusion of a standard reopening clause or the issuance of a TMDL are not necessarily curative of ADEM's failure to comply

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with Ala. Admin. Code (ADEM), rule 335-6-6-.04. Thus, we conclude that the circuit court did not err in failing to remand this cause to the AEMC.

For the above stated reasons, we affirm the judgment of the circuit court overturning the AEMC's decision.

The motion to dismiss the appeal on the basis of mootness filed by ADEM and TRI is denied.

2050974 -- AFFIRMED.

2050995 -- AFFIRMED.

Thompson, P.J., and Thomas, J., concur.

Pittman, J., concurs in the result, without writing.

Bryan, J., recuses himself.