

FOUR COUNTY (NW) REGIONAL SOLID WASTE
MANAGEMENT DISTRICT BOARD and State of Arkansas,
ex rel. Winston Bryant, Arkansas Attorney General *v.*
SUNRAY SERVICES, INC.

97-1133

971 S.W.2d 255

Supreme Court of Arkansas
Opinion delivered July 9, 1998

[Petition for rehearing denied September 10, 1998.]

1. ENVIRONMENTAL LAW — CHAPTER E REGULATIONS — STANDARD OF REVIEW. — Under Act 902 of 1995, Ark. Code Ann. § 8-6-724 (Supp. 1997), regional solid-waste management boards may adopt more restrictive standards for the location, design, construction, and maintenance of solid-waste disposal sites and facilities than the state or federal governments, provided the standards are based upon generally accepted scientific knowledge or engineering practices and are consistent with the purposes of the relevant code provisions.
2. ENVIRONMENTAL LAW — CHAPTER E REGULATIONS — TRIAL COURT ERRED IN APPLYING INCORRECT LEGISLATIVE STANDARD IN ASSESSING. — In light of the fact that the Chapter E regulations in dispute unquestionably had scientific or engineering validity in some settings, the supreme court could not say that they were not based upon generally accepted scientific knowledge or engineering practices; the court held that the trial court erred in applying the incorrect legislative standard in assessing the validity of the requirements.
3. COURTS — JUDICIAL REVIEW OF LEGISLATIVE ACTION — PRESUMPTION LEGISLATION ENACTED IN REASONABLE MANNER — MOVING PARTY'S BURDEN. — Judicial review of legislative action is not undertaken *de novo* by a trial court because that would be judicial legislating and violative of the separation-of-powers doctrine contained in Ark. Const. art. 4, § 2; in such situations, the trial court must engage in a presumption that the legislative authority enacted the legislation in a reasonable manner, and the burden is placed on the moving party to prove that the enactment was unreasonable or arbitrary; an enactment is not arbitrary if there is "any reasonable basis" for its enactment; absent arbitrariness or unreasonableness, legislative action by local government should stand

because it is not the role of the judiciary to review the wisdom or rightness of legislation.

4. COURTS — JUDICIAL REVIEW OF LEGISLATIVE ACTION — PROPER DEFERENCE NOT ACCORDED LEGISLATIVE ROLE OF DISTRICT BOARD. — The supreme court concluded that the trial court employed the wrong standard when reviewing what amounted to legislative action by appellant District Board, having focused on and then decided whether the Chapter E regulations were appropriate based on the evidence without giving proper deference to the legislative role of appellant District Board; the trial court's role was to examine the regulations for arbitrariness or unreasonableness, but this review does not entail questioning the wisdom or rightness of legislation unless the legislation is not supported by a rational basis.
5. COURTS — JUDICIAL REVIEW OF LEGISLATIVE ACTION — TRIAL COURT ERRED IN EVALUATING CORRECTNESS OF ADOPTION OF REGULATIONS. — The supreme court held that the trial court erred in evaluating whether the adoption of the Chapter E regulations was correct as opposed to determining whether appellant District Board's legislative action was arbitrary or unreasonable.
6. APPEAL & ERROR — REVIEW OF CHANCERY CASES — NO REMAND WHERE EQUITIES OF PARTIES CAN BE PLAINLY IDENTIFIED. — The supreme court reviews chancery cases *de novo*; when the record is sufficiently developed to enable it to do so, the court decides the issues presented without remand; it has been the invariable practice of the supreme court not to remand a case to chancery court for further proceedings and proof where it can plainly identify the equities of the parties.
7. ENVIRONMENTAL LAW — DOUBLE-COMPOSITE LINER SYSTEM — REGULATION BASED ON GENERALLY ACCEPTED ENGINEERING PRACTICE. — Where it was undisputed that double composite liners had been used in other states at particular landfill sites to confine leachate, and Regulation 22 of the Pollution Control and Ecology Commission mandated its usage within appellant's district, the supreme court could not say that appellant District Board's regulation was not based upon a generally accepted engineering practice.
8. ENVIRONMENTAL LAW — DOUBLE-COMPOSITE LINER SYSTEM — REQUIREMENT THROUGHOUT AREA NOT UNREASONABLE. — Where the application of a regulation requiring a double composite liner system was limited to an area where the geology admittedly was fragile and unique, the supreme court could not say that appellant District Board was unreasonable in requiring the system

FOUR COUNTY (NW) REG'L SOLID WASTE MANAGEM'T
DIST. BD. v. SUNRAY

120

Cite as 334 Ark. 118 (1998)

[334

throughout the area, particularly in light of the area's fragility and the landfill problems experienced in the past.

9. ENVIRONMENTAL LAW — ON-SITE INSPECTOR — DAILY INSPECTION REQUIREMENT NOT UNREASONABLE. — Although noting that daily on-site inspection was a conservative approach for detection of potential problems, the supreme court held that appellant District Board was not unreasonable in making this requirement.
10. ENVIRONMENTAL LAW — WELLS INVENTORY — REQUIREMENT MET LEGISLATIVE STANDARD. — Where the testing of surrounding groundwater was a commonplace engineering practice, the supreme court concluded that appellant District Board's one-half-mile-radius well-testing requirement met the legislative standard.
11. ENVIRONMENTAL LAW — WELLS INVENTORY — APPELLANT DISTRICT BOARD DID NOT ACT ARBITRARILY IN ADOPTING ONE-HALF-MILE-RADIUS REGULATION. — Where a geologist for appellant District Board contended that initial well testing would detect any preexisting contaminant and thus would be helpful in weighing the validity of subsequent water-contamination claims, the supreme court concluded that the rationale appeared totally reasonable and perceived no arbitrariness on the part of appellant District Board in adopting the one-half-mile radius well-testing regulation; some reasonable distance had to be chosen, and the court declined to redraw the radius line.
12. ENVIRONMENTAL LAW — ACOUSTIC AND VIDEO GEOPHYSICAL LOGS — REGULATION HAD RATIONAL BASIS. — Where, as part of preconstruction design, appellant District Board's regulations required landfill applicants, in accordance with common engineering practices and the legislative standard, to submit acoustic and video logs of bedrock topography, the supreme court, on the basis of testimony, rejected the view that it was unreasonable to require duplicative tests and held that, while conservative, the regulation had a rational basis.
13. ENVIRONMENTAL LAW — SURFACE GEOPHYSICAL STUDIES — REGULATION WAS NOT ARBITRARY. — Where, in accordance with generally accepted scientific knowledge or engineering practice, appellant District Board's regulations required at least two surface tests for bedrock topography from a list of five tests that included radar and seismic methods, and where appellant's experts emphasized that the more data accumulated through multiple tests, the better the opportunity to verify the results, the supreme court could not fault the rationale for requiring the tests and declined to hold that the regulation was arbitrary.

14. ENVIRONMENTAL LAW — DYE-TRACE STUDIES — APPELLANT DISTRICT BOARD NOT ARBITRARY IN MANDATING. — Where a preconstruction requirement, which was a valid engineering practice, related to determining preferred water transport pathways by using dye tracing; where the trial court described dye tracing as a “powerful tool” for determining groundwater movement in karst settings; and where, at the very least, dye tracing would determine the extent of underwater pathways, including whether any existed, the supreme court concluded that appellant District Board was not arbitrary in mandating dye tracing throughout the four counties of the district.
15. ENVIRONMENTAL LAW — CHAPTER E REGULATIONS — SUMMARY JUDGMENT REVERSED — APPELLEE’S COMPLAINT AS TO REGULATIONS DISMISSED. — Because it held that six challenged Chapter E regulations were based on generally accepted scientific knowledge or engineering practices and were not arbitrary or unreasonable, the supreme court reversed the trial court’s judgment and dismissed appellee’s complaint with respect to the regulations.
16. JUDGMENT — SUMMARY JUDGMENT — STANDARD OF REVIEW. — The well-established standard of review for an appeal from a grant of summary judgment includes the principle that once a party establishes *prima facie* entitlement to summary judgment by affidavits, depositions, or other supporting documents, the opposing party must meet proof with proof and demonstrate the existence of a genuine issue of material fact.
17. JUDGMENT — SUMMARY JUDGMENT — CONCLUSORY EVIDENCE INSUFFICIENT TO SUPPORT MOTION. — The affidavits of appellee’s experts provided evidence only in the most conclusory of forms, which was insufficient to support a motion for summary judgment.
18. JUDGMENT — SUMMARY JUDGMENT — MATERIAL QUESTION OF FACT REMAINED — REVERSED AND REMANDED FOR TRIAL ON BUFFER-ZONE ISSUE. — Where a material question of fact remained to be resolved on the question of a regulation requiring a two-mile buffer zone between a landfill and specified sites, the supreme court reversed and remanded the matter for trial on the issue, with the trial court using the correct standards of review.

Appeal from Washington Chancery Court; *Tom Smitherman*, Chancellor; reversed and dismissed in part; reversed and remanded in part; motion for substituted counsel granted.

Katherine C. Gay, for appellant Four County (NW) Regional Solid Waste Management District Board.

FOUR COUNTY (NW) REG'L SOLID WASTE MANAGEM'T
DIST. BD. v. SUNRAY

122

Cite as 334 Ark. 118 (1998)

[334

Winston Bryant, Att'y Gen., by: *Kelly S. Murphy*, Ass't Att'y Gen., and *Charles Moulton*, Ass't Att'y Gen., for appellant State of Arkansas.

Davis, Cox & Wright PLC, by: *Constance G. Clark* and *William Jackson Butt II*, for appellee.

ROBERT L. BROWN, Justice. This appeal arises out of litigation by appellee Sunray Services, Inc., a firm that constructs and operates solid-waste landfills, in which Sunray claimed that certain regulations adopted by the appellant Four County (NW) Regional Solid Waste Management District Board (District Board) violated state law. The District includes Washington, Benton, Carroll, and Madison Counties. The trial court upheld two of the District Board's regulations but struck down six others as not being based upon generally accepted scientific knowledge or engineering practices, as required by Ark. Code Ann. § 8-6-724 (Supp. 1997). The trial court granted summary judgment in favor of Sunray with respect to another regulation requiring a two-mile buffer zone between solid-waste landfills and certain named bodies of water. The District Board and the State urge on appeal that the trial court did not apply the proper standard of review for the six regulations and further erred in concluding that the regulations violated state law. They claim, in addition, that summary judgment regarding the two-mile buffer zone was inappropriate because a fact issue developed based on expert testimony regarding the efficacy of that regulation. We agree with the District Board and the State and reverse the judgment and dismiss the complaint regarding the six regulations. With respect to the regulation for a two-mile buffer zone, we also agree with the appellants, and we reverse and remand for trial. The District Board has filed a motion to substitute counsel, and we grant that motion.

A brief history of the legislation and this lawsuit is helpful. In 1991, the General Assembly passed Act 752, which created eight Regional Solid Waste Management Districts and empowered each district to adopt regulations that were consistent with, but no more restrictive than, applicable environmental protection performance standards adopted by state law or incorporated by reference to federal law. See 1991 Ark. Acts 752. In 1993, the

General Assembly expressly removed the authority of municipalities and counties to adopt environmental ordinances that were more restrictive than state or federal law absent a fully-implemented comprehensive area-wide zoning plan. *See* 1993 Ark. Acts 1280 § 2. The General Assembly also authorized Regional Solid Waste Management District Boards to adopt more restrictive standards for the location, construction, and maintenance of landfills than required by the state and federal governments. *See* 1993 Ark. Acts 1280 § 5. In December 1993, the District Board enacted permanent regulations known as Chapter E regulations pursuant to Act 1280, which restricted the location, operation, maintenance, and design of solid-waste landfills and provided financial requirements and a means for enforcing the regulations.

Sunray first challenged the Chapter E regulations in federal district court. That court abstained from hearing state-law questions. As a result, Sunray challenged the Chapter E regulations in the Washington County Chancery Court. That court initially granted summary judgment in favor of the District Board on March 22, 1995. Sunray appealed the judgment to this court.

In 1995, the General Assembly amended the Arkansas Code to provide that Regional Solid Waste Management District Boards could adopt more restrictive requirements only if the requirements are based upon generally accepted scientific knowledge or engineering practices. 1995 Ark. Acts 902 § 1, now codified at Ark. Code Ann. § 8-6-724 (Supp. 1997). On Sunray's motion, this court remanded the matter to the trial court on September 11, 1995, for the purpose of considering the effect of Act 902 on the Chapter E regulations and the trial court's summary-judgment order.

On April 2, 1996, Sunray filed its fourth amended complaint against the District Board and sought judgment declaring that the Chapter E regulations were invalid. The catalyst for the complaint was Sunray's interest in developing a solid-waste landfill in Durham, which is located in south Washington County.¹ On remand,

¹ On April 28, 1993, Sunray filed its final Class I landfill permit application with the Arkansas Department of Pollution Control and Ecology.

Sunray specifically challenged the following Chapter E regulations on various grounds, including the allegation that they were not based upon generally accepted scientific knowledge or engineering practices: (1) § 11.02, which governed the two-mile watershed buffer; (2) § 12.01, which required a full-time, on-site inspector; (3) § 12.03(a), which required quarterly testing of groundwater monitoring wells; (4) § 12.03(b), which mandated a preconstruction inventory of wells within a one-half mile radius of the site; (5) § 13.01(a)(2), which mandated detailed geologic mapping of the site and the area within one mile of the boundary of the site; (6) § 13.01(a)(3)(A)(ii), which required subsurface exploration to evaluate overburden; (7) § 13.01(a)(3)(B)(ii), which mandated geophysical logs of borings that included acoustic logs and video logs; (8) § 13.01(a)(3)(B)(iii), which required the geophysical study of the site to include two of five listed methodologies; (9) § 13.01(a)(3)(C)(ii), which mandated that preferred contaminant transport pathways be determined by dye traces; and (10) § 13.02, which required the use of a double composite liner in conjunction with a leachate detection and collection system.

Also on April 2, 1996, Sunray moved for summary judgment on the basis that there was no genuine issue of material fact that these regulations violated § 8-6-724. On June 6, 1996, the trial court allowed the State of Arkansas to intervene as a party defendant, and both the State and the District Board opposed Sunray's summary-judgment motion. Sunray subsequently abandoned its motion as to all regulations except for § 11.02, which required the two-mile watershed buffer zone. On September 26, 1996, the trial court entered an order in which it concluded that the two-mile watershed buffer was not based upon generally accepted scientific knowledge or engineering practices and, thus, was violative of § 8-6-724.

After a three-day trial, the trial court entered an order on June 23, 1997, which incorporated a June 11, 1997 letter opinion to counsel. The trial court made detailed findings of fact and concluded that the above-referenced regulations, except for three, were not based upon generally accepted scientific knowledge or engineering practices. Two exceptions were § 12.03(a), which mandated quarterly testing of groundwater monitoring wells and

FOUR COUNTY (NW) REG'L SOLID WASTE MANAGEM'T
DIST. BD. v. SUNRAY

ARK.]

Cite as 334 Ark. 118 (1998)

125

§ 13.01(a)(3)(A)(ii), which required subsurface exploration of overburden through hydraulic conductivity tests. The parties stipulated that § 13.01(a)(2) was valid so long as the requirement was limited to mapping the surface. At trial, it developed that the increased cost per household for the Chapter E regulations would be \$0.82 a month or less than \$0.03 per day.

I. Standard of Review

[1] The District Board and the State first contend that the trial court applied the wrong standard under § 8-6-724 for reviewing the Chapter E regulations. The standard, to repeat, was enacted in 1995 by Act 902 and reads as follows:

Regional solid waste management boards may adopt more restrictive standards for the location, design, construction, and maintenance of solid waste disposal sites and facilities than the state or federal governments, *provided such standards are based upon generally accepted scientific knowledge or engineering practices and are consistent with the purposes of this subchapter.*

Ark. Code Ann. § 8-6-724 (emphasis added). Specifically, the appellants claim that the trial court erroneously reviewed the regulations against the standard of whether they were generally accepted in state or federal law as opposed to whether they were *based upon* generally accepted scientific knowledge or engineering practices.

We believe that the District Board and State are correct. In reviewing the trial court's letter opinion, the court often alluded to whether the regulatory requirement was found anywhere in the United States and whether it was categorically required throughout the state or limited to specific sites. That is not the standard fixed by the General Assembly. Rather, the standard is whether the Chapter E regulations are *premised on* generally accepted scientific knowledge or engineering practices. It is clear to us that the individual Chapter E requirements are not experimental but rather have been used in one form or another in other jurisdictions in constructing and monitoring solid-waste landfills. It is also clear to us that the Chapter E requirements have more validity in karst geologies where carbonate rocks such as limestone and dolomite

predominate as opposed to non-karst terrains. Karst terrains are more likely to have sink holes, underground caverns, and greater porosity, all of which enhances the potential for groundwater movement and contamination. Indeed, counsel for Sunray agreed at oral argument that the Chapter E regulations would be suitable for approximately 69% of the four-county area, which falls into the karst category, but not for the remaining 31%. The District Board and State, however, are quick to add that the entire four-county area is geologically fragile and that the purpose of the regulations is to determine the extent of that fragility and the state of the bedrock at any given site.

[2] In light of the fact that the Chapter E regulations in dispute unquestionably have scientific or engineering validity in some settings, we cannot say that they are not based upon generally accepted scientific knowledge or engineering practices. We hold that the trial court erred in applying the incorrect legislative standard in assessing the validity of these requirements.

[3] In addition, the trial court appears to have employed the wrong standard when reviewing what amounts to legislative action by the District Board. This court has recognized that judicial review of legislative action is not undertaken *de novo* by a trial court because that would be judicial legislating and violative of the separation-of-powers doctrine contained in Ark. Const. art. 4, § 2. *City of Lowell v. M & N Mobile Home Park, Inc.*, 323 Ark. 332, 916 S.W.2d 95 (1996); *Johnson v. Sunray Serv., Inc.*, 306 Ark. 497, 816 S.W.2d 582 (1991); *Wenderoth v. City of Ft. Smith*, 251 Ark. 342, 472 S.W.2d 74 (1971). In such situations, the trial court must engage in a presumption that the legislative authority enacted the legislation in a reasonable manner, and the burden is placed on the moving party to prove that the enactment was unreasonable or arbitrary. *City of Lowell v. M & N Mobile Home Park, Inc.*, *supra*. An enactment is not arbitrary if there is "any reasonable basis" for its enactment. *City of Lowell*, 323 Ark. at 339, 916 S.W.2d at 99 (emphasis in original), citing *City of Little Rock v. Breeding*, 273 Ark. 437, 445, 619 S.W.2d 664, 668 (1981). Absent arbitrariness or unreasonableness, legislative action by local government should stand because it is not the role of the judiciary

to review the wisdom or rightness of legislation. *Johnson v. Sunray Serv., Inc.*, *supra*; *Wenderoth v. City of Ft. Smith*, *supra*.

[4] It appears to us that the trial court focused on, and then decided, whether the regulations were appropriate based on the evidence without giving proper deference to the legislative role of the District Board. Decisions concerning the nature of the tests to assess the terrain and monitor the landfill clearly fall within the bailiwick of legislative action by the District Board. The trial court's role was to examine the regulations for arbitrariness or unreasonableness. But this review does not entail questioning the wisdom or rightness of the legislation unless the legislation is not supported by a rational basis. *City of Lowell v. M & N Mobile Home Park, Inc.*, *supra*.

[5] In sum, we hold that the trial court also erred in evaluating whether the adoption of the Chapter E regulations was correct as opposed to determining whether the District Board's legislative action was arbitrary or unreasonable.

II. Review of the Regulations

We next must decide whether this court will assess the Chapter E regulations, using the correct standards of review, or remand for the trial court to conduct another trial. We are fully aware that the trial in this matter covered three days. In that trial, eight experts testified, and thirty-six exhibits were introduced. The record in this appeal is 2,346 pages. It is more than obvious to us that the issues in this case have been fully developed.

[6] This court has said that we review chancery cases *de novo* and when the record is sufficiently developed to enable us to do so, we decide the issues presented without remand. *Avance v. Richards*, 331 Ark. 32, 959 S.W.2d 396 (1998); *Cochran v. Cochran*, 309 Ark. 604, 832 S.W.2d 252 (1992); *Lynch v. Brunner*, 294 Ark. 515, 745 S.W.2d 115 (1988); *Ferguson v. Green*, 266 Ark. 556, 587 S.W.2d 18 (1979). We said in *Ferguson v. Green*, *supra*, that it has been the "invariable practice" of the court not to remand a case to chancery court for further proceedings and proof where we can plainly identify the equities of the parties. *Ferguson*, 266 Ark. at 565, 587 S.W.2d at 23.

We turn then to the regulations themselves, using the correct standards for review: (1) whether the regulations are based on generally accepted scientific knowledge or engineering practices, and (2) whether the District Board was arbitrary or unreasonable in adopting the regulations.

a. Double composite liner system.

[7] It is undisputed that double composite liners have been used in other states at particular landfill sites to confine leachate. Indeed, Sunray witness, Dr. Rudolph Bonaparte, an expert in geotechnical engineering, admitted as much. Regulation 22 of the Pollution Control and Ecology Commission mandated its usage in the Boone/St. Joe formation, which forms part of the District. With these factors in mind, we cannot say that the District Board's regulation is not based upon a generally accepted engineering practice.

We turn then to whether it was arbitrary for the District Board to adopt the double-liner requirement throughout the four counties, using the test of whether any rational basis supports it. Dr. Bonaparte urged that a double liner should be used only at specific sites and not have general applicability. Mark Wither-spoon, a registered professional geologist, testified for the District Board and underscored the special, karst characteristics of the Northwest Arkansas geology. He further alluded to the problems with the Parsons landfill, which was located in Washington County and had a state-of-the-art design but which experienced a large influx of waste and resulting contamination problems. Bobby Fanning, Director of the Benton County Environmental Affairs Office, also testified about the Fulton Class I landfill in Benton County, a landfill that also experienced leakage.

[8] We do not view this requirement as comparable to a situation where a regulation is applied categorically throughout an entire state. Here, the application is limited to an area where geology admittedly is fragile and unique. We have no doubt that the southern one-third of the District, which includes Durham, has less carbonate rock and fewer porosity problems. By the same token, the geology in the four counties is not monolithic in any

sense, but faulted and fractured, and the sole purpose for these regulations is protection against leachate and water contamination by using systems like the double composite liner. While Sunray would prefer for this requirement to be site-specific, we cannot say that the District Board was unreasonable in requiring the double-liner system throughout the area, particularly in light of the area's fragility and the landfill problems experienced in the past.

b. On-site inspector.

State monitoring and inspection of landfill sites on a random basis are required, as the trial court found. Again, the engineering practice of inspection is not contested. The sole issue here is the *permanency* of the inspector, that is, his or her presence on the site on a daily basis. The question is one of degree and the extent of the inspection. Sunray expert Dr. Bonaparte termed the requirement "unprecedented" and "excessive." Mark Witherspoon, for the District Board, countered that with full-time inspection, problems such as those experienced at the Parsons landfill would have been detected early on and perhaps prevented.

[9] We would be hard pressed to hold that daily inspection, apparently to be paid for by the District Board, is not beneficial.² While, again, this is a conservative approach for detection of potential problems, the District Board was not unreasonable in making this requirement.

c. Wells inventory.

[10] Prior to construction of the landfill, § 12.03(b) requires that wells within a one-half mile radius of the site be tested. As with full-time monitoring, testing surrounding groundwater is a commonplace engineering practice. The trial court, in fact, upheld a regulation for quarterly well testing after the landfill becomes operational. Well testing certainly meets the legislative standard.

² Though § 12.01 speaks only in terms of the District Board's "hosting" the full-time inspector, Dr. Jerry Overton testified that the District would pay for the inspector.

Whether the requirement is arbitrary is the next question. Sunray experts Dr. Bonaparte; Dr. William White, a Ph.D. in geochemistry; and James Walsh, a registered professional engineer, all testified that a one-half mile distance is arbitrary and that groundwater might not have any relationship to surrounding wells, especially upgradient wells. Mark Witherspoon for the District Board contended that initial well testing would detect any preexisting contaminant and, thus, would be helpful in weighing the validity of subsequent water-contamination claims.

[11] The rationale of Mark Witherspoon appears totally reasonable, and we perceive no arbitrariness on the part of the District Board in adopting this regulation. Some reasonable distance had to be chosen, and we decline to redraw the radius line. This regulation would have the beneficial effect of providing a connection between a "leaking" landfill and surrounding groundwater.

d. Acoustic and video geophysical logs.

As part of preconstruction design, landfill applicants must submit acoustic and video logs of bedrock topography under § 13.01 of the regulations. The trial court found both methods useful in karst geologies which, to reiterate, is the predominating geology for the four counties. These tests are common engineering practices and meet the legislative standard.

[12] The dispute, however, centers on whether it is unreasonable to require duplicative tests when one should suffice or to require the tests categorically throughout the District. Dr. Bonaparte and Dr. White, for Sunray, opined that core drillings and samples should be sufficient for testing. Dr. White and Mr. Walsh went further and testified that they had never heard of a requirement for acoustic logs for landfills. District Board expert Mark Witherspoon offered that both tests were "within the scale of what's accepted." A second witness for the District Board, Charles Fiedler, a consulting engineer, posited that these supplemental tests and logs provide additional data and can substitute for bore core samples that are not retrieved intact. While conservative, the regulation has a rational basis.

e. Surface geophysical studies.

Section 13.01 also requires at least two surface tests for bed-rock topography from a list of five tests that includes radar and seismic methods. These tests are clearly bottomed in generally accepted scientific knowledge or engineering practice.

[13] The issue raised by Sunray is whether the tests are inappropriately duplicative and whether they have any validity in a non-karst terrain. Dr. Bonaparte and Dr. White on behalf of Sunray specifically opined, while admitting the tests were appropriate for gathering information, that they should only be applied to a specific site and not required universally. The District Board's experts, including Mark Witherspoon, Charles Fiedler, and Dr. Jerry Overton, all emphasized that the more data accumulated through multiple tests, the better the opportunity to verify the results. To be sure, we can conceive of a situation where requiring a multitude of tests would at some point cross the bounds of reasonableness. Yet, we cannot fault the rationale for requiring these tests and again decline to hold that the regulation is arbitrary.

f. Dye-trace studies.

This preconstruction requirement relates to determining preferred water transport pathways by using dye tracing. Dye tracing is used, by everyone's admission, in appropriate geologies such as a karst terrain. It is unquestionably a valid engineering practice.

Sunray experts Dr. Bonaparte and Dr. White again contested the requirement of dye tracing throughout the four-county area. They argued at trial that the test is of little or no consequence in non-carbonate settings where sandstone and shale are the common bedrock and where underwater pathways are virtually non-existent. Charles Fiedler on behalf of the District Board, however, claimed that the test was also useful in hard-rock terrains.

[14] We note where the trial court described dye tracing as a "powerful tool" for determining groundwater movement in karst settings. At the very least, it would determine the extent of underwater pathways, including whether any existed. The Dis-

trict Board was not arbitrary in mandating dye tracing throughout the four counties.

[15] Because we hold that these six Chapter E regulations are based on generally accepted scientific knowledge or engineering practices and are not arbitrary or unreasonable, we reverse the trial court's judgment and dismiss Sunray's complaint with respect to these regulations.

III. Two-mile Buffer Zone

Section 11.02 of Chapter E, entitled "Watershed Buffers," requires a two-mile buffer zone between the landfill and Beaver Lake; Lake Francis; Lake Sequoyah; Table Rock Lake; Prairie Grove Lake; Lincoln Lake; Osage Creek (Benton County); the Illinois River; the White River including the East, Middle, and West Forks; the Kings River; Osage Creek (Carroll County); and War Eagle Creek. On this point, the trial court entered summary judgment in favor of Sunray and determined that there was no evidence that the two-mile buffer zone was based on generally accepted scientific knowledge or engineering practices.

[16] Our standard of review for an appeal from a grant of summary judgment is well-established and includes the principle that once a party establishes *prima facie* entitlement to summary judgment by affidavits, depositions, or other supporting documents, the opposing party must meet proof with proof and demonstrate the existence of a genuine issue of material fact. *Sublett v. Hips*, 330 Ark. 58, 952 S.W.2d 140 (1997); *Milam v. Bank of Cabot*, 327 Ark. 256, 937 S.W.2d 653 (1997).

[17] In the case before us, Sunray relied primarily on three conclusory affidavits filed by its experts: Dr. William White, James Walsh, and Kevin Hodges. All three affidavits made one statement on this issue, and that statement was identical:

District Regulation Section 11.02 banning Solid Waste Disposal Facilities within two miles of certain specified surface water bodies is not in accord with, based upon or supported by generally accepted scientific knowledge or engineering practices and is actually a clear violation of such knowledge and practices.

It is obvious that these affidavits provided evidence only in the most conclusory of forms, which is insufficient to support a

motion for summary judgment. *Robson v. Tinnin*, 322 Ark. 605, 911 S.W.2d 246 (1995); *Swindle v. Lumbermens Mut. Cas. Co.*, 315 Ark. 415, 869 S.W.2d 681 (1993).

On the other hand, in response to Sunray's summary-judgment motion, the District Board's expert, Mark Witherspoon, provided by way of affidavit:

With regard to the two-mile buffer between landfills and water bodies that was enacted by the District, buffer distances are a generally accepted means of insuring the safety of a landfill. While it is my personal position that the distance selected for a buffer should be based on site-specific criteria or on some reproducible technical formula, there are many laws and regulations throughout America that establish non-site-specific buffer distances between landfills and other things, such as water bodies, airports, and even landfills, and the use of such categorical buffer distances is a generally accepted engineering practice.

In addition, in Mark Witherspoon's deposition testimony, he discussed the general element of safety achieved by using buffer zones. Though he admitted that a buffer zone might actually have the reverse effect in certain limestone geologies, he stated the general rule that the further you take solid waste away from a water source the better.

[18] It seems patently obvious to this court that a material question of fact needs to be resolved on this issue, with the trial court using the correct standards of review as set out above. See *Wallace v. Broyles*, 331 Ark. 58, 961 S.W.2d 712 (1998). We are further mindful that this court has addressed the constitutionality of a similar buffer-zone requirement enacted by the Washington County Quorum Court. See *Johnson v. Sunray Serv., Inc.*, *supra*.

We reverse on this point as well, and we remand for trial on this issue. The District Board has moved for a substitution of counsel with Steven L. Parker being substituted for Katherine C. Gay. We grant the District Board's motion.

Reversed and dismissed in part. Reversed and remanded in part. Motion to substitute counsel is granted.

THORNTON, J., not participating.