

THE STATE OF SOUTH CAROLINA
In The Supreme Court

APPEAL FROM ADMINISTRATIVE LAW COURT
Carolyn C. Matthews, Administrative Law Court Judge

RECEIVED

JAN 18 2012

S.C. Supreme Court

Case No. 08-ALJ-07-183-CC

Heath Hill,

Petitioner,

v.

South Carolina Department of Health and
Environmental Control and South Carolina
Electric & Gas Company,

Respondents.

APPENDIX

James E. Smith, Jr.
E. Scott Winburn
James E. Smith, Jr., P.A.
1422 Laurel Street
Columbia, South Carolina 29201
(803) 933-9800

Robert Guild
314 Pall Mall
Columbia, South Carolina 29201
(803) 252-1419

Attorneys for Petitioner Heath Hill

Stephen P. Hightower
SCDHEC Office of General Counsel
2600 Bull Street
Columbia, South Carolina 29201

Elizabeth B. Partlow
Ogletree Deakins Nash Smoak & Stewart, PC
1320 Main Street
Columbia, South Carolina 29201

John M. S. Hoefer
Whilloughby & Hoefer, PA
930 Richland Street
Columbia, South Carolina 29201

Francis G. Gelleney, Jr.
Post Office Box 808
Chester, South Carolina 29706

Attorneys for Respondents

TABLE OF CONTENTS

Order Denying Petition For Rehearing.....	1
Petition For Rehearing.....	3
Amended Motion of Respondent South Carolina Electric & Gas Company To Dismiss Appeal As Moot.....	23
*Page 18 of FINAL ORDER AND DECISION The Honorable Carolyn C. Matthews, December 3, 2009 Omitted Inadvertently in the Record on Appeal.....	93
Final Brief of Appellant.....	94
Final Reply Brief of Appellant.....	136
Initial Brief of Appellant.....	150
Final Brief of Respondent South Carolina Department of Health and Environmental Control.....	197
Final Brief of Respondent South Carolina Electric & Gas Company.....	222

**Record on Appeal is Being Filed Separately along with Additional Copies of the Briefs

The South Carolina Court of Appeals

Heath Hill,

Appellant,

v.

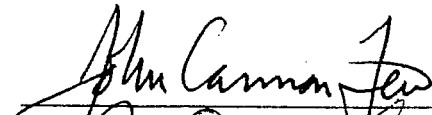
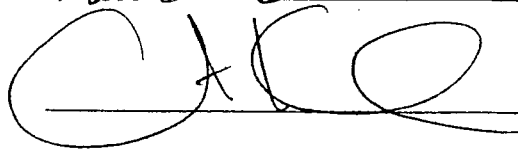
South Carolina Department of Health
and Environmental Control and South
Carolina Electric & Gas Company,

Respondents.

The Honorable Carolyn C. Matthews
Richland County
Trial Court Case No. 2008-AL-09-00183
2008-AL-09-00534

ORDER DENYING PETITION FOR REHEARING

PER CURIAM: After a careful consideration of the Petition for Rehearing, the Court is unable to discover that any material fact or principle of law has been either overlooked or disregarded and hence, there is no basis for granting a rehearing. It is, therefore, ordered that the Petition for Rehearing be denied.

 C. J.
 J.
 J.

Columbia, South Carolina

FILED

19 December 2011

JAMES E. SMITH, JR., P.A.
ATTORNEYS AT LAW

JAMES E. SMITH, JR. *†
E. SCOTT WINBURN
DYLAN W. GOFF

1422 LAUREL STREET
COLUMBIA, SOUTH CAROLINA 29201

SHANNON S. STUCKEY
(1969-2000)

TELEPHONE:
(803) 933-9800
FACSIMILE:
(803) 933-9801

OF COUNSEL:
NINA NELSON SMITH

November 23, 2011

*ALSO ADMITTED IN NC
†ALSO ADMITTED IN GA

EMAIL:
FIRM@JAMESSMITHPA.COM
WEBPAGE:
www.JamesSmithPA.com

VIA HAND DELIVERY

The Honorable Tanya Gee
Clerk of Court
South Carolina Court of Appeals
1015 Sumter Street
Columbia, SC 29201

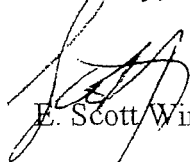
Re: Heath Hill v. South Carolina Department of Health and Environmental Control
and South Carolina Electric & Gas Company
Docket No. 08-ALJ-07-0183-CC and 08-ALJ-07-0534-CC

Dear Clerk Gee:

Please find enclosed for filing one original and six copies of the Appellant's Petition for Rehearing in the above-referenced matter. If you have any questions or need anything further, please do not hesitate to contact me.

With kind regards, I am,

Sincerely,


E. Scott Winburn

ESW:da

Enclosures

cc: Elizabeth B. Partlow, Esq.
Stephen P. Hightower, Esq.

RECEIVED
NOV 23 2011
SC Court of Appeals



THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM ADMINISTRATIVE LAW COURT
Carolyn C. Matthews, Administrative Law Court Judge

Case No. 08-ALJ-07-183-CC

Opinion No. 2011-UP-502 (S.C. Ct. App. Filed November 9, 2011)

Heath Hill,

Appellant,

v.

South Carolina Department of Health and
Environmental Control and South Carolina
Electric & Gas Company,

Respondents.

PETITION FOR REHEARING

The Appellant, Heath Hill respectfully petitions the Court for a rehearing of its Opinion No. 2011-UP-502 pursuant to Rule 221(a), SCACR. The Appellant hereby reasserts the arguments in the record and in the Appellant's briefs in this matter. In reversing, the Court may have overlooked or misapprehended the following points.

1. Where a "Mixing Zone" consent order allows continued discharge of toxic arsenic to

groundwater below SCE&G's leaking coal ash ponds at concentrations 300 times the water quality standard, the DHEC permits which fail to control this pollution must be denied. The ongoing violations of Mixing Zone Regulations related to the 2001 Mixing Zone Consent Agreement between DHEC and SCE&G and the impact of the groundwater seeps from the Wateree River have not been superseded by the 2010 NPDES permit such that any adjudication by the Court regarding the 2008 NPDES permit favorable to Mr. Hill would have no practical legal effect upon the existing controversy. Both the 2010 and 2008 NPDES permits are dependent upon the continued use of unlined leaking ash ponds, and the continued reliance upon the 2001 Mixing Zone Consent Agreement, a private enforcement action. According to Sloan v. Greenville Cnty., 356 S.C. 531 531, 552, 590 S.E.2d 338, 349 (Ct. App. 2003), a case becomes moot when an intervening event makes it "impossible" for the reviewing Court to grant effectual relief. It is possible for the reviewing court here to grant effectual relief by remanding the case to the ALC because it erred in failing to address the seeps discharging into the Wateree River. It possible for this Court to grant effectual relief by remanding the case to the ALC to address whether the leaking ash ponds violate the standards of the Mixing Zone, which would make the continued utilization of the Mixing Zone a violation of the Mixing Zone regulation. If the Court simply remanded the case and required compliance with the Mixing Zone Water Quality standards as those standards relate to the ISWLF and NPDES permits, that would be effectual relief as it would force the Respondents to correct the design defects of the wastewater treatment system for SCE&G's Wateree Station.

2. All of the exceptions to the mootness doctrine apply in this appeal. Mr. Hill demonstrated in his return to SCE&G's motion to dismiss that SCE&G conceded that the issues raised in this appeal are capable of repetition, capable of affecting future events. South Carolina has adopted the

less restrictive approach to evading review analysis, which does not require a reasonable expectation that the same complaining party be subjected to the action again. Byrd v. Irmo High School 321 S.C. 426, 468 S.E.2d 861 (S.C., 1996). Here, the complaining party is asked to appeal every successive NPDES permit for SCE&G's Wateree Station in the years to come, without any hope to challenge the private 2001 Mixing Zone Consent Agreement that establishes the key parameters by which the wastewater treatment system must operate. In fact, the 2001 Mixing Zone Consent Agreement is specifically referred to in the NPDES Permit: "Groundwater Requirements: Analytical parameters should be similar to those specified in the Mixing Zone Agreement #01-053-W", yet there is no mechanism available to the Appellant to challenge the Mixing Zone according to the ALC ruling. While the original adoption of the Mixing Zone 2001 Consent Agreement is not being challenged, its application to excuse a flawed landfill design and NPDES permit is being challenged on appeal. (Fin. Br. Of Appellant p. 1). The mixing zone regulation expressly requires the following:

Mixing zones for ground waters may be allowed by the Department. In order to ensure maintenance and protection of the uses of the waters of the State and in compliance with Section D of this regulation, any mixing zone shall be determined on an individual basis by the Department as prescribed below:

a. the numeric standards for Class GB ground water, Section H.9., are applicable unless a mixing zone solely within the bounds of the property, setting forth certain conditions, is granted by the Department. Such a mixing zone shall be granted upon satisfactory demonstration to the Department that:

- (1) Reasonable measures have been taken or binding commitments are made to minimize the addition of contaminants to ground water and/or control the migration of contaminants in ground water;
- (2) The ground water in question is confined to a shallow geologic unit which has little or no potential of being an Underground Source of Drinking Water, and discharges or will discharge to surface waters

without contravening the surface water standards set forth in this regulation;

(3) The contaminant(s) in question occurs within the bounds of the property, and there is minimum possibility for ground water withdrawals (present or future) to create drawdown such that contaminants would flow off-site; and

(4) The contaminants or combination of contaminants in question are not dangerously toxic, mobile, or persistent.

According to DHEC Regulation 61-68C, the contaminant(s) in question *must occur within the bounds of the property*, yet arsenic and other contaminants are leaving the sight. It is uncontroverted that arsenic is dangerously toxic, mobile and persistent at Wateree Station and that it is moving beyond the bounds of the property through the groundwater and through the seeps to surface water. Respondents have taken the position that the 2001 Mixing Zone Agreement cannot be challenged, ever; the same 2001 Mixing Zone that is used to excuse continued pollution of groundwater and surface water due to a flawed, antiquated wastewater treatment system using unlined 40-year-old sedimentation ponds. SCE&G and SCDHEC have taken the position that these issues raised on Appeal evade review by arguing that there can be no challenge as to whether the Mixing Zone standards are being met, and whether the Mixing Zone established to "control" the pollution at Wateree Station is in compliance with the law. SCE&G has specifically conceded that the issues are capable of repetition.

3. The questions raised on appeal are ones of imperative and manifest urgency to establish a rule for future conduct in a matter of important public interest. This general exception to the mootness doctrine is not addressed by the Court's Opinion and therefore Appellant respectfully requests rehearing of the Court's opinion in this matter. Appellant made more than passing references to environmental and public interest concerns in its argument. Numerous examples exist

throughout the Record on Appeal and Appellant's briefs regarding environmental concerns at this site including continued violation of Water Quality Standards, as well as concerns about impacts to the public. These arguments have not been abandoned. Appellant is an adjacent landowner to SCE&G's Wateree Station, and a citizen and resident of the Eastover community who uses and enjoys the natural resources of the area, including the Wateree River, which continues to be adversely affected by the activities proposed under the subject permits. Tr. 10-6-09, pp.48-53.

In Sloan v. Department of Transp. 379 S.C. 160, 167-169, 666 S.E.2d 236, 240 (S.C. 2008), the court noted that since case law did not specifically address DOT's authorization for an emergency procurement, and a DOT emergency procurement could occur at anytime, there was an urgent nature to the issue. Here, just as the DOT emergency procurement question in Sloan where the issue was whether the public (or another contractor) was shut out of the procurement process without recourse, the Appellant and the public in general were not only shut out of the process establishing the "private" perpetual 2001 Mixing Zone Consent Agreement, according to the ALC's ruling they have no mechanism to challenge whether the agency is following the law in the enforcement of the Mixing Zone. The legality of using a "private" perpetual enforcement action such as the Mixing Zone used by the Respondents in this case is an issue of imperative and manifest urgency and the Court must establish a rule for future conduct in a matter of this importance to the Appellant and the public at large.

4. The decision by the trial court may affect future events or have collateral consequences for the parties. Appellant's arguments are not conclusory, but it would be improper to speculate wildly as to how the ALC order may affect future events or result in collateral consequences. There is no doubt, however, that continued use of the wastewater treatment system

for SCE&G's Wateree Station as it is currently designed, which begins with a lined landfill and ends with unlined leaking ash ponds will result in continued pollution of the groundwater and surface waters of the state. As an adjacent landowner and as someone who uses and enjoys the natural resources of the area, including the Wateree River, the Appellant will be impacted by the trial court's decision. The only way these unlined ponds can remain in use is by keeping the public out of the process through the private enforcement agreement so that a formal challenge remains impossible as to whether the Mixing Zone regulations are being properly applied. A decision on the merits by the ALC will affect, among other things, whether SCE&G and SCDHEC may utilize a "private" Mixing Zone Consent Agreement enforcement action to evade review of the waste treatment system, and whether the Appellant can challenge the "enforcement" of that enforcement action in the future.

5. Where SCE&G's landfill "leachate" liquid contaminated with toxic arsenic will be routed to leaking unlined coal ash ponds without proper treatment, DHEC permits that fail to control this pollution must be denied. Where "Seeps" or leaks in SCE&G's coal ash pond dike allows continued discharge of toxic arsenic to the Wateree river exceeding water quality standards, DHEC permits which fail to control this pollution must be denied. The SC Pollution Control Act prohibits the discharges of pollution into the environment without a duly issued DHEC permit. SC Code Ann. § 48-1-90(a). Nothing in the ISWLF or NPDES permits here purport to account for or authorize the unpermitted discharge of arsenic into groundwater and surface water documented in this record. The ISWLF uses unlined leaking ash ponds as part its design. Those ash ponds are governed by the 2001 Mixing Zone Consent agreement between DHEC and SCE&G. The mootness issue relates only 2010 NPDES permit. Even if the Respondents are correct that the 2010 NPDES permit supercedes the 2008 NPDES permit rendering the issue moot, an argument Appellant does not

concede, the Court has still failed to address why it is an acceptable design for an ISWLF to remain dependent upon a failing private enforcement measure from 2001. The record clearly shows that Water Quality standards are violated by the seeps discovered by the Appellant, by the discovery of the plume of arsenic moving through the groundwater under the unlined ponds, and by continuous violations of the mixing zone standards.

The issue of leaking ash ponds is ongoing and continues to evade review. According to the ALC Order, the Appellant could not contest the 2001 Mixing Zone Consent Agreement relied upon by the ISWLF and NPDES permits. The ALC disallowed the Appellant's challenge to the enforcement of the Mixing Zone regulations related to Wateree Station in the 2008 permit appeals. Mr. Hill would not have been able to contest the private enforcement action as part of an appeal of the 2010 NPDES permit, an appeal of the 2014 NPDES permit, or any future NPDES permit appeal.

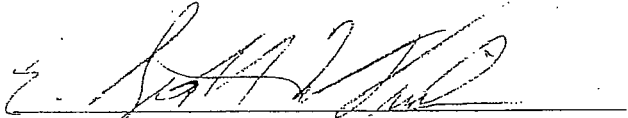
CONCLUSION

For the reasons set forth herein, the Appellant respectfully requests that the Opinion of the Court of Appeals be withdrawn and that the Final Order and Decision of the Administrative Law Court be reversed and to deny the permits sought by Respondent SCE&G for the industrial solid waste landfill and NPDES permit allowing the discharge of arsenic contaminated groundwater and service water from SCE&G's Wateree coal station.

The point at which the arsenic laden seeps or arsenic laden groundwater reaches the Wateree River, Water Quality Standards are violated both according to the Mixing Zone Regulation and the South Carolina Water Quality Standards. Issues raised on appeal represent an ongoing justiciable controversy, the issues are not moot. The issues raised on appeal are capable of repetition but

evading review; the questions are ones of imperative and manifest urgency to establish a rule for future conduct in matters of public interest; and the decision by the trial court may affect future events or have collateral consequences for the parties.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "James E. Smith, Jr.", is written over a horizontal line.

James E. Smith, Jr.

E. Scott Winburn

Dylan W. Goff

James E. Smith, Jr., P.A.

1422 Laurel Street

Columbia, South Carolina 29201

(803) 933-9800

Robert Guild

314 Pall Mall

Columbia, South Carolina 29201

(803) 252-1419

Attorneys for Appellant

ATTORNEYS FOR APPELLANT HEATH HILL

CERTIFICATE OF SERVICE

I, the undersigned, an employee of James E. Smith, Jr., P.A., attorneys for Appellant, Heath Hill, do hereby certify that I have served the foregoing Petition for Rehearing, dated November 23, 2011, by personally depositing a copy of the same in a United States Postal Service mailbox, postage prepaid, addressed to the parties indicated below:

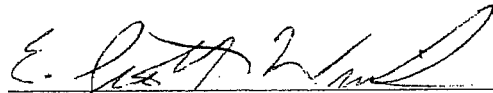
Stephen P. Hightower, Esquire
SCDHEC Office of General Counsel
2600 Bull Street
Columbia, SC 29201

John M.S. Hoefer
Willoughby & Hoefer, PA
930 Richland Street
Columbia, South Carolina 29201

Elizabeth B. Partlow
Ogletree Deakins Nash Smoak & Stewart, PC
1320 Main Street
Columbia, South Carolina 29201

Francis G. Delleney, Jr.
Post Office Box 808
Chester, South Carolina 29706

Attorneys for Respondents



E. Scott Winburn

Dated November 23, 2011

RECEIVED
NOV 28 2011
SC Court of Appeals

THIS OPINION HAS NO PRECEDENTIAL VALUE. IT SHOULD NOT BE CITED OR RELIED ON AS PRECEDENT IN ANY PROCEEDING EXCEPT AS PROVIDED BY RULE 268(d)(2), SCACR.

**THE STATE OF SOUTH CAROLINA
In The Court of Appeals**

Heath Hill,

Appellant,

v.

South Carolina Department of
Health and Environmental
Control and South Carolina
Electric & Gas Company,

Respondents.

RECEIVED

NOV 10 2011

JAMES E. SMITH, JR., P.A.

Appeal From Administrative Law Court
Carolyn C. Matthews, Administrative Law Court Judge

Unpublished Opinion No. 2011-UP-502
Heard September 13, 2011 – Filed November 9, 2011

AFFIRMED IN PART, APPEAL DISMISSED IN PART

James Emerson Smith, Jr., E. Scott Winburn, and
Robert Guild, all of Columbia, for Appellant.

Elizabeth B. Partlow, John M. S. Hoefer, and Stephen Philip Hightower, all of Columbia, and Francis G. Delleney, Jr., of Chester, for Respondents.

PER CURIAM: Heath Hill appeals the approval by the Administrative Law Court (ALC) of a Class Two Industrial Solid Waste Landfill (ISWLF) permit and a National Pollutant Discharge Elimination System (NPDES) permit, both of which were issued in 2008 by Respondent South Carolina Department of Health and Environmental Control (DHEC) to Respondent South Carolina Electric & Gas Company (SCE&G). While the matter was pending in this court, SCE&G moved to dismiss Hill's appeal as moot. The motion was consolidated with Hill's appeal. We grant the motion to dismiss as to the issues Hill raised concerning the NPDES permit and affirm the ALC's decision affirming the issuance of the ISWLF permit.

1. We hold Hill's challenge to the NPDES permit based on the alleged failure of the ALC to consider (1) a 2001 mixing zone consent agreement between DHEC and SCE&G and (2) the impact of groundwater seeps from the Wateree River Bank on arsenic levels in the Wateree River is now moot. The NPDES permit has been superseded by a 2010 NPDES permit modification that took effect January 1, 2011, after Hill failed to make a timely request for a contested case hearing on the matter. We agree with SCE&G that the 2010 permit modification is now the controlling document governing SCE&G's operation of its NPDES system and will remain so even if Hill were to prevail in this appeal on the issues he raised regarding the 2008 permit. Hence, any adjudication by this court about the 2008 NPDES permit, even if favorable to Hill, would have "no practical legal effect upon [the] existing controversy." Sloan v. Greenville Cnty., 356 S.C. 531, 552, 590 S.E.2d 338, 349 (Ct. App. 2003) (brackets in original).

2. We further hold that none of the three exceptions to the mootness doctrine applies in this appeal. Contrary to Hill's assertion that the controversy giving rise to this appeal is capable of repetition but evading review, we found no indication that his complaints concerning the NPDES permit "can be repeatedly presented to the trial court yet escape review at the appellate level because of [their] fleeting and determinate nature." Citizen Awareness Regarding Educ. v. Calhoun Cnty. Publ'g, Inc., 406 S.E.2d 65, 67

(W. Va. 1991) (quoted in Curtis v. State, 345 S.C. 557, 568, 549 S.E.2d 591, 596 (2001)). Furthermore, in his return to SCE&G's motion to dismiss, Hill made only passing references to environmental concerns and a conclusory assertion that the ALC order at issue here may affect future events or result in collateral consequences for the parties; therefore, we hold that neither public interest concerns nor potential repercussions for the parties warrant our adjudication of the propriety of the NPDES permit. See First Sav. Bank v. McLean, 314 S.C. 361, 363, 444 S.E.2d 513, 514 (1994) (deeming an issue abandoned because the appellant failed to provide supporting arguments or authority). Accordingly, we dismiss as moot those issues in Hill's appeal concerning the NPDES permit.

3. As to Hill's argument that the ISWLF permit failed to control the effect of SCE&G's landfill "leachate" liquid, we affirm the ALC order pursuant to Rule 220(b)(1), SCACR, and the following authorities: S.C. Code Ann. §1-23-610(B) (Supp. 2010) (providing the standard of review for the court of appeals when reviewing an order issued by the ALC); Bailey v. S.C. Dep't of Health & Env'tl. Control, 388 S.C. 1, 5, 693 S.E.2d 426, 429 (Ct. App. 2010) (stating the court of appeals cannot substitute its judgment for that of the ALC as to the weight of the evidence on questions of fact unless the ALC's findings are " 'clearly erroneous in view of the reliable, probative and substantive evidence in the whole record' ") (quoting Comm'rs of Pub. Works v. S.C. Dep't of Health & Env'tl. Control, 372 S.C. 351, 358, 641 S.E.2d 763, 766-67 (Ct. App. 2007)); id. at 5-6, 693 S.E.2d at 429 ("Substantial evidence is not a mere scintilla of evidence, but evidence which, considering the record as a whole, would allow reasonable minds to reach the conclusion the ALC reached.") (citing Leventis v. S.C. Dep't of Health & Env'tl. Control, 340 S.C. 118, 130, 530 S.E.2d 643, 650 (Ct. App. 2000)).

AFFIRMED IN PART, APPEAL DISMISSED IN PART.

FEW, C.J., and THOMAS and KONDUROS, JJ., concur.

JAMES E. SMITH, JR., P.A.
ATTORNEYS AT LAW

JAMES E. SMITH, JR. *†
E. SCOTT WINBURN
DYLAN W. GOFF

1422 LAUREL STREET
COLUMBIA, SOUTH CAROLINA 29201

SHANNON S. STUCKEY
(1969-2000)

TELEPHONE:
(803) 933-9800
FACSIMILE:
(803) 933-9801

OF COUNSEL:
NINA NELSON SMITH

February 28, 2011

*ALSO ADMITTED IN NC
†ALSO ADMITTED IN GA

EMAIL:
FIRM@JAMESSMITHPA.COM
WEBPAGE:
www.JamesSmithPA.com

VIA HAND DELIVERY

The Honorable Tanya Gee
Clerk of Court
South Carolina Court of Appeals
1015 Sumter Street
Columbia, SC 29201

RECEIVED

FEB 28 2011

SC Court of Appeals

Re: Heath Hill v. South Carolina Department of Health and Environmental Control
and South Carolina Electric & Gas Company
Docket No. 08-ALJ-07-0183-CC and 08-ALJ-07-0534-CC

Dear Clerk Gee:

Please find enclosed for filing one original and six copies of the Petitioner's Return to Respondent South Carolina Electric & Gas Company to Dismiss Appeal as Moot in the above-referenced matter. Please return the seven additional stamped copies to our courier.

With kind regards, I am,

Sincerely,


E. Scott Winburn

ESW:da

Enclosures

cc: Elizabeth B. Partlow, Esq.
Robert Guild, Esq.
Etta Williams, Esq.
Roger P. Hall, Esq.
Stephen P. Hightower, Esq.



Service Disabled Veteran-Owned Small Business

THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM THE ADMINISTRATIVE LAW COURT
Carolyn C. Matthews, Administrative Law Judge

Docket No. 08-ALJ-07-0183-CC
Docket No. 08-ALJ-07-0534-CC

Heath Hill,

Appellant,

v.

South Carolina Department of
Health and Environmental Control
and South Carolina Electric and Gas
Company,

Respondents.

APPELLANT HEATH HILL'S RETURN TO RESPONDENT SOUTH CAROLINA
ELECTRIC & GAS COMPANY'S AMENDED MOTION TO DISMISS APPEAL AS MOOT

James E. Smith, Jr.
E. Scott Winburn
1422 Laurel Street
Columbia, South Carolina 29201
(803) 933-9800

Robert Guild
314 Pall Mall Street
Columbia, South Carolina 29201
(803) 252-1419

Introductory Statement

On February 17, 2011, Respondent South Carolina Electric & Gas Company filed its Amended Motion To Dismiss Appeal As Moot. Appellant Heath Hill opposes this motion. The grounds of the Appellant's opposition are: (1) the issues raised on appeal represent an ongoing controversy; (2) the issues raised on appeal are capable of repetition but evading review; (3) the questions raised on appeal are ones of imperative and manifest urgency to establish a rule for future conduct in matters of important public interest; (4) the decision by the ALC may affect future events or have collateral consequences for the parties. Respondent's motion should be denied.

Argument

1. **Issues raised on appeal represent an ongoing justiciable controversy, the issues are not moot.**

The issues raised on appeal represent an ongoing justiciable controversy concerning the Class Two Solid Waste Landfill Permit and an NPDES Discharge Permit. Respondent argues that no actual controversy exists, therefore the Appeal is "moot". A case becomes moot if it is *impossible* for the reviewing court to grant effectual relief. *Ex parte Moore*, 550 S.E.2d 877 (emphasis added). This condition for mootness does not exist here.

The pollution containment and control system for managing the pollutants associated with the coal combustion process at Wateree Station, including toxic arsenic, is designed to fail. So long as the arsenic-contaminated liquid "leachate" accumulated from the new landfill is routed through the unlined and leaking coal ash ponds before it reaches the permitted NPDES discharge pipe, the permit is designed to fail. Where the design and performance of the unlined

and leaking coal ash ponds are an essential element in the approved landfill and NPDES wastewater systems, the ALC erred in refusing to consider the leaking ponds in its review of the permits and erred further in failing to deny the permits or require effective remedial measures to correct these design defects.

In short, the unlined leaking ash ponds, a component of the proposed waste treatment system, were leaking at the time of the appeal, they are leaking now and they will continue to leak in the future because the ALC erred by refusing to require remedial measures to correct the design defects.

2. The issues raised on appeal are capable of repetition but evading review.

Respondent concedes that the issues raised in this appeal are capable of repetition, yet argues that the issues do not evade review. South Carolina has adopted the “lenient” approach to evading review analysis, which does not require a reasonable expectation that the same complaining party be subjected to the action again. *Byrd v. Irmo High School* 321 S.C. 426, 468 S.E.2d 861 (S.C.,1996). In *Sloan v. Department of Transp.* 379 S.C. 160, 167-169, 666 S.E.2d 236, 240 (S.C.,2008), the court addressed the question of whether an issue evades review. In *Sloan*, the issue was whether the SCDOT properly authorized an emergency procurement provision to rectify a construction project significantly behind schedule, by circumventing the usual competitive bidding process. The emergency procurement came four years into the construction project, which was then completed within about six months. The project was completed just a few months after Sloan filed suit. The court applied the “capable of repetition but evading review” exception to mootness in *Sloan*, and found that the issues raised by Sloan were not moot. The court cited the reasoning in *Greenville County I*, 356 S.C. at 555, 590

S.E.2d at 351 (where the Court of Appeals found that Sloan's case, which presented an issue related to the procurement code's design-build exception, was one that was likely to recur but evade review because "design-build source selection accelerates the process of awarding public works contracts and the ultimate completion of the projects themselves").

Here, the issue of the unlined leaking ash ponds, a component of the proposed waste treatment system, is capable of repetition and continues to evade review. These ponds were leaking at the time of the appeal, they are leaking now, and they will continue to leak in the future. A 2001 "Mixing Zone" consent agreement will allow continued discharge of toxic arsenic to groundwater below SCE&G's leaking coal ash ponds. Landfill "leachate" liquid contaminated with arsenic will be routed to these unlined ash ponds without proper treatment. The NPDES and Landfill permits depend upon the Mixing Zone Agreement. The 2001 Mixing Zone Consent Agreement is specifically referred to in the NPDES Permit cited in Respondent's motion under **Groundwater Requirements**: "Analytical parameters should be similar to those specified in Mixing Zone Agreement #01-053-W, with the addition of total mercury, established for the SCE&G/Wateree Facility in February 2001." (Respondent's Exhibit 4)¹ The original adoption of the Mixing Zone 2001 Consent Agreement is not being challenged, but its application to excuse a flawed landfill design and NPDES permit is being challenged on appeal. (Fin. Br. of Appellant p. 1.)

Respondent has consistently taken the position that the issues regarding the continued use of the unlined, leaking ash ponds, along with the continued reliance upon the 2001 Mixing Zone Consent Agreement enforcement could not be considered by the ALC, nor could these issues be

considered on appeal. (R. p. 11 and see also Br. of Resp. SCE&G at pp. 9-10) If Respondent is correct, that the Mixing Zone Consent Order (governing the unlined leaking ash ponds) is not to be considered as part of the waste treatment system, then Appellant cannot review these issues, ever. According to SCE&G's position, the Appellant must suffer the threat of contamination for at least five more years until the next opportunity for Permit Review, yet, even then, the unlined leaking ash ponds and the 2001 Mixing Zone Consent Agreement cannot be reviewed according to SCE&G. SCE&G's position confirms that the issues raised on Appeal are capable of repetition but evading review. Respondent's motion should be denied.

3. The questions raised on appeal are ones of imperative and manifest urgency to establish a rule for future conduct in matters of public interest.

This is not a dispute simply between two adjacent landowners. Appellant is an adjacent landowner, citizen and resident of the Eastover community, who uses and enjoys the natural resources of the area, including the Wateree River, which will be adversely affected by the activities proposed under the subject permits. He is concerned for the safety of his family and that of the community. Tr. 10-6-09, pp. 48-53. The subject permits clearly impact the public at large as well as the Appellant. The general public enjoys the natural resources of the area, including the River, which is impacted by the proposed activities. The South Carolina Department of Health and Environmental Control (DHEC) is the state agency charged with protecting public health, coastal resources, and the State's land, air and water quality. Clearly,

¹ It appears that Counsel for SCE&G inadvertently included her Bio. within the pages of the NPDES Permit after the Table of Contents Page.

the issues of this appeal concern matters of public interest, therefore, Respondent's motion should be denied.

In *Sloan*, the court notes that where judicial guidance exists on the legal issue presented, there is no imperative and manifest urgency for an advisory opinion. *Sloan v. Department of Transp* 379 S.C. 160, 167-169, 666 S.E.2d 236, 240 (S.C., 2008). In *Sloan*, no case law specifically addressed DOT's authorization for an emergency procurement. The court found that because DOT's authorization for an emergency procurement could occur at anytime, there was an urgent nature to the issue.

The issues here are just as urgent as the issues in *Sloan*. Here, we have components of a waste treatment system (the unlined ash ponds) that continue to leak toxic arsenic into the river and groundwater, and a regulatory agency that continues to misuse the Mixing Zone Consent Agreement enforcement action as a pretext to "contain" the plume of arsenic in the groundwater. The question the court faced in *Sloan*, whether DOT's use of the emergency procurement provision was proper to circumvent the standard competitive bidding process, is strikingly similar to the questions raised in this case. Here, the question of whether DHEC can defer to a separate enforcement action, i.e. the 2001 Mixing Zone Consent Agreement, to circumvent the acknowledged deficiencies of the unlined ash ponds is a novel question and one of first impression.

The issues raised on appeal are of significant public interest. The United States Environmental Protection Agency is proposing to regulate for the first time coal combustion residuals, (CCRs) or coal ash, to address the risks from the disposal of the wastes generated by electric utilities like SCE&G. The Agency is considering two options. Under the first proposal,

EPA would list CCRs as special wastes subject to regulation under subtitle C of Resource Conservation and Recovery Act (RCRA), when they are destined for disposal in landfills or surface impoundments. Under the second proposal, EPA would regulate disposal of CCRs under subtitle D of RCRA by issuing national minimum criteria. (See 35128 **Federal Register**/Vol. 75, No. 118/ Monday, June 21, 2010/Proposed Rules) Clearly, the issue of coal ash disposal is a matter of public interest. The questions raised on appeal are ones of imperative and manifest urgency to establish a rule for future conduct in matters of public interest, therefore, Respondent's motion should be denied.

4. The decision by the trial court may affect future events or have collateral consequences for the parties.

In *Sloan*, the Court succinctly addressed the issue of whether a decision by the trial court may effect future events or have collateral consequences for the parties: "a decision on the merits of this case certainly will affect future events, *to wit*, how the DOT decides to authorize emergency procurements in the future." Here, a decision on the merits by the ALC will certainly affect, among other things, whether SCE&G and SCDHEC may utilize a "private" Mixing Zone Consent Agreement enforcement action to evade review of a waste treatment system that continues to use ash ponds leaking toxic arsenic as components of the waste treatment system. Furthermore, a decision on the merits affects whether SCDHEC can violate the requirements of a true Mixing Zone simply by arguing that the Agreement created in 2001 is not subject to review. The decision by the ALC will affect future events and have collateral consequences for the parties, therefore, Respondent's motion should be denied.

Conclusion

For the foregoing reasons, Appellant respectfully requests that the Court deny the Motion To Dismiss.

Respectfully submitted,

James E. Smith, Jr.
E. Scott Winburn
James E. Smith, Jr., P.A.
1422 Laurel Street
Columbia, SC 29201
(803) 933-9800

Robert Guild
314 Pall Mall
Columbia, SC 29201
(803) 252-1419

Attorneys For Appellant Heath Hill

CERTIFICATE OF SERVICE

I do hereby certify that the foregoing APPELLANT'S HEATH HILL'S RETURN TO RESPONDENT SOUTH CAROLINA ELECTRIC & GAS COMPANY'S AMENDED MOTION TO DISMISS APPEAL AS MOOT has been served upon the following persons by U.S. Mail, properly addressed, and with the correct amount of postage affixed thereto:

Elizabeth B. Partlow
Ogletree Deakins Nash Smoak & Stewart, PC
1320 Main Street
Columbia, South Carolina 29201
(803) 252-1300

Etta Williams, Esq.
S.C.DHEC
2600 Bull Street
Columbia, SC 29201

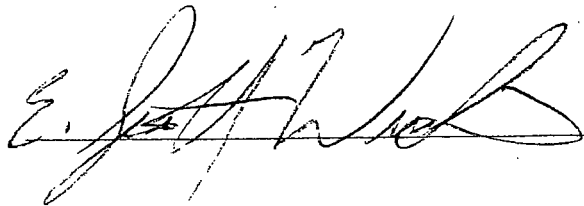
John M. S. Hoefer
Willoughby & Hoefer, PA
930 Richland Street
Columbia, South Carolina 29201
(803) 252-3300

Roger Hall, Esq.
S.C.DHEC
2600 Bull Street
Columbia, SC 29201

Francis G. Delleney, Jr.
Post Office Box 808
Chester, South Carolina 29706
(803) 581-2211

Stephen P. Hightower, Esq.
S.C.DHEC
2600 Bull Street
Columbia, SC 29201

Dated this 28th day of February 2011



THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM THE ADMINISTRATIVE LAW COURT
Carolyn C. Matthews, Administrative Law Judge

Case No. 08-ALC-07-0183-CC
Case No. 08-ALC-07-0534-CC

Heath Hill,

Appellant,

v.

South Carolina Department of
Health and Environmental
Control and South Carolina
Electric & Gas Company,

RECEIVED
JUL 1 2 008
SC Court of Appeals

Respondents.

AMENDED MOTION OF RESPONDENT
SOUTH CAROLINA ELECTRIC & GAS COMPANY
TO DISMISS APPEAL AS MOOT

Elizabeth B. Partlow
OGLETREE, DEAKINS, NASH,
SMOAK & STEWART, P.C.
1320 Main Street, Suite 600
Columbia, SC 29201
03-252-1300 (Telephone)
803-254-6517 (Facsimile)
beth.partlow@ogletreedeakins.com

John M.S. Hoefer
WILLOUGHBY & HOEFER, P.A.
Post Office Box 8416
Columbia, SC 29202-8416
803-252-3300 (Telephone)
803-771-2410 (Facsimile)
jhoefer@willoughbyhoefer.com

Francis G. Delleney, Jr.
HAMILTON DELLENEY &
HEMLEPP, P.A.
Post Office Box 808
Chester, SC 29706
803-581-2211 (Telephone)
803-581-2216 (Facsimile)
hdhattys@truvista.net

MOTION OF RESPONDENT SOUTH CAROLINA ELECTRIC & GAS COMPANY TO DISMISS APPEAL AS MOOT

NOW COMES Respondent South Carolina Electric & Gas Company ("SCE&G") and moves to dismiss the appeal of Appellant Heath Hill ("Appellant") as moot. In support of this Motion, SCE&G would show as follows:

FACTS

1. In April 2008 and August 2008, Appellant filed in the Administrative Law Court ("ALC") Requests for Contested Case Hearings to challenge a landfill permit and a National Pollutant Discharge Elimination System ("NPDES") permit, respectively, issued by the South Carolina Department of Health and Environmental Control ("DHEC") to SCE&G for its coal-fired generating plant known as Wateree Station in Eastover, Richland County, South Carolina.
2. The ALC consolidated the two Requests for Contested Case Hearings.
3. On December 3, 2009, the ALC issued its Final Order and Decision upholding DHEC's decision to issue the landfill and NPDES permits.
4. Following denial of his Motion to Reconsider, Appellant filed his Notice of Appeal in the South Carolina Court of Appeals on February 11, 2010. The case has been fully briefed.
5. On June 1, 2010, DHEC staff issued an NPDES permit modification to SCE&G, principally to conform to changes made to the South Carolina Water Quality Standards in 2008. The DHEC staff decision also revised several conditions of the permit in response to public comment on the draft permit modification. (Exhibit 1.)
6. Appellant requested final review of the permit modification by the DHEC Board, and the Board denied his request. (Exhibit 2.)

7. Appellant thereafter filed a Request for a Contested Case Hearing before the ALC. The ALC dismissed Appellant's Request for Contested Case Hearing as untimely by order dated December 9, 2010. (Exhibit 3.)

8. Based on the ALC's Order of Dismissal, DHEC issued the permit modification with an effective date of January 1, 2011. (Exhibit 4.)

9. Appellant has not appealed the dismissal of his Request for Contested Case Hearing to challenge the NPDES permit modification.

ARGUMENT

In his pending appeal, Appellant has raised three issues, all of which are based on the alleged inadequacy of SCE&G's August 2008 NPDES permit to protect the groundwater beneath SCE&G's ash ponds and the surface water in the Wateree River from "toxic arsenic." Appellant's only complaint about the landfill permit is that leachate collected from the landfill will be routed to the ash ponds, from which Appellant asserts that arsenic will continue to discharge to the groundwater and to the Wateree River. Indeed, Appellant could not challenge the landfill permit itself, since Appellant's own expert witness admitted at the hearing that the landfill permit conforms to all requirements of South Carolina law and regulation. (See R. p. 402, line 11 – p. 403, line 12; see also Br. of Resp. SCE&G at pp. 16-17.)

The August 2008 NPDES permit challenged in Appellant's appeal imposed end-of-pipe limits for arsenic in the wastewater discharge and required SCE&G to monitor the ash pond dikes and toe areas to determine that seepage was not occurring. (R. pp. 1007 - 1037.) Appellant argued in his appeal that these requirements were inadequate. Since the filing of the instant appeal, however, these requirements have been replaced

by the requirements of the NPDES Permit Modification issued on June 1, 2010, and effective on January 1, 2011.¹ Thus, even if the ALC's decision upholding the August 2008 NPDES permit were reversed, the reversal would have no practical effect. The terms of the NPDES Permit Modification, effective January 1, 2011, would continue to set forth the requirements for SCE&G's wastewater discharge.

Because the relief requested by Appellant in this case would have no practical legal effect upon the controversy, Appellant's appeal is now moot. See *Mathis v. S.C. State Highway Dept.*, 260 S.C. 344, 195 S.E.2d 713 (1973) (case becomes moot when some event occurs making it impossible for reviewing Court to grant effectual relief); see also *Curtis v. State*, 345 S.C. 557, 567, 549 S.E.2d 591, 596 (2001) (appellate court will not pass on moot and academic questions or make an adjudication where there remains no actual controversy).

The Court has recognized three exceptions to the doctrine of mootness: (1) if the issue is capable of repetition but evading review; (2) if the question is one of imperative and manifest urgency to establish a rule for future conduct in matters of important public interest; or (3) if a decision by the trial court may affect future events or have collateral consequences for the parties. *Curtis*, 345 S.C. at 568, 549 S.E.2d at 596 (deciding moot question of temporary injunction in consolidated appeal with decision on the merits); see also *Shah v. Richland Mem. Hosp.* 350 S.C. 139, 564 S.E.2d 681 (Ct. App. 2002) (dismissing State Ethics Act allegation as moot where one

¹ In pertinent part, the NPDES Permit Modification imposed monthly monitoring and reporting requirements for arsenic rather than end-of-pipe limits (based on the 2008 revisions to South Carolina Water Quality Standards), required a groundwater monitoring plan, and prescribed additional requirements for operation and maintenance of the ash ponds. (Exhibit 4.)

defendant was not a governmental entity and the contract claims were rendered moot by expiration of the contract). None of these exceptions applies to this matter.

In the first category, the Court has considered the legality of a student's suspension even though the suspension was complete before the appellate court could review the matter. *Byrd v. Irmo High School*, 321 S.C. 426, 468 S.E.2d 861 (1996). Likewise, the South Carolina Court of Appeals has ruled on an appeal from a refusal to issue a declaratory judgment on the validity of a bid at a judicial sale. *Holden v. Cribb*, 349 S.C. 132, 561 S.E.2d 634 (Ct. App. 2002). However, the Court has refused to review a case in which a City imposed and then removed allegedly unauthorized conditions on a residential development, *Seabrook v. City of Folly Beach*, 337 S.C. 304, 523 S.E.2d 462 (1999), and a case in which an entity first refused to produce but thereafter produced documents under the Freedom of Information Act, *Sloan v. Friends of the Hunley, Inc.*, 369 S.C. 20, 630 S.E.2d 474 (2006). In both *Seabrook* and *Sloan*, the Court ruled that although the actions were capable of repetition, they did not evade review. To evade review, the issue must be one which would likely escape review at the appellate level because of its "fleeting and determinate nature." *McClam v. State*, 386 S.C. 49, 56, 686 S.E.2d 203, 206 (Ct. App. 2009) (citations omitted). Like the issues analyzed in *Seabrook*, *Sloan*, and *McClam*, the alleged defects in SCE&G's now-superseded permit may be capable of being repeated in some other permit, but they do not evade review.

In the second category, South Carolina appellate courts have considered such matters of public interest as the authority of a government body to issue bonds for construction of a new auditorium, *Ashmore v. Greater Greenville Sewer Dist.*, 211 S.C.

77, 44 S.E.2d 88 (1947), and the expenditure of public funds pursuant to a competitive bidding statute, *Sloan v. Dep't of Transp.* 365 S.C. 299, 618 S.E.2d 876 (2005); *Sloan v. Greenville County*, 356 S.C. 531, 590 S.E.2d 338 (Ct. App. 2003); *Sloan v. School Dist. of Greenville County*, 342 S.C. 515, 537 S.E.2d 299 (Ct. App. 2000). No such issue of important public interest is presented here. This case is a dispute between adjacent landowners over the specific terms of a particular NPDES permit and implicates no broader public issue.

In the third category, the South Carolina Court of Appeals ruled on an allegedly moot case in which a debtor had already deposited disputed funds with the court. *Collins Music Co. v. IGT*, 365 S.C. 544, 619 S.E.2d 1 (Ct. App. 2005) (noting that post-judgment interest was continuing to accrue, so the court's decision would affect both parties to the appeal). In this case however, adjudication by the court on Appellant's complaints about various provisions of SCE&G's 2008 NPDES permit will not affect any future event or have collateral consequences for the parties. Beginning on January 1, 2011, SCE&G's 2010 Permit Modification set forth the conditions under which SCE&G may discharge wastewater to the Wateree River. Any decision by this Court about the 2008 permit would be advisory only.

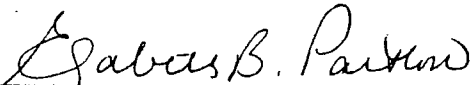
CONCLUSION

Because the 2008 NPDES permit at issue in the instant appeal has been superseded and replaced by the 2010 permit, Appellant's appeal of the 2008 permit is moot. No exception to the doctrine of mootness applies. Accordingly, the Court should dismiss this appeal.

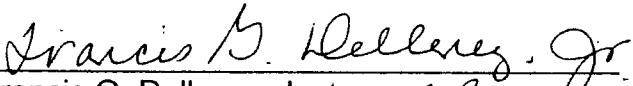
Respectfully submitted,

OGLETREE, DEAKINS, NASH,
SMOAK & STEWART, P.C.

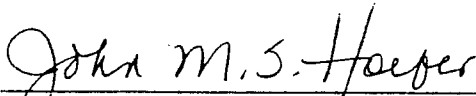
February 17, 2011


Elizabeth B. Partlow
1320 Main Street, Suite 600
Columbia, SC 29201
803-252-1300 (Telephone)
803-254-6517 (Facsimile)
beth.partlow@ogletreedeakins.com

HAMILTON DELLENEY & HEMLEPP, P.A.


Francis G. Delleney, Jr. *by EBP up permission*
Post Office Box 808
Chester, SC 29706
803-581-2211 (Telephone)
803-581-2216 (Facsimile)
hdhattys@truvista.net

WILLOUGHBY & HOEFER, P.A.


John M. S. Hoefer *by EBP up permission*
Post Office Box 8416
Columbia, SC 29202-8416
803-252-3300 (Telephone)
803-771-2410 (Facsimile)
jhoefer@willoughbyhoefer.com

Attorneys for Respondent South Carolina
Electric & Gas Company

CERTIFICATE OF SERVICE

I do hereby certify that the foregoing **AMENDED MOTION OF RESPONDENT SOUTH CAROLINA ELECTRIC & GAS COMPANY TO DISMISS APPEAL AS MOOT** has been served upon the following persons by U.S. Mail, properly addressed, and with the correct amount of postage affixed thereto:

Etta Williams, Esq.
S.C. DHEC
2600 Bull Street
Columbia, SC 29201

James E. Smith, Jr., Esq.
E. Scott Winburn, Esq.
1422 Laurel Street
Columbia, SC 29201

Stephen P. Hightower, Esq.
S.C. DHEC
2600 Bull Street
Columbia, SC 29201

Robert Guild, Esq.
314 Pall Mall
Columbia, SC 29201

Roger Hall, Esq.
S.C. DHEC
2600 Bull Street
Columbia, SC 29201

Dated this 17th day of February 2011.

Charles B. Patton

Exhibit 1

MEMO

June 1, 2010



TO: Concerned Citizens

FROM: Jeffrey P. deBessonnet, P.E.
Director, Water Facilities Permitting Division

91 7108 2133 3936 3005 5087

RE: SCE&G/Wateree Permit Modification Decision
NPDES Permit SC0002038

DHEC staff has reviewed the comments received during the comment period, including the public hearing held on March 9, 2010. Our decision is to issue the permit today with changes. A copy of the permit is on DHEC's web page at <http://www.scdhec.gov/environment/water/>. The following changes have been made to the permit:

1. The monitoring frequency for arsenic has been changed from quarterly to monthly.
2. A reopener statement has been added to Part V.A.8 that will allow the permit to be modified based on any future regulation or law changes to arsenic water quality standards. Also, wording has been added stating that permit modifications may only be made for cause in accordance with R.61-9.122.62(d) and/or (e).
3. The language allowing construction storm water to be discharged without additional permits has been removed from Part V.E.5.
4. A permit condition has been added which requires SCE&G to remove a net amount of ash from the coal ash basins over the life of the NPDES permit to reduce levels of pollutants that may be leaching into the groundwater.
5. Part V.E.6 of the previous permit has been revised to require regular inspections of the ash basins by qualified personnel and submittal of reports of the inspections to the Department.

Enclosed with this memo is a response to comments and on the reverse side of this memo is information on how to request a final review conference with the DHEC Board, i.e., to initiate an appeal of this staff decision. As noted in the enclosure, a request for a final review conference must be made within 15 days of DHEC mailing this notice.

Appeal Procedures



The issuance of an NPDES permit by the S.C. Department of Health and Environmental Control (Department) becomes the final agency decision 15 days after notice of the decision has been mailed to the applicant or respondent, unless a written request for final review is filed with the Department. This Department decision relies on the administrative record, which includes the permit rationale, and other supporting documentation contained in the permit file.

An applicant, permittee, licensee, or affected person who wishes to appeal this decision must file a written request for final review with the Clerk of the Board at the following address or by facsimile at 803-898-3323:

Clerk of the Board
SC DHEC
2600 Bull Street
Columbia, SC 29201

The request for final review should include the following:

1. The grounds on which the Department's decision is challenged and the specific changes sought in the decision,
2. A statement of any significant issues or factors the Board should consider in deciding how to handle the matter, and
3. A copy of the Department's decision or action under review.

If the 15th day occurs on a weekend or State holiday, the request is due to be received by the Clerk of the Board on the next working day. The request for final review must be received by the Clerk of the Board by 5:00 p.m. on the date it is due. If a timely request for final review is filed with the Clerk of the Board, the Clerk will provide additional information regarding procedures.

The Board of Health and Environmental Control has 60 days from the date of receipt of a request for final review to conduct a final review conference. The conference may be conducted by the Board, its designee, or a committee of three members of the Board appointed by the chair.

If a final review conference is not conducted within 60 days, the Department decision becomes the final agency decision, and a party may request a contested case hearing before the Administrative Law Court within 30 days after the deadline for the final review conference.

SCE&G/Wateree Public Comments (in italics) and Responses (2010 NPDES Permit Modification)

1. *Some commenters noted that the condition allowing discharge of construction storm water does not adequately protect water quality standards.*

The Department has removed the allowance for construction storm water to be discharged under this NPDES permit.

2. *Some commenters noted that removal of limits on arsenic constitutes antibacksliding and is not protective of the river.*

Antibacksliding rules are not engaged when there is no longer any reasonable potential to violate water quality standards. Also, antibacksliding does not apply to an effluent limit that has not been in effect and met consistently.

3. *Some commenters noted that use of 7Q10 and mean annual flow and mixing zones are not protective under certain conditions.*

Regulation 61-68.C.4 states the following with regards to aquatic life and human health protection:

(a)(1): The applicable critical flow conditions for aquatic life criteria shall be defined as 7Q10 or tidal conditions as determined by the Department. The numeric criteria of this regulation are not applicable to waters of the State when the flow rate is less than 7Q10 except as prescribed below.

(b)(1): The applicable critical flow conditions for human health shall be defined as annual average flow for carcinogens, 7Q10 (or 30Q5 if provided by the applicant) for noncarcinogens, or tidal conditions as determined by the Department. The applicable critical flow conditions for organoleptic criteria shall be defined as annual average flow or tidal conditions as determined by the Department. The numeric criteria of this regulation are not applicable to waters of the State when the flow rate is less than the annual average flow for carcinogens or 7Q10 (or 30Q5 if provided by the applicant) for noncarcinogens, except as prescribed below.

Based on these regulations, the Department has used the appropriate flow conditions to derive permit limitations using 7Q10 and annual average flow conditions even when drought or other flow conditions below 7Q10 have occurred. The Department has allowed use of a surface water mixing zone to determine the need for permit limits in accordance with Regulation 61-68.C.10.

4. *Some commenters noted that the permit should provide further recommendation and requirements to protect the Wateree River from seepage areas.*

The NPDES modification accounts for the ground water contribution of arsenic, including the seeps. The seeps are being reviewed under DHEC's current enforcement order. In this context, SCE&G is developing a plan to address the seeps.

5. *Some commenters noted that monitoring for iron and manganese should not be removed from the permit.*

Iron and manganese were removed from the Water Quality Standards regulation in 2008. Based on this regulatory change, monitoring is no longer needed.

6. *Some commenters noted that DHEC should provide additional language that insures the permittee collects a representative sample if collected on a day other than the 1st Monday of every month.*

The NPDES permit contains a "boilerplate" condition in Part II.J.1.a(1) that states that all samples must be "representative" of the monitored activity, regardless of the day collected.

7. *Some commenters suggested that DHEC should require regular monitoring of landfill/runoff leachate.*

With regards to monitoring of this wastewater, the monitoring is to be performed at the final discharge point from the ash ponds. Monitoring of wastewater discharges typically occurs after all treatment has been provided; this includes the ash ponds as part of the total treatment system because they provide additional settling. In an NPDES permit, the monitoring is designed to provide information on the effluent for comparison with water quality standards instream. Requiring additional sampling on the landfill leachate alone would not provide data for instream water quality comparison.

Included in the permit, however, is a condition that requires additional, more comprehensive sampling to be performed after the landfill and scrubber systems begin operation. This data will provide actual, not just estimated, characteristics of the effluent. Changes to the permit may be warranted upon review of the data.

8. *Some commenters noted that DHEC should deny SCE&G's request for modification of the NPDES permit based on the levels of arsenic in soil and water.*

Arsenic is discharged from the facility to the river both in wastewater, in accordance with the NPDES permit, and in groundwater that receives arsenic from the ash basins and flows towards the river. The groundwater discharge includes seeps that outcrop along the edge of the river. The groundwater discharge is being investigated under a separate DHEC enforcement action.

DHEC has calculated the amount of arsenic that will be discharged to the river from these two sources (wastewater and groundwater) based on the volume of water that will discharge to the river from these sources and the arsenic concentrations in the wastewater and groundwater. These calculations show that the levels of arsenic in the river will remain below the levels needed for protection of human health and in stream aquatic life in accordance with USEPA-approved, state water-quality standards.

The NPDES permit actions and environmental investigations conducted under the DHEC enforcement action at the facility have focused on arsenic in the wastewater and groundwater because arsenic primarily moves through the environment in water. It is understood that elevated levels of arsenic in soil are present in and below the ash pond and where water containing elevated levels of arsenic contact the soil.

9. *Some commenters noted that DHEC should protect the ground water from more arsenic.*

Ground water protection is mainly being addressed via a separate DHEC enforcement action. As a permit condition, we have added a requirement for a specified net amount of ash to be removed from the ash basin over the life of the permit.

10. *Some commenters suggested that arsenic monitoring be performed monthly not quarterly.*

DHEC has changed the frequency of sampling of the effluent from Outfall 03A from quarterly to monthly.

11. *Comments were provided noting that changing the Water Quality Standards does not mean DHEC has to remove the monitoring or limits from the permit.*

The prior limits were based on standards in effect at the time. The current proposed permit is based on the standards in effect now. There is no basis for a permit more stringent than that required by current rules.

12. *One commenter noted that the waters of the Wateree River, the Santee River and the Congaree River have been the site of studies on federally endangered shortnose sturgeon and mussels species.*

First, the aquatic life protection standards for arsenic are less stringent than the human health protection standard. The calculated instream value of arsenic is not near the aquatic life standard. Also, we have received no information from the US Fish and Wildlife Service regarding a concern related to these endangered species.

13. *One commenter noted that even though SCDHEC has established a TMDL for mercury for fish at both upstream (CW-206 and CW-214) and downstream (CW-698) sites, SCDHEC does not set mercury limits in the draft permit.*

This draft permit modification did not address a modification to mercury. For information, there is no TMDL for mercury at these sites or on the Wateree River, but the waterbody is impaired for fish consumption due to mercury for a large portion of the river.

14. *One commenter noted that SCDHEC's technical justification includes questionable calculations. SCE&G assumed a "worst case" arsenic concentration of 1900 mg/l, even though the limit in the consent agreement is 3000 mg/l, and levels as high as 4051 mg/l have been observed in groundwater monitoring wells. In other words SCDHEC is using a maximum contaminant concentration more than twice as low as observed contaminant concentrations.*

The calculation in question used the highest arsenic value detected in a seep near the river and is considered to be representative of high arsenic concentrations in groundwater near the river. If the concentration used in the calculation were doubled, as suggested by the commenter, the contribution to the river from the groundwater including the seeps, even during low flow conditions (7Q10 flow levels) in the river, would still be below levels of concern for the protection of human health and instream aquatic life in accordance with USEPA-approved, state water-quality standards.

15. *One comment stated, "SCDHEC allowed a SCE&G consultant, rather than its own scientific staff, to address the question of arsenic bioaccumulation in fish at the public hearing. The consultant incorrectly stated that arsenic in fish is harmless to humans. In fact, both inorganic and organic arsenic can accumulate in fish, with the former being the dangerous form of arsenic."*

The person that responded to the question at the hearing is a DHEC employee. He stated that DHEC has not yet developed action levels for the consumption of fish based on the concentration of arsenic in fish. He discussed how arsenic in fish is viewed by the Agency for Toxic Substance and Disease Registry (ATSDR). ATSDR is a federal agency that prepares detailed Toxicological Profiles for many harmful chemicals and conducts human health assessments for USEPA. The ATSDR Toxicological Profile for Arsenic dated 2007 contains the following statements regarding arsenic in fish:

- Page 23 - "Although some fish and shellfish take in arsenic, which may build up in tissues, most of this arsenic is in an organic form called arsenobetaine (commonly called "fish arsenic") that is much less harmful."
- Page 63 - "Several organic arsenicals are found to accumulate in fish and shellfish. These derivatives (mainly arsenobetaine and arsenocholine, also referred to as "fish arsenic") have been studied by several researchers and have been found to be essentially nontoxic (Brown et al. 1990; Cannon et al. 1983; Charbonneau et al. 1978; Kaise et al. 1985; Luten et al. 1982; Siewicki 1981; Tam et al. 1982; Yamauchi et al. 1986)."

Toxicological Profile for Arsenic dated 2007 can be found at the following web address:

<http://www.atsdr.cdc.gov/toxprofiles/tp2.pdf>.

USEPA is in the process of revising the recommended human health ambient water quality criteria for arsenic. When a new criteria is established by USEPA, DHEC will likely pursue adoption in the state water quality standards (Regulation 61-68) and will include the consumption of organisms such as fish. The criteria will consider both the bioconcentration factor and the amount of organic and inorganic arsenic that occurs in fish.

16. *Some commenters requested SCDHEC develop a plan to retire the ash ponds and replace them with lined ponds farther away from the river, and require SCE&G to clean up the groundwater contamination from the ponds.*

The plan for dealing with groundwater associated with the ash ponds is being handled by a separate enforcement action. As a permit condition, we have added a requirement for a specified net amount of ash to be removed from the ash basin over the life of the permit.

17. *Some commenters suggested that discharge monitoring reports prior to the current date should be posted on EPA's ECHO system. Future Discharge Monitoring Reports should be made publicly available, both electronically and at Eastover Branch of the Richland County Public Library.*

DHEC does not have a say in how EPA handles their ECHO database or its update frequency. All Discharge Monitoring Reports are publicly available through DHEC's Freedom of Information office.

18. *One commenter noted that removing arsenic limitations for SCE&G's NPDES permit at the Wateree Station will threaten the viability of the Wateree River Blue Trail and other rivers with high recreational value in South Carolina and that removing discharge limits for arsenic and reducing monitoring requirements of the permit fails to protect the Congaree National Park.*

The most stringent application of the water quality standards (aquatic life/human health) was the human health value. It is based on annual average flow conditions, not an acute exposure concern and considers that the current levels of discharge are not near the standards. The proposed permit is protective of all the referenced waters.

19. *Some commenters noted that they are concerned that arsenic may accumulate at dangerous levels.*

See response to comment No. 15.

20. *Several commenters asked for testing of all private drinking water & irrigation wells in vicinity. Comments were provided regarding reliance on well water and keeping drinking water safe.*

The groundwater that contains arsenic from the ash basins is found in the shallow water-table aquifer that discharges to the nearby Wateree River. Therefore, arsenic contamination in the shallow groundwater beneath the basins poses little risk to local water wells. Arsenic released from the ash basins to the groundwater is being addressed through a DHEC enforcement action. Under this enforcement action, groundwater investigations and testing will continue at the site to monitor potential risks to human health and the environment and to determine what remedial actions are appropriate for the site. If future investigations suggest that a private well has the

potential to be impacted by arsenic from the site, then DHEC will have the private well tested. Meanwhile, if folks living near the site are concerned about the water quality in their well, they can have their water tested by a lab and/or contact the local DHEC office at 803-896-0620.

21. *Several commenters asked for tests for bio-accumulation of contaminants in fish and sediment sampling.*
See response to comment No. 15. Environmental impacts related to arsenic released from the ash basins to the groundwater, which eventually discharges to surface water (Wateree River), are being addressed through a DHEC enforcement action. Under this enforcement action, groundwater, seeps, sediment, surface water from the Wateree River and fish tissue have been investigated and tested for the presence of arsenic. Investigations and testing will continue under this enforcement action to monitor potential impacts to human health and the environment and to determine what remedial actions are appropriate for the site.
22. *One commenter suggested that the ash ponds should be rebuilt and lined as soon as possible.*
This action, if determined to be necessary, will be handled in an enforcement action, not as a permit condition.
23. *One commenter suggested that treatment for landfill leachate to remove arsenic be performed before routing to ponds.*
The existing and proposed ponds are acceptable methods of wastewater treatment for the leachate. There is no basis to require treatment beyond what is necessary to comply with the NPDES permit. Also, SCE&G would decide the best overall treatment approach.
24. *One commenter noted that the whole permit (and the amendments) also apparently ignores the fact that arsenic (and other contaminants) enters the channel water through seeps in the current retaining wall and from shallow groundwater discharge into the channel.*
See responses to Comments #8 and #14.
25. *One commenter noted that monitoring arsenic, even with higher limits, is necessary to look for problems and have a record of past discharges when problems are discovered. Arsenic may get diluted in the Wateree River, but it WILL biogeochemically concentrate in nearby sediments, water, plant life, and animal life.*
Wastewater discharges permitted under this NPDES permit meet EPA-approved, state water-quality standards for arsenic including the instream standard for the protection of aquatic life. Environmental impacts related to arsenic released from the ash basins to the groundwater, which eventually discharges to surface water (Wateree River), are being addressed through a separate DHEC enforcement action. See also response to Comment #15.
26. *Some folks were concerned that they were not made aware of the meeting and want to be notified of future meetings/public hearings.*
Notice of the public hearing was placed on DHEC's website at <http://www.scdhec.net/environment/water/publicnote/html/eqpnwater.aspx?SortBy=title&PFilter=npdes> on February 3, 2010 and remained there until March 19, 2010. Notice was also placed in The State newspaper on February 3, 2010 and sent to a mailing list of folks interested in public notices for this facility or county.
27. *Standards applicable to arsenic - Regulation Process. Several people had questions about how regulations are changed under state laws that govern DHEC rules.*
When DHEC wants to set or revise a water quality standard, there is a lengthy process that begins with a "notice drafting." This notice, which is published in the State Register, indicates the start of a regulation development process. After getting comments on proposed changes, DHEC staff request permission from the DHEC Board to publish actual proposed changes for public input. After gathering input, DHEC's Board holds a hearing on the proposed changes. If the DHEC Board approves changes, then these changes are forwarded to the State Legislature for review and approval. An exception under state law would be that if DHEC must make a specific change(s) to comply with federal rules to maintain DHEC's delegation status, those changes do not require legislative review (i.e., the process is complete with approval of the DHEC Board). Normally, state regulation processes must be approved by the federal Environmental Protection Agency (EPA), also.
In the case of the most recent changes to arsenic, the regulation development process began in 2007 and concluded in 2008 with legislative approval and, subsequently, EPA approval. If DHEC were to make regulatory changes regarding arsenic or other pollutant parameters in the future, the process would be as described above.

Exhibit 2

BOARD:
Paul C. Aughtry, III
Chairman
Edwin H. Cooper, III
Vice Chairman
Steven G. Kisner
Secretary



C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

08-069
JES BO
Henry C.
M. David Mitchell
Glenn A. M.
Coleman F. Buckhouse

S.C. Board of Health and Environmental Control; Telephone (803) 898-3309 Fax: (803) 898-3393

July 13, 2010

U.S. Mail - CERTIFIED - Return Receipt

91 7108 2133 3937 2126 9812
James E. Smith, Jr., Esq.
1422 Laurel Street
Columbia, SC 29201

91 7108 2133 3937 2126 9829
John M. Crego
Friends of Congaree Swamp
PO Box 7746
Columbia, SC 29202

91 7108 2133 3937 2126 9836
Robert Guild, Esq.
314 Pall Mall
Columbia, SC 29201

91 7108 2133 3937 2126 9843
Elizabeth Partlow, Esq.
Ogletree Deakins Nash Smoak Stewart, PC
1320 Main Street, Ste. 600
Columbia, SC 29201

Via Interagency Mail Delivery

Stephen P. Hightower, Esq.
Roger P. Hall, Esq.
SCDHEC - Office of General Counsel
2600 Bull Street
Columbia, SC 29201

RE: *Docket No. 10-RFR-64 - Decision dated June 1, 2010, to approve a modification to NPDES Permit SC0002038 changing the monitoring frequency for arsenic from quarterly to monthly; reopen statement that will allow the permit to be modified based on any future change in regulation/law for arsenic water quality standards; remove language allowing construction storm water to be discharged without additional permits; condition requiring SCE&G to remove a net amount of ash*

from the coal ash basins over the life of permit to reduce levels of pollutants that may be leaching into groundwater; requiring regular inspections of the ash basins by qualified personnel and submittal of reports to Dept.

The S.C. Board of Health and Environmental Control decided on July 8, 2010, not to conduct a Final Review Conference on the above-referenced matter.

S.C. Code Section 44-1-60 provides that if the Board declines in writing to schedule a final review conference, the staff decision becomes the final agency decision, and an applicant, permittee, licensee, or affected person may request a contested case hearing before the Administrative Law Court (ALC) within thirty calendar days after notice is mailed to the applicant, permittee, licensee, and affected person that the Board declined to hold a final review conference.

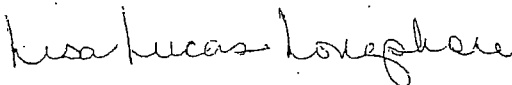
A request for a contested case hearing before the Administrative Law Court must be filed within the time allowed and in accordance with the Rules of the ALC, including payment of the ALC's filing fee, at the following address:

Clerk's Office
South Carolina Administrative Law Court
Edgar A. Brown Building
1205 Pendleton St., Suite 224
Columbia, SC 29201

The ALC's Notice of Request for Contested Case Hearing form and the Rules of the ALC can be found at the ALC's website: <http://www.scalc.net>. Further information on filing a request for a contested case hearing before the ALC may be obtained by calling the Clerk's Office at the Administrative Law Court (803-734-0550).

If a party files a request for a contested case hearing with the ALC, the party must serve a copy of the request on DHEC and any other parties at the same time the request is filed with the ALC. A copy of the request for a contested case hearing must be delivered or mailed to DHEC at the address at the top of this memorandum.

Sincerely,



Lisa Lucas Longshore
Clerk

The above information on filing a request for a contested case hearing before the Administrative Law Court is provided as a courtesy; parties before the ALC are responsible for complying with all applicable requirements of the Court.

OCG # 21110

I:\Share\LEGAL\ALL\MATTERS\21110 RFR BOW SCE&G Wateree npdes mod\rcd.doc

Exhibit 3

**STATE OF SOUTH CAROLINA
ADMINISTRATIVE LAW COURT**

Heath Hill,

Petitioner,

vs.

South Carolina Department of Health
and Environmental Control and
SCE&G,

Respondents.

Docket No. 10-ALJ-07-0625-CC

ORDER OF DISMISSAL

This matter comes before the Administrative Law Court (ALC or Court) pursuant to a Request for a Contested Case Hearing under S.C. Code Ann. §§ 44-1-60(G) (as amended by 2010 S.C. Act No. 278 § 1) and 1-23-600(A) (Supp. 2009) filed by Petitioner Heath Hill (Petitioner). Respondent South Carolina Electric and Gas Company (SCE&G) moved to dismiss Petitioner's Request, and Respondent South Carolina Department of Health and Environmental Control (DHEC) supports that motion. Petitioner opposes the motion to dismiss.

A hearing on SCE&G's motion to dismiss was held on October 27, 2010. After review of the motion, responses, and arguments of the parties, the Court grants the motion to dismiss.

BACKGROUND

The salient facts are undisputed. On June 1, 2010, the staff of DHEC approved a modification to the National Pollutant Discharge Elimination System (NPDES) permit for SCE&G's Wateree Station coal-fired power plant. The DHEC staff decision was set forth in a "Memo" addressed to "Concerned Citizens" from Jeffrey P. deBessonnet, P.E., Director of the Water Facilities Permitting Division. The staff decision contained a notice of appeal procedures provision stating that a request to the DHEC Board for review of the final staff decision had to be made within 15 days of the mailing of the notice of the staff decision. A copy of the DHEC staff decision was sent to Petitioner.¹

FILED

December 9, 2010

SC ADMIN. LAW COURT

¹ Petitioner introduced a copy of the June 1, 2010, staff decision during the hearing on SCE&G's motion to dismiss. The copy introduced by Petitioner has a "Received" stamp indicating receipt by Petitioner's counsel, although the date of receipt is not clear.

Petitioner timely requested that the DHEC Board review the staff decision. The Clerk of the DHEC Board sent an "Acknowledgment of Request for Final Review and Notice of Procedures" to several parties, including Petitioner, noting that requests for final review were filed on June 16, 2010.²

At its July 8, 2010 meeting, the DHEC Board declined to review the staff decision. Notice of the DHEC Board decision not to hear the matter was mailed to all parties by certified mail on July 13, 2010. Petitioner received the notice of the DHEC Board decision on July 15, 2010. The notice informed the parties, including Petitioner, of the Board decision and stated as follows:

S.C. Code Section 44-1-60 provides that if the Board declines in writing to schedule a final review conference, the staff decision becomes the final agency decision, and an applicant, permittee, licensee, or affected person may request a contested case hearing before the Administrative Law Court (ALC) **within thirty calendar days after notice is mailed** to the applicant, permittee, licensee, and affected person that the Board declined to hold a final review conference.

(emphasis added).

Thirty calendar days after notice was mailed to the parties was August 12, 2010. However, Petitioner filed and served his Request for Contested Case hearing on August 13, 2010.

DISCUSSION

SCE&G and DHEC argue that the ALC lacks jurisdiction to hear this case because Petitioner failed to file his Request for Contested Case Hearing within thirty days after the Board mailed its letter notifying the parties of its decision not to hear the case. Petitioner, on the other hand, contends that his hearing request was timely because it was filed in the ALC within ninety days of the Board's acknowledgment of his request for Board review, and within thirty days of his receipt of notice of the Board's decision not to hear the case.

S.C. Code Ann. § 44-1-60 (Supp. 2009 as amended by 2010 S.C. Act No. 278 § 1)³ sets forth the procedures for seeking final review by the DHEC Board of a DHEC staff decision and for seeking a contested case in the ALC from a DHEC Board decision. Generally, a party

² Petitioner also introduced a copy of this notice at the hearing.

³ Section 44-1-60 was amended in the 2010 session of the General Assembly. The amendment was effective July 1, 2010, except as to cases pending in a court of South Carolina on June 1, 2010. As discussed in more detail herein, that exception is not applicable in this case.

dissatisfied with a DHEC staff decision must request final review by the DHEC Board within fifteen days after notice of the staff decision is mailed to the applicant. § 44-1-60(E)(2). The DHEC Board then has sixty days within which to hold a review conference. § 44-1-60(F). The Board may (1) hold a final review conference and issue a decision; (2) decline in writing to hold a final review conference; or (3) take no action within the sixty-day period. § 44-1-60(F). If the Board either declines in writing to schedule a final review conference or allows the sixty days to lapse without any action, then the staff decision becomes the final agency decision and an affected party may request a contested case hearing before the ALC pursuant to Section 44-1-60(G). § 44-1-60(F). If the Board decides to hold a final review conference, Section 44-1-60(F) prescribes the procedure by which the conference must be conducted.

Subsection (G) of Section 44-1-60 sets forth the time limits within which a person must request a contested case hearing under each of the Board's three possible courses of action. It provides:

An applicant, permittee, licensee, or affected person may file a request with the Administrative Law Court for a contested case hearing within thirty calendar days after:

- (1) notice is mailed to the applicant, permittee, licensee, and affected persons that the board declined to hold a final review conference; or
- (2) the sixty calendar day deadline to hold the final review conference lapses and no conference has been held; or
- (3) the final agency decision resulting from the final review conference is received by the parties.

§ 44-1-60(G).

In this case, the DHEC Board decided that it would not hold a review conference. Notice of that decision was mailed to Petitioner on July 13, 2010. Notably, the letter notifying Petitioner that the Board would not hold a review conference specifically recited the time requirement of Section 44-1-60(G)(1). According to that time requirement, Petitioner's time for requesting a contested case hearing before the ALC expired on August 12, 2010.

The Respondents, citing Mears v. Mears, 287 S.C. 168, 337 S.E.2d 206 (1985), argue that since Petitioner failed to timely file his request for a contested case with the ALC, this Court does not have jurisdiction to hear this case. Indeed, it is well established that compliance with a prescribed time period for serving or filing an appeal is a jurisdictional requirement for which courts have no authority to extend the prescribed time. See id. at 169; 337 S.E.2d at 207; Elam

v. S.C. Dep't of Transp., 361 S.C. 9, 14-15, 602 S.E.2d 772, 775 (2004). However, this case is not an appeal of an administrative decision in a strict sense, but rather a contested case proceeding in which this Court functions like a trial tribunal. See Brown v. S.C. Dep't of Health and Env'tl. Control, 348 S.C. 507, 512, 560 S.E.2d 410, 413 (2002) (holding that a contested case hearing before the ALC is "in the nature of a de novo hearing with the presentation of evidence and testimony"). Accordingly, Mears is not directly applicable.

Nevertheless, the Legislature has unquestionably established a prescribed procedure to seek review of these matters within a specific time frame. Under South Carolina law, a statute that creates a new liability and affixes the time within which an action may be commenced is a "statute of creation," and commencement within the time affixed is an indispensable condition of the action. Knight Publ'g Co. v. Univ. of S.C., 295 S.C. 31, 33, 367 S.E.2d 20, 22 (1988), overruled on other grounds by McLendon v. S.C. Dep't of Highways and Public Transp., 313 S.C. 525, 443 S.E.2d 539 (1994). Although the failure to timely commence an action pursuant to a statute of creation is not a subject matter jurisdiction defect, such an action "cannot be maintained unless brought within the time allowed by that statute." Simpson v. Sanders, 314 S.C. 413, 415 n.1, 445 S.E.2d 93, 94 n.1 (1994). When a statute both creates a cause of action and includes a time limit for its commencement, compliance with the time limit is a condition precedent to the maintenance of the action. 54 C.J.S. Limitations of Actions § 31 (updated October 2010). "Such a statutory time limit conditions the existence of the right of action, thereby creating a substantive, rather than procedural, limitation on the right. Bringing suit within the prescribed time is a condition of liability itself, not of the remedy alone." Id.

Here, under common law, individuals like Petitioner did not have the right to bring cases challenging a governmental agency's issuance of an environmental permit. Therefore, I find that Section 44-1-60 is a statute of creation because it creates a right which did not exist under the common law and fixes a time frame necessary in order to bring an action under it. Cf. Simpson, 314 S.C. at 415, 445 S.E.2d at 94 (finding that the elective share statute was a statute of creation). Accordingly, though a party who fails to timely request a contested case hearing before the ALC is not jurisdictionally precluded under the holding in Mears, its request is nonetheless precluded because the party failed to establish a condition precedent necessary for the Court to invoke its jurisdiction.

Review pursuant to Section 44-1-60(G)

Petitioner nonetheless argues that the time frame for requesting a contested case hearing before the ALC is not limited by the requisites of Section 44-1-60(G)(1). Rather, he argues that Section 44-1-60(G) establishes multiple time frames from which a party may rely and that, under Section 44-1-60(G)(2), his request was timely.

Section 44-1-60(G)(2) provides that “[a]n applicant, permittee, licensee, or affected person may file a request with the Administrative Law Court for a contested case hearing within thirty calendar days after . . . the sixty calendar day deadline to hold the final review conference lapses and no conference has been held.” (emphasis added). Petitioner contends that the sixty-day deadline lapsed on August 15, 2010, which was sixty days after June 16, 2010, the date he requested a final review conference. Indisputably, no final review conference was held within the sixty-day time period from June 16, 2010 to August 15, 2010. Nevertheless, it is not as if the Board took no action during that time frame and simply allowed the sixty-day deadline to naturally expire on August 15, 2010. Quite the contrary, the Board mailed notice to Petitioner on July 13, 2010 that it would not hold a final review conference, thereby providing Petitioner the immediate right to seek review by the ALC under Section 44-1-60(G)(1).

Thus, the issue the Court must decide is whether the sixty-day deadline to hold the final review conference can properly be characterized as “laps[ing]” on August 15, 2010, as Petitioner contends. “The cardinal rule of statutory construction is to ascertain and effectuate the intent of the legislature.” Charleston County School Dist. v. State Budget and Control Bd., 313 S.C. 1, 5, 437 S.E.2d 6, 8 (1993); see also Olson v. Faculty House of Carolina, Inc., 344 S.C. 194, 205, 544 S.E.2d 38, 44 (Ct. App. 2001) (“The quintessence of statutory construction is legislative intent.”). “The true guide to statutory construction is not the phraseology of an isolated section or provision, but the language of the statute as a whole considered in light of its manifest purpose.” Floyd v. Nationwide Mut. Ins. Co., 367 S.C. 253, 260, 626 S.E.2d 6, 10 (2005). “A statute as a whole must receive practical, reasonable, and fair interpretation consonant with the purpose, design, and policy of lawmakers.” Sloan v. S.C. Bd. of Physical Therapy Exam'rs, 370 S.C. 452, 468, 636 S.E.2d 598, 606 (2006).

Here, the term “lapse” is not defined in the statute; therefore, it is proper to look to its dictionary definition to supply its meaning. See Lee v. Thermal Eng'g Corp., 352 S.C. 81, 91-92, 572 S.E.2d 298, 303 (Ct. App. 2002) (“Where a word is not defined in a statute, our appellate

courts have looked to the usual dictionary meaning to supply its meaning.”). A review of various dictionaries provides the following definitions of the word “lapse”:

- “to be no longer in force, **as through disuse or the passage of time.**” Webster’s II New Riverside Dictionary 389 (1996) (emphasis added).
- “to become invalid **because it is not used, claimed, or renewed;** expire.” The New Oxford American Dictionary 953 (2d. ed. 2005) (emphasis added).
- “to become null and void **through disuse, negligence or death.**” Microsoft Encarta College Dictionary 811 (2001) (emphasis added).
- “to become void.” Black’s Law Dictionary 885 (7th ed. 1999).
- “to cease being in force; terminate.” Dictionary.com, <http://dictionary.reference.com/browse/lapse> (last visited Nov. 30, 2010).

As noted above, in the present case, the Board did not passively sit by and allow the sixty-day deadline to naturally come to an end on August 15, 2010. Rather, it actively cut the deadline short on July 13, 2010 by mailing notice to Petitioner of its decision not to hold a final review conference. Once the Board took that action, Petitioner possessed the immediate right to seek review from the ALC under Section 44-1-60(G)(1) and the sixty-day deadline for holding a final review conference was no longer of any force or effect. Thus, the sixty-day deadline did not become void as a result of the Board’s inaction or the passage of time; quite the opposite, it became void as a result of the Board’s act of mailing notice to the parties that it was not going to hold a final review conference.⁴ Therefore, under the more specific definitions of the term “lapse” set forth above, the sixty-day deadline to hold a final review conference did not lapse. See Webster’s II New Riverside Dictionary 389 (1996); The New Oxford American Dictionary 953; Microsoft Encarta College Dictionary 811 (2001). Moreover, to the extent that the sixty-day deadline “lapse[d]” under the more general definitions of that term (i.e., by simply becoming “void” or ceasing to be “in force”),⁵ it lapsed on July 13, 2010, not August 15, 2010.

Although other definitions of the word “lapse” exist which are more helpful to Petitioner’s argument, I find that the definitions contained in the above bulleted list best reflect the legislature’s intent in using the word “lapse” in 44-1-60(G)(2). Accordingly, because those

⁴ Prior to the enactment of Section 44-1-60(G)(1), the Board’s act of mailing notice to the parties of its decision not to hold a final review conference did not nullify the sixty-day deadline because the parties could not seek ALC review until the sixty-day deadline had passed.

⁵ See Black’s Law Dictionary 885 (7th ed. 1999); Dictionary.com, <http://dictionary.reference.com/browse/lapse> (last visited Nov. 30, 2010).

definitions demonstrate that the deadline lapsed, if at all, on July 13, 2010—31 days prior to the date Petitioner filed his contested case hearing request—I find that Petitioner cannot avail himself of Section 44-1-60(G)(2) in this case.⁶

My conclusion that Section 44-1-60(G)(2) is inapplicable here is further supported by South Carolina appellate court decisions interpreting the word “or.” Although our Supreme Court has held that “[t]he word ‘or’ used in a statute imports choice between two alternatives,” it has clarified that the term ordinarily “means one or the other of two, but not both.” Brewer v. Brewer, 242 S.C. 9, 14, 129 S.E.2d 736, 738 (1963). Furthermore, the use of the word “or” in a statute is not always interpreted as creating an equal choice. For example, in Investors Premium Corp. v. South Carolina Tax Commission, 260 S.C. 13, 193 S.E.2d 642 (1973), the Supreme Court addressed the question of whether the Tax Commission could collect documentary stamp taxes under S.C. Code Ann. § 65-681 (1962) from the payee of a promissory note (i.e., the lender) or whether it was limited to collecting the taxes from the maker of the note (i.e., the borrower). Section 65-681 provided:

There shall be levied, collected and paid for and in respect of the several bonds, debentures or certificates of stock and indebtedness and other documents, instruments, matters and things mentioned and described in ss 65-682 to 65-684 and ss 65-688 to 65-690 . . . by any person who makes, signs, issues, sells, removes, consigns or ships them or for whose benefit or use they are made . . . the several taxes specified in said sections.

Id. at 17-18, 193 S.E.2d at 644 (emphasis added). The Court ultimately held that “the borrower is primarily liable for the payment of the taxes with the lender being secondarily liable.” Id. at 20, 193 S.E.2d at 645. In reaching that result, the Court concluded that the term “or” did not create an “alternative of choice” for the Tax Commission, but rather created an “alternative of necessity.” Id. Specifically, it found that “the legislature meant ‘or’ as introducing a substitute taxpayer in the event holding the primary taxpayer liable is impracticable.” Id. (emphasis added). Thus, the Court interpreted the word “or” not as creating a second, equally utilizable alternative, but rather as creating a backup option that was employable only in cases where the first named option was unavailable.

⁶ Notably, if the Court were to hold otherwise (i.e., that the sixty-day deadline lapsed on August 15, 2010), then Petitioner’s request for a contested case would still be outside the time frame prescribed by Section 44-1-60(G)(2). Section 44-1-60(G)(2) expressly states that the hearing request must be filed **after** the sixty-day deadline has lapsed. Here, Petitioner filed his request for a contested case hearing on August 13, 2010, two days **before** August 15, 2010.

The court's reasoning in Investors Premium is applicable to the present case. Here, the Legislature's use of the word "or" in Section 44-1-60(G) was not intended to provide "alternative[s] of choice" to those filing a contested case hearing request, but rather to provide "alternative[s] of necessity," with each alternative's applicability dependent upon the course of action taken by the Board. Stated differently, the purpose of Section 44-1-60(G) is to implement three mutually exclusive, succeeding time frames, with each time frame corresponding to one of the three different actions available to the Board. Thus, Section 44-1-60(G)(1) applies in cases where the Board mails notice to the parties of its decision not to hold a final review conference, Section 44-1-60(G)(2) applies in cases where the Board allows the sixty-day time frame for holding a final review conference to pass without taking any action, and Section 44-1-60(G)(3) applies in cases where the Board holds a final review conference and issues a final agency decision.⁷ Hence, like the situation in Investors Premium, Section 44-1-60(G)(2) serves to provide a substitute timeframe for the time frame set forth in Section 44-1-60(G)(1), and it applies only in cases where the Board fails to notify the parties by mail of its decision not to hold a final review conference.

In the present case, the Board mailed notice to Petitioner that it would not hold a final review conference. Therefore, as established by Section 44-1-60(G)(1), the thirty-day time period for requesting a contested case hearing began running at that point. Once the time to file began to run under that provision, the subsequent provisions were rendered inapplicable. Accordingly, because the thirty-day period set forth in Section 44-1-60(G)(1) expired before Petitioner filed his hearing request, his request was untimely.

To rule otherwise and accept Petitioner's interpretation of Section 44-1-60(G) would run contrary to the purpose of limiting a party's time to seek review. See Carolina Marine Handling, Inc. v. Lasch, 363 S.C. 169, 175, 609 S.E.2d 548, 552 (Ct. App. 2005) ("The cornerstone policy consideration underlying statutes of limitations is the laudable goal of law to promote and achieve finality in litigation."). Here, Section 44-1-60(G) evinces an intent by the legislature that parties seek review of the Board's decision within thirty days. Rather than fulfill that intent, Petitioner's interpretation would extend the time frame for seeking review to as much as ninety days in cases where the Board notifies the parties of its intent not to hold a final review

⁷ Because the Board can take only one of these three actions, it was sensible for the legislature to use the word "or" in Section 44-1-60(G). See Brewer v. Brewer, 242 S.C. at 14, 129 S.E.2d at 738 (noting that the term "or" usually means one or the other of two, but not both).

conference. Petitioner's interpretation presumes that though the thirty day time frame to seek review before the ALC begins running under Section 44-1-60(G)(1), the legislature intended that a party could elect a more dilatory time frame under Section 44-1-60(G)(2). However, in order to accept such an interpretation, one would have to conclude that the legislature intended to create two alternative filing time frames in cases where the Board decides it will not hold a final review conference, yet only one filing time frame in cases where it decides the opposite. I find no evidence of such legislative intent.

Furthermore, Petitioner's construction of Section 44-1-60(G) would render Section 44-1-60(G)(1) entirely superfluous. Our Supreme Court has instructed that "[a] statute should be so construed that no word, clause, sentence, provision or part shall be rendered surplusage, or superfluous." Matter of Decker, 322 S.C. 215, 219, 471 S.E.2d 462, 463 (1995) (quoting 82 C.J.S. Statutes § 346). Courts must also presume the legislature intended to accomplish something with an enacted statute and did not intend for a section or provision to be purposeless or futile. Duvall v. S.C. Budget and Control Bd., 377 S.C. 36, 42, 659 S.E.2d 125, 128 (2008).

Here, if Petitioner's interpretation were accepted, a party would never need to comply with Section 44-1-60(G)(1). Rather, after the Board specifically stated that it was not going to hold a final review conference, a party could always simply invoke the requirements of Section 44-1-60(G)(2), wait until the sixty-day deadline to hold the final review conference passed, and then file within thirty calendar days after that date. Such an interpretation would not only render Section 44-1-60(G)(1) meaningless, but it would also render the Board's act of notifying the parties that it was not going to hold a final review conference partially pointless.⁸

Finally, Petitioner's construction would render much of 2010 S.C. Act No. 278 meaningless. Among a few other changes, Act 278 added Section 44-1-60(G)(1). Prior to Act 278, Section 44-1-60 already provided the deadlines by which a party might seek a contested case hearing if the Board reviewed the staff decision or if it allowed the sixty-day deadline to lapse. The only new deadline established by Act 278 was the deadline set forth in Section 44-1-60(G)(1). Thus, because Petitioner's construction of Section 44-1-60(G) would render Section 44-1-60(G)(1) meaningless, it would also render Act 278 largely meaningless.

⁸ Petitioner contends that the only conceivable purpose behind the Board issuing a written decision not to conduct a final review conference is to grant parties the right to seek immediate review before the ALC. However, issuing such a decision also functions to shorten the length of time available for seeking ALC review.

Actual Notice

Alternatively, Petitioner argues that the time period for seeking review with the ALC under Section 44-1-60(G)(1) began to run on the date he received actual notice of the Board's decision not to hold a final review conference, not the date the notice was deposited in the mail. I disagree.

An argument nearly identical to Petitioner's was expressly rejected by the South Carolina Supreme Court in its recent decision, South Carolina Coastal Conservation League v. South Carolina Department of Health and Environmental Control, No. 26892, 2010 WL 4608371 (S.C. Nov. 15, 2010). In Coastal Conservation League, the Supreme Court addressed the issue of the commencement date of the fifteen-day time frame set forth in S.C. Code Ann. 44-1-60(E) (Supp. 2008) for requesting a final review conference before the DHEC Board. DHEC and the Coastal Conservation League argued that the time frame commenced on the date the DHEC staff decision was received, rather than on the date it was mailed. On appeal, the Supreme Court rejected that argument, explaining:

The clear and unambiguous language in the statute provides that the staff decision becomes final "fifteen days after notice of the department decision has been mailed ..." **Had the legislature intended for the time period to begin running from the date a party receives notice of the decision, the statute would have been drafted accordingly.** Indeed, § 44-1-60(F)(2), the provision immediately following § 44-1-60(E), provides "[w]ithin thirty days after the receipt of the decision an applicant, permittee, licensee, or affected person desiring to contest the final agency decision may request a contested case hearing." The use of the phrase "receipt of the decision" in § 44-1-60(F)(2) indicates that had the legislature intended for the fifteen day time period to begin after receipt of notice, the legislature knew how to draft the statute to accomplish this result:

Id. at *3. (emphasis added).

In the present case, Section 44-1-60(G)(1) clearly states that a party must file a request for a contested case hearing within thirty calendar days after "**notice is mailed** to the applicant, permittee, licensee, and affected persons that the board declined to hold a final review conference." (emphasis added). Moreover, Section 44-1-60(G)(3) demonstrates that the legislature knew how to distinguish between the mailing of a document and the receipt of a document. Section 44-1-60(G)(3), which provides the time period for filing a contested case hearing in cases where the Board holds a final review conference, states that the hearing request must be filed within thirty days after "**the final agency decision resulting from the final review conference is received by the parties.**" (emphasis added). Accordingly, for the same reasons

discussed in Coastal Conservation League, I conclude that the time frame set forth in Section 44-1-60(G)(1) commences on the date notice is mailed, not on the date it is received.

Petitioner's reliance on Hamm v. South Carolina Public Service Commission, 287 S.C. 180, 336 S.E.2d 470 (1985) is also misplaced. Hamm was discussed—and ultimately distinguished—by the Supreme Court in Coastal Conservation League, where the Court stated:

In Hamm v. S.C. Pub. Svs. Comm., we held that S.C. Code Ann. § 1-23-380(b) (1984), which provides that a party may appeal "within thirty days after the final decision of the agency," must be read to allow a party to appeal thirty days after receiving notice of the decision. **Otherwise, an agency could essentially preclude judicial review by concealing its decision until after the expiration of the thirty days.** . . . The Court in Hamm did not hold that a filing period must begin with receipt of notice of an agency's decision. Rather, the Court read a notice requirement into § 1-23-380(b) to avoid "an absurd result not possibly intended by the legislature." Section 44-1-60(E), on the other hand, does not suffer from the same notice infirmity, for it specifically requires DHEC to mail notice of its decision to the applicant, permittee, licensee, and affected persons who have asked to be notified.

Coastal Conservation League, 2010 WL 4608371 at *3-4 (emphasis added).

Thus, as Coastal Conservation League makes clear, the Supreme Court's concern in Hamm was that an agency might withhold notice of a decision until the expiration of the appeal period. Importantly, no such concern exists in the present case. Here, if the Board fails to notify the parties of its decision not to hold a final review conference, then the time frame set forth in Section 44-1-60(G)(2) for seeking ALC review kicks in. As noted above, that provision allows a party to file a request for a contested case hearing before the ALC within thirty days after the sixty-day deadline for holding a final review conference passes without any action by the Board. Thus, like in Coastal Conservation League, there is no reason to read in a requirement that the filing period must begin with receipt of notice of the Board's decision not to hold a final review conference. Accordingly, I find Hamm distinguishable from the present case.

Finally, it must be noted that "there is a basic presumption that the legislature has knowledge of previous legislation as well as of judicial decisions construing that legislation when later statutes are enacted concerning related subjects." Whitner v. State, 328 S.C. 1, 6, 492 S.E.2d 777, 779 (1997). Here, when Section 44-1-60(G) was amended by Act 278 earlier this year, the Court of Appeals had already issued its decision in the Coastal Conservation League case discussed above. See S.C. Coastal Conservation League v. S.C. Dep't of Health and Envtl.

Control, 380 S.C. 349, 669 S.E. 2d 899 (Ct. App. 2008).⁹ Like the Supreme Court, the Court of Appeals rejected the argument that the filing time frame under Section 44-1-60(E) commenced at the time notice was actually received. See id. at 372-73, 669 S.E. 2d at 911. Thus, when it passed Act 278, the legislature should have known that Section 44-1-60(G)(1), which uses nearly identical language as Section 44-1-60(E), would likely be interpreted just as Section 44-1-60(E) was by the Court of Appeals.

In summary, well-established rules of statutory construction compel the conclusion that the only deadline that applies in this case is the deadline set forth in Section 44-1-60(G)(1). Accordingly, because notice of the Board's decision was mailed to the parties on July 13, 2010, Petitioner's request for contested case hearing was due on August 12, 2010. Since it was not filed until August 13, 2010, it was untimely and this case must therefore be dismissed.

Petitioner's Remaining Arguments

Petitioner's remaining arguments are likewise unavailing. First, Petitioner contends that Rule 3(C) of the ALC rules of procedure¹⁰ affords him five extra days to file his Request for Contested Case Hearing since notice of the Board's decision not to hear the case was served on him by mail. However, the ALC rules apply only to cases that are pending before the ALC, not to cases in which the jurisdiction of the ALC has not been properly invoked. See ALC Rule 69 ("Once the Court acquires jurisdiction of a matter from an agency, the ALC Rules shall govern all procedural aspects of the matter . . .") (emphasis added). Moreover, an ALC rule may not alter the provisions of a statute. Cf. State v. Cottingham, 224 S.C. 181, 187, 77 S.E.2d 897, 900 (1953) ("Statutes override rules of court, if in conflict."); Marichris, LLC v. Derrick, 384 S.C. 345, 353, 682 S.E.2d 301, 305 (Ct. App. 2009) ("A rule of civil procedure may not limit the provisions of a statute.").¹¹ Accordingly, I find this argument to be without merit.

Second, Petitioner claims that a case pending between these parties in the South Carolina Court of Appeals precludes application of Act 278 in this case. Section 26 of Act 278, which

⁹ The Court of Appeals' decision was ultimately reversed by the Supreme Court. See S.C. Coastal Conservation League v. S.C. Dep't of Health and Envtl. Control, No. 26892, 2010 WL 4608371 (S.C. Nov. 15, 2010). However, on the issue discussed herein, the Supreme Court agreed with the Court of Appeals. See id. at *3.

¹⁰ ALC Rule 3(C) provides that "[w]henever a party has the right or is required to do some act or take some proceedings within a prescribed period after the service of a notice or other paper upon him and the notice or paper is served upon him by mail or upon a person designated by statute to accept service, five days shall be added to the prescribed period."

¹¹ Pursuant to S.C. Code Ann. § 1-23-650(B) (Supp. 2009), ALC rules may not be promulgated unless they are "consistent with the rules of procedure governing civil actions in courts of common pleas."

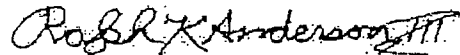
sets forth the effective date of the Act, states that "[t]his act takes effect July 1, 2010; **provided, the provisions of this act do not apply to any matter pending before a court of this State prior to June 1, 2010.**" 2010 S.C. Act No. 278 § 26 (emphasis added). Here, the Court of Appeals case referenced by Petitioner is an appeal of a Final Order and Decision issued by Administrative Law Judge Carolyn Matthews on December 3, 2009. The present controversy relates to a June 1, 2010 DHEC staff decision and July 8, 2010 DHEC Board decision. Thus, because the present case is not a "matter pending before a court of this State prior to June 1, 2010," I find that Act 278 applies here.

ORDER

For the foregoing reasons, I conclude that Petitioner failed to timely file his request for a contested case hearing under Section 44-1-60(G). Accordingly,

IT IS HEREBY ORDERED that the motion to dismiss filed by SCE&G is GRANTED and that this case is DISMISSED.

AND IT IS SO ORDERED.

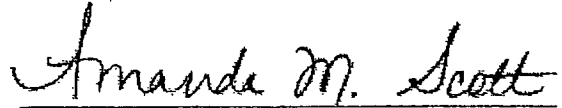


Ralph King Anderson, III
Chief Administrative Law Judge

December 9, 2010
Columbia, South Carolina

CERTIFICATE OF SERVICE

I, Amanda M. Scott, hereby certify that I have this date served this Order upon all parties to this cause by depositing a copy hereof, in the United States mail, postage paid, in the Interagency Mail Service, or by electronic mail to the address provided by the party(ies) and/or their attorney(s).



Amanda M. Scott
Judicial Law Clerk

December 9, 2010
Columbia, South Carolina

Exhibit 4

BOARD:
Paul C. Aughtry, III
Chairman
Edwin H. Cooper, III
Vice Chairman
Steven G. Kisner
Secretary



C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment

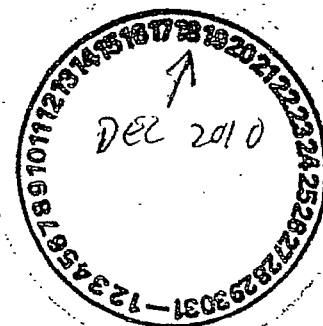
BOARD:
Henry C. Scott
M. David Mitchell, MD
Glenn A. McCall
Coleman F. Buckhouse, MD

CERTIFIED MAIL/RETURN RECEIPT REQUESTED

December 13, 2010

MARK FERGUSON
SCE&G
220 OPERATION WAY MC C221
CAYCE, SC 29033-3701

Re: Department Decision
SCE&G/WATEREE STATION
NPDES Permit # SC0002038
Richland County

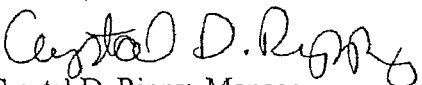


Dear Mr. Ferguson:

We are proceeding to make the NPDES permit effective on January 1, 2011 based on the Order of Dismissal dated December 9, 2010 issued by the SC Administrative Law Court. Attached is a new cover page showing the revised effective date of the modification. The permit modification will remain as originally issued on June 1, 2010. Your new DMRs will be generated and mailed to you in the near future.

If you have any questions about the permit, please contact Melinda Vickers of my staff at 803-898-4186 or at vickermg@dhec.sc.gov. You may reach me at 803-898-4157.

Sincerely,


Crystal D. Rippey, Manager
Industrial Wastewater Permitting Section

Enclosures

e-mail w/encl: EPA Region 4
NPDES Permit Administration
Melanie Hindman, BOW/WPC Enforcement
Harry L Mathis, Columbia EQC Office, Region 3
COLUMBIA EQC LAB
Melinda G Vickers, BOW



South Carolina Department of Health
and Environmental Control

National Pollutant Discharge Elimination System Permit

for Discharge to Surface Waters

This Permit Certifies That

*South Carolina Electric & Gas Company
Wateree Steam Station*

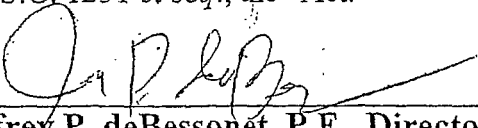
has been granted permission to discharge from a facility located at

*142 Wateree Station Road
Eastover, South Carolina
Richland County*

to receiving waters named

Wateree River

in accordance with limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Pollution Control Act of South Carolina (S.C. Code Sections 48-1-10 *et seq.*, 1976), Regulation 61-9 and with the provisions of the Federal Clean Water Act (PL 92-500), as amended, 33 U.S.C. 1251 *et seq.*, the "Act."


Jeffrey P. deBessonnet, P.E., Director
Water Facilities Permitting Division

Issue Date: August 29, 2008

Expiration Date: December 31, 2012

Effective Date: October 1, 2009

Permit No.: SC0002038

Modification Issue Date: June 1, 2010

Modification Effective Date: January 1, 2011



South Carolina Department of Health
and Environmental Control

National Pollutant Discharge Elimination System Permit

for Discharge to Surface Waters

This Permit Certifies That

***South Carolina Electric & Gas Company
Wateree Steam Station***

has been granted permission to discharge from a facility located at

***142 Wateree Station Road
Eastover, South Carolina
Richland County***

to receiving waters named

Wateree River

in accordance with limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Pollution Control Act of South Carolina (S.C. Code Sections 48-1-10 *et seq.*, 1976), Regulation 61-9 and with the provisions of the Federal Clean Water Act (PL 92-500), as amended, 33 U.S.C. 1251 *et seq.*, the "Act."

**Jeffrey P. deBessonnet, P.E., Director
Water Facilities Permitting Division**

Issue Date: August 29, 2008

Expiration Date: December 31, 2012

Effective Date: October 1, 2009

Permit No.: SC0002038

Modification Issue Date: June 1, 2010

Modification Effective Date: July 1, 2010



National Pollutant Discharge Elimination System Permit

for Discharge to Surface Waters

This Permit Certifies That

***South Carolina Electric & Gas Company
Wateree Steam Station***

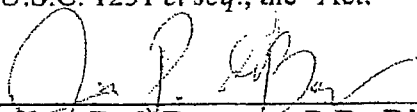
has been granted permission to discharge from a facility located at

***142 Wateree Station Road
Eastover, South Carolina
Richland County***

to receiving waters named

Wateree River

in accordance with limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Pollution Control Act of South Carolina (S.C. Code Sections 48-1-10 *et seq.*, 1976), Regulation 61-9 and with the provisions of the Federal Clean Water Act (PL 92-500), as amended, 33 U.S.C. 1251 *et seq.*, the "Act."


**Jeffrey P. deBessonnet, P.E., Director
Water Facilities Permitting Division**

Issue Date: August 29, 2008

Expiration Date: December 31, 2012

Effective Date: October 1, 2009

Permit No.: SC0002038

Modification Issue Date: June 1, 2010

Modification Effective Date: July 1, 2010

Table of Contents

PART I. Definitions.....	3
PART II. Standard Conditions	7
A. Duty to comply.....	7
B. Duty to reapply.....	7
C. Need to halt or reduce activity not a defense	7
D. Duty to mitigate	7
E. Proper operation and maintenance.....	7
F. Permit actions	8
G. Property rights.....	8
H. Duty to provide information	9
I. Inspection and entry	9
J. Monitoring and records.....	9
K. Signatory requirement.....	11
L. Reporting requirements.....	13
M. Bypass	17
N. Upset	18
O. Misrepresentation of Information	18
Part III. Limitations and Monitoring Requirements	19
A. Effluent Limitations and Monitoring Requirements.....	19
B. Whole Effluent Toxicity and Other Biological Limitations and Monitoring Requirements	21
C. Groundwater Monitoring Requirements	23
D. Sludge Monitoring Requirements	23
E. Soil Monitoring Requirements.....	23
Part IV. Schedule of Compliance.....	24
Part V. Other Requirements	25
A. Effluent Requirements	25
B. Whole Effluent Toxicity and Other Biological Requirements.....	26
C. Groundwater Requirements	29
D. Sludge Requirements	29
E. Other Conditions	29

Ogletree Deakins

Elizabeth B. Partlow



Shareholder
beth.partlow@ogletreedeacons.com

Office(s):

Columbia

p: 803-252-1300

f: 803-254-6517

Practice Area(s): Environmental

Bio:

Ms. Partlow is a shareholder in the firm's Columbia, South Carolina office. Her practice is focused in the area of environmental law. She has been listed in The Best Lawyers in America since 2005.

Ms. Partlow represents clients from a wide range of industries, including manufacturing plants, pulp and paper mills, real estate developers, waste management facilities, and petroleum distributors. She regularly defends clients in state and federal administrative enforcement actions and citizen suits in cases arising under clean air, clean water, hazardous waste, and Superfund (including community right-to-know) laws. She also assists clients in obtaining environmental permits, conducting environmental audits and due diligence inquiries, and negotiating with regulators to achieve reasonable solutions to environmental issues.

Prior to joining Ogletree Deakins, Ms. Partlow served as Legal Counsel to Governor David M. Beasley of South Carolina, specializing in environmental issues. She represented the Governor on the Southeast Compact Commission, the Southern States Energy Board, the Hazardous Waste Management Select Oversight Committee, and as a Natural Resource Trustee. Ms. Partlow previously served as Deputy Director for the Environment for former South Carolina Governor Carroll Campbell, Jr.; as staff counsel for the South Carolina Department of Health and Environmental Control; and as staff attorney for the South Carolina Supreme Court.

Education:

J.D., University of South Carolina School of Law, 1985

B.A., *magna cum laude*, University of South Carolina, 1982

Admitted to Practice:

State of South Carolina
U.S. Supreme Court
U.S. Court of Appeals, Fourth Circuit
U.S. Court of Appeals, District of Columbia Circuit
U.S. District Court, District of South Carolina

Activities:

South Carolina Bar (Member, Natural Resources Section), Richland County Bar Association, Editorial Board - South Carolina Lawyer, South Carolina Chamber of Commerce (Environmental Technical Committee), Carolinas Air Pollution Control Association, Nancy K. Perry Children's Shelter (Member, Board of Trustees)



PART I. Definitions

Any term not defined in this Part has the definition stated in the Pollution Control Act or in "Water Pollution Control Permits", R.61-9 or its normal meaning.

- A. The "Act", or CWA, shall refer to the Clean Water Act (Formerly referred to as the Federal Water Pollution Control Act) Public Law 92-500, as amended.
- B. The "average" or "arithmetic mean" of any set of values is the summation of the individual values divided by the number of individual values.
- C. "Basin" (or "pond") means any in-ground or earthen structure designed to receive, treat, store, temporarily retain and/or allow for the infiltration/evaporation of wastewater.
- D. "Blowdown" means the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practices.
- E. "Bottom ash" means the ash that drops out of the furnace gas stream in the furnace and in the economizer sections. Economizer ash is included when it is collected with bottom ash (40 CFR 423.11(f)).
- F. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- G. "Chemical metal cleaning waste" means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning (40 CFR 423.11(c)).
- H. "Coal pile runoff" means the rainfall runoff from or through any coal storage pile (40 CFR 423.11(m)).
- I. A "composite sample" shall be defined as one of the following four types:
 - 1. An influent or effluent portion collected continuously over a specified period of time at a rate proportional to the flow.
 - 2. A combination of not less than 8 influent or effluent grab samples collected at regular (equal) intervals over a specified period of time and composited by increasing the volume of each aliquot in proportion to flow. If continuous flow measurement is not used to composite in proportion to flow, the following method will be used: An instantaneous flow measurement should be taken each time a grab sample is collected. At the end of the sampling period, the instantaneous flow measurements should be summed to obtain a total flow. The instantaneous flow measurement can then be divided by the total flow to determine the percentage of each grab sample to be combined. These combined samples form the composite sample.
 - 3. A combination of not less than 8 influent or effluent grab samples of equal volume but at variable time intervals that are inversely proportional to the volume of the flow. In other words, the time interval between aliquots is reduced as the volume of flow increases.
 - 4. If the effluent flow varies by less than 15 percent, a combination of not less than 8 influent or effluent grab samples of constant (equal) volume collected at regular (equal) time intervals over a specified period of time.

All samples shall be properly preserved in accordance with Part II.J.4. Continuous flow or the sum of instantaneous flows measured and averaged for the specified compositing time period shall be used with composite results to calculate mass.

- J. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.
- K. "Daily maximum" is the highest average value recorded of samples collected on any single day during the calendar month.
- L. "Daily minimum" is the lowest average value recorded of samples collected on any single day during the calendar month.
- M. The "Department" or "DHEC" shall refer to the South Carolina Department of Health and Environmental Control.
- N. "Fly ash" means the ash that is carried out of the furnace by the gas stream and collected by mechanical precipitators, electrostatic precipitators, and/or fabric filters. Economizer ash is included when it is collected with fly ash (40 CFR 423.11(e)).
- O. "Free available chlorine" shall mean the value obtained using the amperometric titration method for free available chlorine described in *Standard Methods for the Examination of Water and Wastewater* (40 CFR 423.11(l)).
- P. The "geometric mean" of any set of values is the Nth root of the product of the individual values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered to be one (1).
- Q. A "grab sample" is an individual, discrete or single influent or effluent portion of at least 100 milliliters collected at a time representative of the discharge and over a period not exceeding 15 minutes and retained separately for analysis.
- R. "Groundwater" means the water below the land surface found in fractured rock or various soil strata.
- S. "Low volume waste sources" include, but are not limited to: wastewaters from wet scrubber air pollution control systems, ion exchange water treatment systems, water treatment evaporator blowdown, laboratory and sampling streams, boiler blowdown, floor drains, cooling tower basin cleaning wastes, and recirculating house service water systems. Sanitary and air conditioning wastes are not included (40 CFR 423.11(b)).
- T. The "maximum or minimum" is the highest or lowest value, respectively, recorded of all samples collected during the calendar month. These terms may also be known as the instantaneous maximum or minimum.

- U. "Metal cleaning waste" means any wastewater resulting from cleaning [with or without chemical cleaning compounds] any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning (40 CFR 423.11(d)).
- V. "Monitoring well" means any well used to sample groundwater for water quality analysis or to measure groundwater levels.
- W. The "monthly average", other than for fecal coliform and enterococci, is the arithmetic mean of all samples collected in a calendar month period. The monthly average for fecal coliform and enterococci bacteria is the geometric mean of all samples collected in a calendar month period. The monthly average loading is the arithmetic average of all daily discharges made during the month.
- X. "Once through cooling water" means water passed through the main cooling condensers in one or two passes for the purpose of removing waste heat (40 CFR 423.11(g)).
- Y. The "PCA" shall refer to the Pollution Control Act (Chapter 1, Title 48, Code of Laws of South Carolina).
- Z. The "practical quantitation limit" (PQL) is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. It is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed. It is also referred to as the reporting limit.
- AA. "Quarter" is defined as the first three calendar months beginning with January and each group of three calendar months thereafter (also known as calendar quarters).
- BB. "Quarterly average" is the arithmetic mean of all samples collected in a quarter.
- CC. "Recirculated cooling water" means water which is passed through the main condensers for the purpose of removing waste heat, passed through a cooling device for the purpose of removing such heat from the water then passed again, except for blowdown, through the main condenser (40 CFR 423.11(h)).
- DD. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- EE. "Sludge" means industrial sludge. Industrial sludge is a solid, semi-solid, or liquid residue generated during the treatment of industrial wastewater in a treatment works. Industrial sludge includes, but is not limited to, industrial septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from industrial sludge. Industrial sludge does not include ash generated during the firing of industrial sludge in an industrial sludge incinerator or grit and screenings generated during preliminary treatment of industrial wastewater in a treatment works. Industrial sludge by definition does not include sludge covered under 40 CFR Part 503 or R.61-9.503.
- FF. "Total residual chlorine" (or total residual oxidants for intake water with bromides) means the value obtained using the amperometric method for total residual chlorine described in 40 CFR Part 136. The term "average

concentration" as it relates to chlorine discharge means the average of analyses made over a single period of chlorine release which does not exceed two hours (40 CFR 423.11(a) and (k)).

GG. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

HH. "Wastewater" means industrial wastewater. Industrial wastewater is wastewater generated from a federal facility, commercial or industrial process, including waste and wastewater from humans when generated at an industrial facility.

PART II. Standard Conditions

A. Duty to comply

The permittee must comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. The Department's approval of wastewater facility plans and specifications does not relieve the permittee of responsibility to meet permit limits.

1. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
2. Failure to comply with permit conditions or the provisions of this permit may subject the permittee to civil penalties under S.C. Code Section 48-1-330 or criminal sanctions under S.C. Code Section 48-1-320. Sanctions for violations of the Federal Clean Water Act may be imposed in accordance with the provisions of 40 CFR Part 122.41(a)(2) and (3).
3. A person who violates any provision of this permit, a term, condition or schedule of compliance contained within this NPDES permit, or the State law is subject to the actions defined in the State law.

B. Duty to reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. A permittee with a currently effective permit shall submit a new application 180 days before the existing permit expires, unless permission for a later date has been granted by the Department. The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

C. Need to halt or reduce activity not a defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper operation and maintenance

1. The permittee shall at all times properly operate and maintain in good working order and operate as efficiently as possible all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance based on design facility removals, adequate funding, adequate operator staffing and training and also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
2. Power Failures. In order to maintain compliance with effluent limitations and prohibitions of this permit, the permittee shall either:
 - a. provide an alternative power source sufficient to operate the wastewater control facilities;
 - b. or have a plan of operation which will halt, reduce, or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.
3. The permittee shall develop and maintain at the facility a complete Operations and Maintenance Manual for the waste treatment facilities. The manual shall be made available for on-site review during normal working hours. The manual shall contain operation and maintenance instructions for all equipment and appurtenances associated with the waste treatment facilities and land application system, if applicable. The manual shall contain a general description of the treatment process(es), the operational procedures to meet the requirements of E.1 above, and the corrective action to be taken should operating difficulties be encountered.
4. The permittee shall provide for the performance of daily treatment facility inspections by a certified operator of the appropriate grade as defined in Part V.E of this permit. The Department may make exceptions to the daily operator requirement in accordance with R.61-9.122.41(e)(3)(ii). The inspections shall include, but should not necessarily be limited to, areas which require visual observation to determine efficient operation and for which immediate corrective measures can be taken using the O & M manual as a guide. All inspections shall be recorded and shall include the date, time, and name of the person making the inspection, corrective measures taken, and routine equipment maintenance, repair, or replacement performed. The permittee shall maintain all records of inspections at the permitted facility as required by the permit, and the records shall be made available for on-site review during normal working hours.
5. The name and grade of the operator of record shall be submitted to DHEC/Bureau of Water/Water Pollution Control Division prior to placing the facility into operation. A roster of operators associated with the facility's operation and their certification grades shall also be submitted with the name of the "operator-in-charge." Any changes in operator or operators shall be submitted to the Department as they occur.

F. Permit actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

G. Property rights

This permit does not convey any property rights of any sort, or any exclusive privilege nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

H. Duty to provide information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

I. Inspection and entry

The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and Pollution Control Act, any substances or parameters at any location.

J. Monitoring and records

1. a. (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
(2) Samples shall be reasonably distributed in time, while maintaining representative sampling.
(3) No analysis, which is otherwise valid, shall be terminated for the purpose of preventing the analysis from showing a permit or water quality violation.
- b. Flow Measurements.
 - (1) Where primary flow meters are required, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be present and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from the true discharge rates throughout the range of

expected discharge volumes. The primary flow device, where required, must be accessible to the use of a continuous flow recorder.

- (2) Where permits require an estimate of flow, the permittee shall maintain at the permitted facility a record of the method(s) used in estimating the discharge flow (e.g., pump curves, production charts, water use records) for the outfall(s) designated on limits pages to monitor flow by an estimate.
 - (3) Records of any necessary calibrations must be kept.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by R.61-9.503 or R.61-9.504), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.
 3. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
 4. a. Analyses for required monitoring must be conducted according to test procedures approved under 40 CFR Part 136, equivalent test procedures approved by the Department or other test procedures that have been specified in the permit.

In the case of sludge use or disposal, analysis for required monitoring must be conducted according to test procedures approved under 40 CFR Part 136, test procedures specified in R.61-9.503 or R.61-9.504, equivalent test procedures approved by the Department or other test procedures that have been specified in the permit.

- b. Unless addressed elsewhere in this permit, the permittee shall use a sufficiently sensitive analytical method that achieves a value below the derived permit limit stated in Part III. If more than one method of analysis is approved for use, the Department recommends for reasonable potential determinations that the permittee use the method having the lowest practical quantitation limit (PQL) unless otherwise specified in Part V of the permit. For the purposes of reporting analytical data on the Discharge Monitoring Report (DMR):

- (1) Analytical results below the PQL conducted using a method in accordance with Part II.J.4.a above shall be reported as zero (0). Zero (0) shall also be used to average results which are below the PQL. When zero (0) is reported or used to average results, the permittee shall report, in the "Comment Section" or in an attachment to the DMR, the analytical method used, the PQL achieved, and the number of times results below the PQL were reported as zero (0).
 - (2) Analytical results above the PQL conducted using a method in accordance with Part II.J.4.a shall be reported as the value achieved. When averaging results using a value containing a "less than," the average shall be calculated using the value and reported as "less than" the average of all results collected.
 - (3)(a) The mass value for a pollutant collected using a grab sample shall be calculated using the 24-hour totalized flow for the day the sample was collected (if available) or the instantaneous flow at the time of the sample and either the concentration value actually achieved or the value as determined from the procedures in (1) or (2) above, as appropriate. Grab samples should be collected at a time representative of the discharge.
 - (b) The mass value for a pollutant collected using a composite sample shall be calculated using the 24-hour totalized flow measured for the day the sample was collected and either the concentration value actually achieved or the value as determined from the procedures in (1) or (2) above, as appropriate.
5. The PCA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$25,000 or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment provided by the Clean Water Act is also by imprisonment of not more than 4 years.

K. Signatory requirement.

1. All applications, reports, or information submitted to the Department shall be signed and certified.
 - a. Applications. All permit applications shall be signed as follows:
 - (1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or
 - (b) The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather

complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, State, Federal, or other public agency or public facility: By either a principal executive officer, mayor, or other duly authorized employee or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (a) The chief executive officer of the agency, or
 - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator, Region IV, EPA).
 - b. All reports required by permits, and other information requested by the Department, shall be signed by a person described in Part II.K.1.a of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in Part II.K.1.a of this section;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,
 - (3) The written authorization is submitted to the Department.
 - c. Changes to authorization. If an authorization under Part II.K.1.b of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.1.b of this section must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
 - d. Certification. Any person signing a document under Part II.K.1.a or b of this section shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
2. The PCA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including

monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than two years per violation, or by both.

L. Reporting requirements

1. Planned changes.

The permittee shall give written notice to DHEC/Bureau of Water/Water Facilities Permitting Division as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in R 61-9.122.29(b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Part II.L.8 of this section.
- c. The alteration or addition results in a significant change in the permittee's sewage sludge or industrial sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan (included in the NPDES permit directly or by reference);

2. Anticipated noncompliance.

The permittee shall give advance notice to the DHEC/Bureau of Water/Water Pollution Control Division of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers.

This permit is not transferable to any person except after written notice to the DHEC/Bureau of Water/NPDES Administration. The Department may require modification or revocation and reissuance of the permit to change the name of permittee and incorporate such other requirements as may be necessary under the Pollution Control Act and the Clean Water Act.

- a. Transfers by modification. Except as provided in paragraph b of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under R.61-9.122.62(e)(2)), or a minor modification made (under R.61-9.122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under CWA.
- b. Other transfers. As an alternative to transfers under paragraph a of this section, any NPDES permit may be transferred to a new permittee if:

- (1) The current permittee notifies the Department at least 30 days in advance of the proposed transfer date in Part II.L.3.b(2) of this section;
 - (2) The notice includes U.S. EPA NPDES Application Form 1 and a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - (3) Permits are non-transferable except with prior consent of the Department. A modification under this section is a minor modification which does not require public notice.
4. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.
- a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices including the following:
- (1) Effluent Monitoring: Effluent monitoring results obtained at the required frequency shall be reported on a Discharge Monitoring Report Form (EPA Form 3320-1). The DMR is due postmarked no later than the 28th day of the month following the end of the monitoring period. One original and one copy of the Discharge Monitoring Reports (DMRs) shall be submitted to:

S.C. Department of Health and Environmental Control
Bureau of Water/Water Pollution Control Division
Data and Records Management Section
2600 Bull Street
Columbia, South Carolina 29201
 - (2) Groundwater Monitoring: Groundwater monitoring results obtained at the required frequency shall be reported on a Groundwater Monitoring Report Form (DHEC 2110) postmarked no later than the 28th day of the month following the end of the monitoring period. One original and one copy of the Groundwater Monitoring Report Form (DHEC 2110) shall be submitted to:

S.C. Department of Health and Environmental Control
Bureau of Water/Water Monitoring, Assessment and Protection Division
Groundwater Quality Section
2600 Bull Street
Columbia, South Carolina 29201
 - (3) Sludge, Biosolids and/or Soil Monitoring: Sludge, biosolids and/or soil monitoring results obtained at the required frequency shall be reported in a laboratory format as stated in Part V of the permit. Two copies of these results shall be submitted to:

S.C. Department of Health and Environmental Control
Bureau of Water/Water Pollution Control Division
Data and Records Management Section
2600 Bull Street
Columbia, South Carolina 29201

- (4) All other reports required by this permit shall be submitted at the frequency specified elsewhere in the permit to:

S.C. Department of Health and Environmental Control
Bureau of Water/Water Pollution Control Division
Data and Records Management Section
2600 Bull Street
Columbia, South Carolina 29201

- b. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in R.61-9.503 or R.61-9.504, or as specified in the permit, all valid results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department. The permittee has sole responsibility for scheduling analyses, other than for the sample date specified in Part V, so as to ensure there is sufficient opportunity to complete and report the required number of valid results for each monitoring period.
- c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

5. Twenty-four hour reporting

- a. The permittee shall report any non-compliance, which may endanger health or the environment. Any information shall be provided orally to local DHEC office within 24 hours from the time the permittee becomes aware of the circumstances. During normal working hours call:

County	EQC Region	Phone No.
Fairfield, Lexington, Newberry, Richland	Region 3 -Columbia EQC Office	803-896-0620

*After-hour reporting should be made to the 24-Hour Emergency Response telephone number 803-253-6488 or 1-888-481-0125 outside of the Columbia area.

A written submission shall also be provided to the address in Part II.L.4.a(4) within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

- b. The following shall be included as information which must be reported within 24 hours under this paragraph.

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See R.61-9.122.44(g)).

(2) Any upset which exceeds any effluent limitation in the permit.

- (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours (See R 61-9.122.44(g)). If the permit contains maximum limitations for any of the pollutants listed below, a violation of the maximum limitations shall be reported orally to the DHEC/Bureau of Water/Water Pollution Control Division within 24 hours or the next business day.

- (a) Whole Effluent Toxicity (WET),
(b) tributyl tin (TBT), and
(c) any of the following bioaccumulative pollutants:

α BHC	Mercury
β BHC	Mirex
δ BHC (Lindane)	Octachlorostyrene
BHC	PCBs
Chlordane	Pentachlorobenzene
DDD	Photomirex
DDE	1,2,3,4-Tetrachlorobenzene
DDT	1,2,4,5-Tetrachlorobenzene
Dieldrin	2,3,7,8-TCDD
Hexachlorobenzene	Toxaphene
Hexachlorobutadiene	

- c. The Department may waive the written report on a case-by-case basis for reports under Part II.L.5.b of this section if the oral report has been received within 24 hours.

6. Other noncompliance.

The permittee shall report all instances of noncompliance not reported under Part II.L.4 and 5 of this section and Part IV at the time monitoring reports are submitted. The reports shall contain the information listed in Part II.L.5 of this section.

7. Other information.

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information to the Water Facilities Permitting Division. This information may result in permit modification, revocation and reissuance, or termination in accordance with Regulation 61-9.

8. Existing manufacturing, commercial, mining, and silvicultural dischargers.

In addition to the reporting requirements under Part II.L.1-7 of this section, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the DHEC/Bureau of Water/Water Pollution Control Division of the Department as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

- (1) One hundred micrograms per liter (100 µg/l);
 - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application;
or
 - (4) The level established by the Department in accordance with section R.61-9.122.44(f).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed in the highest of the following "notification levels":
- (1) Five hundred micrograms per liter (500 µg/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with R.61-9.122.21(g)(7).
 - (4) The level established by the Department in accordance with section R.61-9.122.44(f).

M. Bypass

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II.M.2 and 3 of this section.
2. Notice.
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass to the DHEC/Bureau of Water/ Water Facilities Permitting Division.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.L.5 of this section.
3. Prohibition of bypass
 - a. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part II.M.2 of this section.

- b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part II.M.3.a of this section.

N. Upset

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Part II.N.2 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated; and
 - c. The permittee submitted notice of the upset as required in Part II.L.5.b(2) of this section.
 - d. The permittee complied with any remedial measures required under Part II.D of this section.
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

O. Misrepresentation of Information

1. Any person making application for a NPDES discharge permit or filing any record, report, or other document pursuant to a regulation of the Department, shall certify that all information contained in such document is true. All application facts certified to by the applicant shall be considered valid conditions of the permit issued pursuant to the application.
2. Any person who knowingly makes any false statement, representation, or certification in any application, record, report, or other documents filed with the Department pursuant to the State law, and the rules and regulations pursuant to that law, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for pursuant to 48-1-320 or 48-1-330.

Part III. Limitations and Monitoring Requirements

A. Effluent Limitations and Monitoring Requirements

1. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number 01A: Recirculated cooling tower blowdown (internal outfall to Outfall 03A (and 03B))

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration			
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	MR ¹ , MGD	MR ¹ , MGD			1/week	Estimate ²
Free Available Chlorine (FAC) ³			0.2 mg/l	0.5 mg/l	1/week	Multiple Grabs ⁴
Chromium, total ⁵			0.2 mg/l	0.2 mg/l	1/month	Grab
Zinc, total ⁵			1.0 mg/l	1.0 mg/l	1/month	Grab

¹ MR: Monitor and Report

² See Part II.J.1.b

³ See Part I.O and V.A.4.

⁴ Multiple grabs shall consist of grab samples collected at the approximate beginning of the period of Total Residual Chlorine (TRC) and/or Free Available Chlorine (FAC) discharge and once every twenty (20) minutes until TRC or FAC is no longer present.

⁵ These parameters are only required to be monitored when chromium and zinc-containing cooling tower maintenance chemicals are used.

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at or near the cooling tower discharge but prior to mixing with the receiving stream or any other waste stream.
- b. The discharge of one hundred twenty-six (126) toxic pollutants, except chromium and zinc, is prohibited in detectable amounts in chemicals added for cooling tower maintenance. The permittee may demonstrate compliance with such limitations by either routinely sampling and analyzing for the pollutants in the discharge or providing engineering calculations which demonstrate that the regulated pollutants are not detectable in the discharge. Results of sampling or calculations to meet this requirement shall be submitted as an attachment to the DMRs on an annual basis. See Attachment 4 of the Fact Sheet for this permit for a list of PQLs and methods for these pollutants to be used to determine detectable amounts.

2. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall serial numbers 03A and 03B: cooling tower blowdown from 01A, low volume wastes, ash transport wastewaters, landfill runoff/leachate, coal pile runoff, miscellaneous power plant wastewaters, and storm water

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS	
	Mass		Concentration				
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Instantaneous Maximum ¹	Sampling Frequency	Sample Type
Flow	MR ² , MGD	MR ² , MGD				1/month	Instantaneous ³
pH			Min ¹ 6.0 su		Max 8.5 su	1/month	Grab
Total Suspended Solids (TSS)			30 mg/l		100 mg/l	1/month	Grab
Oil & Grease			15 mg/l	20 mg/l		1/month	Grab
Temperature				MR ² °F		1/quarter	Grab
Ammonia, total			MR ² mg/l ^{4,5}	MR ² mg/l ^{4,5}		1/quarter	Grab
Mercury, total			MR ² µg/l ^{4,5}	MR ² µg/l ^{4,5}		1/quarter	Grab
Phosphorus, total	MR ² lb/d		MR ² mg/l ^{4,5}	MR ² mg/l ^{4,5}		1/quarter	Grab
Arsenic, total			MR ² mg/l ^{4,5}	MR ² mg/l ^{4,5}		1/month	Grab

¹See Part I.T

²MR: Monitor and Report

³See Part II.J.1.b

⁴See Part V.A.8

⁵See Part V.A.9

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after treatment and prior to mixing with the receiving stream or any other waste stream.
- b. Use of Outfall No. 03B shall be limited to emergency conditions necessary to assure dike stability and shall not be used for routine discharge. Notification of each emergency use and the reason for the emergency shall be made per Part II.L.5.

B. Whole Effluent Toxicity and Other Biological Limitations and Monitoring Requirements

1. During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge from serial numbers 03A and 03B: cooling tower blowdown from 01A, low volume wastes, ash transport wastewaters, landfill runoff/leachate, coal pile runoff, miscellaneous power plant wastewaters, and storm water

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
<i>Ceriodaphnia dubia</i> Acute Whole Effluent Toxicity @ ATC= 15%	-	0*	1/quarter	Grab

* Report "0" if test passes or "1" if test fails in accordance with Part V.B.1

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations: at or near the discharge, but prior to mixing with the receiving waters.

2. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall serial numbers 03A and 03B: cooling tower blowdown from 01 A, low volume wastes, ash transport wastewaters, landfill runoff/leachate, coal pile runoff, miscellaneous power plant wastewaters, and storm water

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Monthly Average	Maximum ¹	Measurement Frequency	Sample Type
<i>Ceriodaphnia dubia</i> Chronic Whole Effluent Toxicity @ CTC= 2.3%	MR % ²	MR % ²	1/month ³	Grab
<i>Ceriodaphnia dubia</i> Chronic Whole Effluent Toxicity-Reproduction @ CTC=2.3%	MR % ²	MR % ²	1/month ³	Grab
<i>Ceriodaphnia dubia</i> Chronic Whole Effluent Toxicity- 7-day Survival @ CTC=2.3%	MR % ²	MR % ²	1/month ³	Grab

¹Maximum is defined as the highest percent effect of all valid tests performed during the monitoring period following the procedures in Part V.B.2.d.

²See Part V.B.2 for additional toxicity reporting requirements. MR = Monitor and Report.

³Valid tests must be separated by at least 7 days (from the time the first sample is taken to start one test until the time the first sample is taken to start a different test). There is no restriction on when a new test may begin following a failed or invalid test.

- a. Samples used to demonstrate compliance with the discharge limitations and monitoring requirements specified above shall be taken at or near the final point-of-discharge but prior to mixing with the receiving waters or other waste streams.
- b. Valid test results from split samples shall be reported on the DMR. For reporting an average on the DMR, individual valid results for each test from a split sample are averaged first to determine a sample value. That value is averaged with other sample results obtained in the reporting period and the average of all sample results reported. For reporting the maximum on the DMR, individual valid results for each test from a split sample are averaged first to determine a sample value. That value is compared to other sample results obtained in the reporting period and the maximum of all sample results reported. For the purposes of reporting, split samples are reported as a single sample regardless of the number of times it is split. All laboratories used shall be identified on the DMR attachment.

C. Groundwater Monitoring Requirements

See Part V.C.

D. Sludge Monitoring Requirements

See Part V.D

E. Soil Monitoring Requirements

none

Part IV. Schedule of Compliance

A. Schedule(s)

None

- B. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each scheduled date.

Part V. Other Requirements

A. Effluent Requirements

1. There shall be no discharge of floating solids or visible foam in other than trace amounts, nor shall the effluent cause a visible sheen on the receiving waters.
2. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
3. The Permittee shall route metal cleaning wastes to a separate holding basin, which shall have no discharge to surface waters or other plant streams.
4. Neither free available chlorine or total residual chlorine may be discharged from any single generating unit for more than two (2) hours in any one day, and not more than one unit in any plant may discharge Free Available Chlorine or Total Residual Chlorine at any one time unless the permittee can demonstrate to the Department that the units in a particular location cannot operate at or below this level of chlorination.
5. Unless authorized elsewhere in this Permit, the permittee must meet the following requirements concerning maintenance chemicals for the following waste streams: once-through noncontact cooling water, recirculated cooling water, boiler blowdown water, and air washer water. Maintenance chemicals shall be defined as any man-induced additives to the above-referenced waste streams.
 - a. Detectable amounts of any of the one hundred and twenty-six priority pollutants is prohibited in the discharge, if the pollutants are present due to the use of maintenance chemicals.
 - b. Slimicides, algicides and biocides are to be used in accordance with registration requirements of the Federal Insecticides, Fungicide and Rodenticide Act.
 - c. The use of maintenance chemicals containing bis(tributyltin) oxide is prohibited.
 - d. Any maintenance chemicals added to the above-referenced waste streams must degrade rapidly, either due to hydrolytic decomposition or biodegradation.
 - e. Discharges of maintenance chemicals added to waste streams must be limited to concentrations which protect indigenous aquatic populations in the receiving stream.
 - f. The permittee must keep sufficient documentation on-site that would show that the above requirements are being met. The information shall be made available for on-site review by Department personnel during normal working hours.
 - g. The occurrence of instream problems may necessitate the submittal of chemical additive data and permit modification to include additional monitoring and limitations.
6. The company shall notify the South Carolina Department of Health and Environmental Control in writing no later than sixty (60) days prior to instituting use of any additional maintenance chemicals in the cooling water system. Such notification shall include:

- a. Name and general composition of the maintenance chemical
 - b. Quantities to be used
 - c. Frequency of use
 - d. Proposed discharge concentration
 - e. EPA registration number, if applicable
 - f. Aquatic toxicity information
7. The permittee is required to submit a completed Form 2C for the discharge from Outfall 03A within 21 months of the start of operations discharging from both the landfill runoff/leachate basin and the FGD scrubber blowdown system. The permittee shall provide at least four (4) samples for all parameters in Section V Part A, Part B, and Part C.1M-15M, 1V-31V, and 1A-11A. These four samples shall be separated such that one sample is collected during each season (i.e., spring, summer, fall and winter) after operations at these facilities begin discharging. Sampling should begin after three months of operation of the scrubbers and landfill runoff/leachate basin.
 8. This permit may be reopened to include additional monitoring and/or limitations for ammonia, mercury, and phosphorus based on monitoring results obtained. This permit may be reopened to include additional monitoring and/or limitations based on changes to law or regulation related to water quality standards for arsenic. Modifications may be performed for cause in accordance with Regulation 61-9.122.62(d) and/or (e).
 9. Where the permit limitation in Part III is below the practical quantitation limit (PQL), the PQL and analytical method stated below shall be considered as being in compliance with the permit limit. Additionally, where the permit requires only monitoring and reporting (MR) in Part III, the PQL and analytical method stated below shall be used for reporting results.

Parameter	Analytical Method	PQL
Ammonia	SM4500NH3 C, F, G or H, or EPA 350.1 (Rev. 2.0 1993)	0.10 mg/l
Arsenic	200.8, 200.9, SM3113B	0.0050 mg/l
Mercury	1669(sampling)/1631E (analysis)	0.0005 µg/l
Phosphorus	365.1(Rev. 2.0 1993), 365.3, 365.4, or SM 4500 P, E, or F	0.050 mg/l

B. Whole Effluent Toxicity and Other Biological Requirements

1. Acute Toxicity -For the requirements identified in Part III.B.1:

- a. A 48-hour static acute toxicity test shall be conducted at the frequency stated in Part III.B Effluent Toxicity Limitations and Monitoring Requirements using a control and the acute test concentration (ATC) of 15%. The test shall be conducted using *Ceriodaphnia dubia* as the test organism using EPA Method 2002.0 in accordance with "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms," EPA 821/R-02/012 (October 2002). The test shall be conducted at 25°C ±1°C.
- b. If the test group *Ceriodaphnia dubia* survival is less than the control group survival at the 0.05α level of a left-tailed Fisher's exact test, the test shall be deemed a failure.

- c. The permittee must report on the discharge monitoring report (DMR) form whether the test passes or fails at the specified ATC. If the test fails, the number "1" shall be placed on the form. If the test passes, the number "0" shall be placed on the form. If more than one test is performed during a monitoring period (including tests from split samples), the worst case result shall be reported on the DMR. The DMR Attachment for Toxicity Test Results, DHEC Form 3420, shall also be completed and submitted with the DMR.
- d. A test shall be invalidated if any part of Method 2002.0 is not followed or if the laboratory is not certified at the time the test is conducted.
- e. All valid toxicity test results shall be submitted on the DHEC Form 3710 entitled "DMR Attachment for Toxicity Test Results" in accordance with Part ILL.4. In addition, results from all invalid tests must be appended to DMRs, including lab control data. The permittee has sole responsibility for scheduling toxicity tests so as to ensure there is sufficient opportunity to complete and report the required number of valid test results for each monitoring period.
- f. The permittee is responsible for reporting a valid test during each monitoring period. However, the Department acknowledges that invalid tests may occur. All of the following conditions must be satisfied for the permittee to be in compliance with Whole Effluent Toxicity (WET) testing requirements for a particular monitoring period when a valid test was not obtained.
 - (1) A minimum of five (5) tests have been conducted which were invalid in accordance with Part V.B.1.d above;
 - (2) The data and results of all invalid tests are attached to the DMR;
 - (3) At least one additional State-certified laboratory is used after two (2) consecutive invalid tests were determined by the first laboratory. The name(s) and lab certification number(s) of the additional lab(s) shall be reported in the comment section of the DMR; and
 - (4) A valid test was reported during each of the previous three reporting periods.

If these conditions are satisfied, the permittee may enter "H" in the appropriate boxes on the toxicity DMR and add the statement to the Comment Section of the DMR that "H indicates invalid tests."

- g. This permit may be modified based on new information that supports a modification in accordance with Regulation 61-9.122.62 and Regulation 61-68.D.

2. Chronic Toxicity - For the requirements identified in Part III.B.2:

- a. A *Ceriodaphnia dubia* three brood chronic toxicity test shall be conducted at the frequency stated in Part III.B, Effluent Toxicity Limitations and Monitoring Requirements, using the chronic test concentration (CTC) of 2.3% and the following test concentrations: 0% (control), 1.0%, 10%, 32% and 100% effluent. The permittee may add additional test concentrations without prior authorization from the Department provided that the test begins with at least 10 replicates in each concentration and all data is used to determine permit compliance.
- b. The test shall be conducted using EPA Method 1002.0 in accordance with "Short-Term Methods for Estimating Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms,"

EPA/821/R-02/013 (October 2002).

- c. The permittee shall use the linear interpolation method described in "Short-Term Methods for Estimating Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," EPA/821/R-02/013 (October 2002), Appendix M to estimate the percent effect on survival and reproduction at the CTC according to the equations in d below.

- d. The linear interpolation estimate of percent effect is $\left(1 - \frac{M_{CTC}}{M_1}\right) * 100$ if the CTC is a tested

$$\left(1 - \frac{M_J - \frac{M_{J+1} - M_J}{C_{J+1} - C_J} * C_J + \frac{M_{J+1} - M_J}{C_{J+1} - C_J} * CTC}{M_1}\right) * 100.$$

concentration. Otherwise, it is

- e. The permittee shall report the percent effect on both *Ceriodaphnia dubia* survival and reproduction at the CTC. Overall percent effect is the greater of the percent effect on survival and reproduction. On the DMR Attachment, the permittee shall also report the IC25 and, using the same test data, the 48-hour chronic LC50.
- f. A test shall be invalidated if any part of Method 1002.0 is not followed or if the laboratory is not certified at the time the test is conducted.
- g. All valid toxicity test results shall be submitted on the DHEC Form 3710 entitled "DMR Attachment for Toxicity Test Results" in accordance with Part II.L.4. In addition, results from all invalid tests must be appended to DMRs, including lab control data. The permittee has sole responsibility for scheduling toxicity tests so as to ensure there is sufficient opportunity to complete and report the required number of valid test results for each monitoring period.
- h. The permittee is responsible for reporting a valid test during each monitoring period. However, the Department acknowledges that invalid tests may occur. All of the following conditions must be satisfied for the permittee to be in compliance with Whole Effluent Toxicity (WET) testing requirements for a particular monitoring period when a valid test was not obtained.
- (1) A minimum of five (5) tests have been conducted which were invalid in accordance with Part V.B.1.e above;
 - (2) The data and results of all invalid tests are attached to the DMR;
 - (3) At least one additional State-certified laboratory is used after two (2) consecutive invalid tests were determined by the first laboratory. The name(s) and lab certification number(s) of the additional lab(s) shall be reported in the comment section of the DMR; and
 - (4) A valid test was reported during each of the previous three reporting periods.

If these conditions are satisfied, the permittee may enter "H" in the appropriate boxes on the toxicity

DMR and add the statement to the Comment Section of the DMR that "H indicates invalid tests."

- i. This permit may be modified based on new information that supports a modification in accordance with Regulation 61-9.122.62 and Regulation 61-68.D.

C. Groundwater Requirements

A groundwater monitoring plan should be submitted to the Ground Water Quality Section (see address in Part II.L.4.a(2)) for approval within six months of completing construction of the landfill runoff/leachate basin. The plan should include a minimum of three monitoring wells, with at least two located downgradient and within 50 feet of the basin. Analytical parameters should be similar to those specified in Mixing Zone Agreement #01-053-W, with the addition of total mercury, established for the SCE&G/Wateree Facility in February 2001.

D. Sludge Requirements

1. All waste oil and solid and hazardous waste shall be properly disposed of in accordance with the rules and regulations of the Bureau of Land and Waste Management of SCDHEC.
2. The on-site landfill will primarily receive the gypsum solids from the FGD scrubber, though it is approved to accept fly ash and bottom ash as well. Fly/bottom ash, including ash recovered from the ash basins and gypsum may also be sent off-site for recycling or beneficial reuse. The permittee shall obtain written approval from the Industrial Wastewater Permitting Section prior to sending any ash material off-site for disposal.
3. Written approval from the Department must be obtained prior to disposal of other sludges or use of other sludge disposal methods.

E. Other Conditions

1. The wastewater treatment plants are each assigned a classification of Group I-P/C. The Environmental Certification Board Rules require that a Grade D-P/C operator be assigned to operate these facilities.
2. The permittee shall maintain an all weather access road to the wastewater treatment plant and appurtenances at all times.
3. The permittee shall monitor all parameters consistent with conditions established by this permit on the 1st Thursday of every calendar month in which sampling is required, unless otherwise approved by this Department. Chronic whole effluent toxicity (WET) monitoring shall be performed on the 1st Monday of every calendar month in which sampling is required, unless otherwise approved by this Department. Acute WET monitoring shall be performed on the 1st Monday of any calendar month within the quarter in which sampling is required, unless otherwise approved by this Department. If any sampling day falls on a holiday, sampling shall be conducted on the next business day. If no discharge occurs on this day, the permittee shall collect an effluent sample during the reporting period on a day when there is a discharge or report "no discharge" for the reporting period for all parameters. Additional monitoring as necessary to meet the frequency requirements of this permit shall be performed by the permittee.

4. The permittee shall continue to maintain a Best Management Practices (BMP) plan to identify and control the discharge of significant amounts of oils and the hazardous and toxic substances listed in 40 CFR Part 117 and Tables II and III of Appendix D to 40 CFR Part 122. The plan shall include a listing of all potential sources of spills or leaks of these materials, a method for containment, a description of training, inspection and security procedures, and emergency response measures to be taken in the event of a discharge to surface waters or plans and/or procedures which constitute an equivalent BMP. Sources of such discharges may include materials storage areas; in-plant transfer, process and material handling areas; loading and unloading operations; plant site runoff, and sludge and waste disposal areas. The BMP plan shall be developed in accordance with good engineering practices, shall be documented in narrative form, and shall include any necessary plot plans, drawings, or maps. The BMP plan shall be maintained at the plant site and shall be available for inspection by EPA and Department personnel.
5. The permittee shall not store coal, soil nor other similar erodible materials in a manner in which runoff is uncontrolled, nor conduct construction activities in a manner which produces uncontrolled runoff unless such uncontrolled runoff has been specifically approved by SCDHEC. "Uncontrolled" shall mean without sedimentation basin or other controls approved by SCDHEC.
6. Coal Ash Basin Requirements: A coal ash basin is defined as a wastewater basin designed to hold and/or treat wastewater containing coal ash from the generation of power at a coal-fired power plant.
 - a. Coal Ash Basin Operation and Maintenance
 - (1) Coal ash basins used to hold or treat wastewater shall be operated and maintained to minimize the discharge of pollutants to waters of the State, except as authorized under this permit.
 - (2) Operation, and maintenance of these types of basins shall be in accordance with Regulation 61-9.122, the South Carolina Pollution Control Act and all other relevant State and Federal regulations.
 - b. Coal Ash Basin Integrity Inspections
 - (1) Coal ash basins shall be inspected at least monthly by qualified personnel with knowledge and training in impoundment integrity. In addition, impoundments shall be inspected annually by a qualified, State-registered professional engineer. At least one additional inspection by qualified personnel shall be performed within 7 days after a 10-year, 24 hour precipitation event at the site.
 - (2) Inspections shall, at a minimum, include the following: observations of dams, dikes and toe areas for erosion, cracks or bulges, seepage, or wet or soft soil; changes in geometry, the depth and elevation of the impounded water, sediment or slurry, or freeboard; changes in vegetation such as overly lush, dead or unnaturally tilted vegetation or tress or other vegetation growing in or on the basin or basin dikes; and any other changes which may indicate a potential compromise to impoundment integrity. When practicable, piezometers or other instrumentation may be installed as a means to aid monitoring of basin integrity.
 - (3) Within 24 hours of discovering changes (e.g., significant increases in seepage or seepage carrying sediment) that indicate an imminent threat to the structural integrity of the basin, the permittee shall begin procedures to remediate the problem, if remediation is determined to be necessary.

c. Reporting and Recordkeeping Requirements for Coal Ash Basins

- (1) Within 5 days of discovering any changes in the basin that indicate a potential compromise to the structural integrity, the permittee must notify the Department in writing at the address in Part II.L.4(a)(4) describing the findings of the inspection, corrective measures taken or planned, and a timeline for implementation of the planned measures.
 - (2) The permittee shall submit an annual report to the Department summarizing findings of all monitoring activities, inspections, and remediation measures pertaining to the structural integrity and operation and maintenance of coal ash basins. The report shall be submitted to the Department at the address in Part II.L.4(a)(4).
 - (3) With regards to other issues which may have long term impacts on integrity, such as trees growing in or on the basin or basin dikes or vegetation blocking spillways, a plan to address these issues shall be submitted to the Department within 45 days of discovery (or 45 days of the effective date of the permit if the condition already exists). A discussion of the need for remedial action in these situations shall be included in the plan. The plan shall be submitted to the Department at the address in Part II.L.4(a)(4).
 - (4) The permittee shall maintain records of all inspection and maintenance activities, including corrective actions made in response to inspections and all other activities undertaken to repair or maintain the basin. All records shall be kept on site and made available to State or Federal inspectors upon request.
 - (5) All pertinent basin permits, design, construction, operation, and maintenance information, including but not limited to plans, geotechnical and structural integrity documentation, copies of permits, associated certifications by a qualified inspector, and other pertinent information, shall be kept on site and made available to State or Federal inspectors upon request.
- d. Permit Re-opener: This permit may be reopened to incorporate additional or more stringent requirements pertaining to the operation and maintenance of coal ash basins.
7. Intake screen backwash may be discharged from this facility.
 8. This permit no longer covers the discharge of storm water associated with industrial activity. The permittee shall obtain coverage for storm water associated with industrial activity after the issuance of this permit and prior to the effective date of this permit to remain covered for those discharges.
 9. This permit may be reopened to address compliance with 316(b) requirements for cooling water intake structures upon resolution of the EPA regulations in 40 CFR Part 125 Subpart J.
 10. The permittee shall provide for a net reduction of 60,000 tons of ash from Ash Pond 1 by July 1, 2012. A report shall be submitted to the Department by October 1, 2012 describing the measures used to meet the reduction, the net tons of ash reduced, and sampling data showing the resulting net reduction in mass of the following metals: total arsenic, total cadmium, total chromium and total lead.

7. Regulation 61-9.122.43 requires that DHEC establish conditions in NPDES permits, as required on a case-by-case basis, to provide for and assure compliance with all applicable requirements of the Clean Water Act, the Pollution Control Act, and regulations.

8. Petitioner did not challenge the arsenic concentrations established in the NPDES permit for the discharge.

9. Petitioner did not challenge SCE&G's engineering estimates for concentrations of arsenic expected to be present in landfill leachate or scrubber blowdown.

10. Petitioner's challenge centered on the arsenic detected in groundwater in the mixing zone and in seeps adjacent to the Wateree River. However, Petitioner failed to establish that arsenic contained in the seeps or other possible groundwater discharges would violate any applicable requirement of the Clean Water Act, the Pollution Control Act, or any regulation. Indeed, Petitioner's expert's calculation of the concentration of arsenic present in the river because of seeps and groundwater was well below the drinking water standard of 10 ppb.

11. Petitioner contends that the seeps discovered in monitoring well 11 are an unpermitted outfall, outside the mixing zone and in violation of Regulation 61-68 governing water classifications and standards. DHEC is charged with the responsibility of enforcing any violation of Regulation 61-68; that issue is outside the scope of the Court's review of the two permits issued by DHEC in this case.

11. Petitioner presented no evidence that the ISWLF was likely to affect shallow groundwater on his property. All water that falls on the landfill site will be

THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM THE ADMINISTRATIVE LAW COURT
Carolyn C. Matthews, Administrative Law Judge

Heath Hill,
Docket No. 08-ALJ-07—183-CC

Appellant,

v.

South Carolina Department of Health and
Environmental Control and South Carolina
Electric & Gas Company,

Respondents.

FINAL BRIEF OF APPELLANT

August 11, 2010

James E. Smith, Jr.
E. Scott Winburn
James E. Smith, Jr., P.A.
1422 Laurel Street
Columbia, South Carolina 29201
(803) 933-9801

Robert Guild
314 Pall Mall
Columbia, South Carolina 29201
(803) 252 1419

ATTORNEYS FOR APPELLANT

TABLE OF CONTENTS

TABLE OF AUTHORITIES.....	i
STATEMENT OF ISSUES ON APPEAL.....	ii
STATEMENT OF THE CASE.....	1
STATEMENT OF FACTS.....	2
ARGUMENT.....	21
1. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE A 2001 "MIXING ZONE" CONSENT AGREEMENT WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO GROUNDWATER BELOW SCE&G'S LEAKING COAL ASH PONDS AT CONCENTRATIONS 300 TIMES THE WATER QUALITY STANDARD?	
2. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE "SEEPS" OR LEAKS IN SCE&G'S COAL ASH POND DIKE WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO THE WATEREE RIVER AT CONCENTRATIONS OVER 100 TIMES WATER QUALITY STANDARDS?	
3. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE SCE&G'S LANDFILL "LEACHATE" LIQUID CONTAMINATED WITH TOXIC ARSENIC WILL BE ROUTED TO LEAKING UNLINED COAL ASH PONDS WITHOUT PROPER TREATMENT?	
CONCLUSION.....	37

TABLE OF AUTHORITIES

CASES

<u>Blue Ribbon Taxi Corp. v. S.hC. Dept. of Motor Vehicles</u> , 380 S.C. 600, 670 S.E.2d 674, 676 (Ct. App. 2008).....	27
<u>Leventis v. South Carolina DHEC</u> , 340 S.C. 118, 530 S.E.2d 643 (Ct.App. 2000).....	28
<u>Sierra Club v. South Carolina Department of Health and Environmental Control and Chem-Nuclear Systems, LLC</u> , Opinion Number 4654 (S.C.Ct.App. 3-10-2010).....	27,35

STATUTES AND ACTS

S.C. Code Ann. § 1-23-610 (Supp. 2009).....	27
S.C. Code Ann. § 48-1-90 (a).....	29

REGULATIONS

R. 61-68, “Water Classifications & Standards”.....	22,33
R. 61-68(C).....	25
R. 61-68C(11)(a)(1).....	26
R. 61-9.122.41(m)(1)(I).....	31,34
R. 61-9.122.41(m)(4).....	31,34
R. 61-9.122.41(n).....	31,34
R. 61-9.122.43(a).....	30,35,37
R. 61.9.122.45(a).....	30,34
Clean Air Interstate Rule (CAIR), 70 Fed. Reg. 25162 (May 12, 2005).....	2

OTHER AUTHORITIES

Final Order and Decision, Docket No.: 08-ALC-07-0183-CC.....	2,11,22,23,26,33,37
--	---------------------

STATEMENT OF ISSUES ON APPEAL

1. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE A 2001 "MIXING ZONE" CONSENT AGREEMENT WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO GROUNDWATER BELOW SCE&G'S LEAKING COAL ASH PONDS AT CONCENTRATIONS 300 TIMES THE WATER QUALITY STANDARD?

2. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE "SEEPS" OR LEAKS IN SCE&G'S COAL ASH POND DIKE WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO THE WATEREE RIVER AT CONCENTRATIONS OVER 100 TIMES WATER QUALITY STANDARDS?

3. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE SCE&G'S LANDFILL "LEACHATE" LIQUID CONTAMINATED WITH TOXIC ARSENIC WILL BE ROUTED TO LEAKING UNLINED COAL ASH PONDS WITHOUT PROPER TREATMENT?

STATEMENT OF THE CASE

This is an appeal by neighboring landowner and farmer Heath Hill from a decision of the Administrative Law Court approving permits by the Department of Health and Environmental control (DHEC) which allow the discharge of toxic arsenic to groundwater and the Wateree River from a landfill and coal ash storage ponds at the Wateree coal-fired power plant of South Carolina Electric and Gas Company (SCE&G) in the Eastover community in Richland County. Mr. Hill contends that use of his farmland and natural resources are threatened by DHEC permits for a Class Two Solid Waste Landfill and related National Pollutant Discharge Elimination System (NPDES) wastewater discharge, which fail to adequately control arsenic contamination of groundwater below the leaking unlined coal ash storage ponds and surface water leaking or seeping through the ash pond dike into the Wateree River.

Mr. Hill timely requested the conduct of a contested case hearing by the Administrative Law Court to review the final DHEC decisions received on or about July 28, 2008 to issue SCE&G Wateree Station Industrial Solid Waste Landfill (ISWL) Permit No. SCR10H934, and the decision received on or about August 29, 2008, to issue NPDES wastewater discharge Permit No.: SC0002038 for SCE&G's Wateree Station.

A contested case hearing was conducted over three days: October 6, 7, and 8, 2009. Mr. Hill presented the testimony of three witnesses: Clemson Environmental Engineering Professor and expert, Dr. David Freedman, the Appellant, Heath Hill, and environmental consultant JC Hare.

Respondent DHEC presented the testimony of one staff witness: permit

writer Melinda Vickers. Respondent SCE&G presented three witnesses: Vice President Jim Landreth, environmental engineer Jean Claude Younan and environmental manager Tom Effinger. Numerous exhibits were received.

The ALC's Final Order and Decision was filed December 3, 2009. A timely Motion to Reconsider was filed by Heath Hill on December 14, 2009. An Order Denying Motion to Reconsider was filed January 13, 2010, which was received on January 15, 2010. Notice of Appeal was served and filed on February 11, 2010.

STATEMENT OF FACTS

Respondent South Carolina Department of Health and Environmental Control issued a Class Two Solid Waste Landfill Permit and an NPDES Discharge Permit to South Carolina Electric and Gas in connection with the installation of a Flue Gas Desulfurization Scrubber System (FGD Scrubber) at Wateree Station, a coal-fired power plant. (R. pp. 1-3). The Clean Air Interstate Rule (CAIR), 70 Fed. Reg. 25162 (May 12, 2005) promulgated by the U.S. Environmental Protection Agency pursuant to the Federal Clean Air Act, requires SCE&G to reduce sulfur dioxide emissions from the combustion of coal. (Id.) The FGD Scrubber uses calcium carbonate to remove sulfur and other contaminants from the smokestack during the production of electricity. (Id.)

As coal is burned to produce electricity, fly ash and bottom ash is produced. FGD gypsum is a waste material produced in the desulfurization of flue gases. (R. p. 624) Once the FGD Scrubber is operational, the gypsum byproduct is removed from the scrubber and transferred to the scrubber blow down pond, which is also part of the NPDES system. (R. p. 634 line 16-p. 636 line 11) From the scrubber blow down

pond, the waste gypsum from the FGD scrubber will be removed, stacked and transported by dump truck to the landfill for permanent storage. (R. p. 636 line 20-p. 125 line 7) Any liquid associated with this process or any rainfall affecting the site, becomes part of the waste discharge subject to the NPDES permit application. (Id.)

The ISWLF was constructed to handle the disposal of the gypsum, as well as *all* other byproducts of coal combustion including fly ash and bottom ash, which contain high levels of contaminants like arsenic. (R. p. 677) Gypsum, fly ash and bottom ash deposited in the landfill is exposed to rainfall and other liquid and creates contaminated liquid called "leachate." (Id.) As described by Jean Claude Younan, engineer and project manager for SCE&G, leachate is water that percolates and "seeps" through the gypsum and the coal combustion product of the landfill into the leachate collection system. (Id.) Any liquid trapped above the liner of the landfill is considered leachate or runoff. (R. p. 710) Unfortunately, leachate containing contaminants such as arsenic pools in the landfill, either due to natural rain events or leachate associated with the production process. The liquid waste must be disposed of properly. (Id) Above the liner of the landfill is a leachate collection system that collects the water or leachate that percolates and seeps through the gypsum, fly ash and bottom ash. (Id) Gravity forces the leachate from the landfill into a lined leachate collection pond. From the lined leachate collection pond, the leachate is pumped to *unlined* Ash Pond 1, which overflows to *unlined* Ash Pond 2. Ash Pond 1 and Ash Pond 2 are 80 acre former borrow pits that have been in operation for nearly forty years. (R. pp. 731-732) These two unlined ponds are a simple form of passive treatment of contaminants like arsenic through sedimentation. The NPDES permit for

the outfall at Ash Pond 2 addresses only the monitored contaminants discharging from the outfall, but it does not address the contaminants discharging from the groundwater and seeps. (R. pp. 231-232) These ponds are leaking arsenic into the groundwater below the ponds. They are leaking arsenic through seeps adjacent to the Wateree River. (Id)

The waste treatment "system" designed by SCE&G at Wateree Station is designed to fail because it begins with two newly lined wastewater collection ponds, but it ends with two old unlined borrow pits now serving as ash ponds that feed into the Wateree River. (R. p. 677) Wateree Station burns 1,797,000 tons of coal annually, and produces 197,000 tons of coal combustion byproducts including fly ash and bottom ash according to Jim Landreth, SCE&G Vice President of Fossil-Hydro Operations. (R. pp. 614-615) Fly ash includes the lighter particles of the ash that follow the flue gas up the furnace. Bottom ash is the ash that falls to the bottom of the furnace, and is sluiced to Ash Pond One. (R. pp. 613-615)

SCE&G's carbon burnout unit further incinerates the ash, to lower the carbon content of the fly ash so that it becomes a marketable product for aggregate and cement companies. (R. pp. 617-618) According to Mr. Landreth, 146,000 tons of fly ash goes to the carbon burnout unit per year. (R. p. 619) On average, 86,000 tons of ash are removed and sold from Pond One each year, according to Mr. Landreth. (R. p. 638 lines 11-13) However, SCE&G has no binding agreement with DHEC or anyone else to reduce the ash in Pond One through the sale of coal ash byproducts. (R. p. 676 lines 3-9) Other than selling off the ash to remove the source of the

does not have another plan for remediation of the contaminated groundwater. (R. p. 680 lines 2-21)

Appellant Harold Heath Hill lives in Lower Richland County, Eastover, and farms approximately 1000 acres, contiguous to the proposed ISWLF and SCE&G's Wateree Station, which lies between Mr. Hill's property and the Wateree River. Two irrigation wells exist on Mr. Hill's property, which irrigate over 900 acres of farmland a short distance from the location of the proposed ISWLF. Mr. Hill and his family have utilized the natural resources along the Wateree River for hunting and fishing all of their lives, and he is concerned for the safety of his family and that of the community. (R. pp. 69-74.)

Mr. Hill's has nearby irrigation wells capable of pumping more than 1000 gallons per minute. These wells draw water from the same aquifers that exist on SCE&G's property, both the shallow and deep aquifers and he is concerned that leachate, or runoff from the proposed landfill could contaminate surface water and groundwater on his property, and fears that the landfill as proposed will devalue his property. (R. pp. 77-78)

Appellant has standing to bring this appeal. He is concerned about the adverse impacts of the proposed landfill and additional waste streams associated with the operation of the flue gas desulfurization scrubber system on his health, use and enjoyment of his property, the value of his property, and on the environment and natural resources in the community including the Wateree River. (R. pp. 69-74) The proposed landfill will generate additional arsenic and other wastes, which ultimately

end up in two unlined 80 acre ash ponds before emptying in the Wateree River. (R. p. 608)

Dr. David Freedman is professor of Environmental Engineering and Science at Clemson University. He reviewed the waste treatment system at issue in this case on behalf of Mr. Hill. Dr. Freedman holds a Ph. D. In Environmental Engineering from Cornell University. (R. pp. 178-179) He currently teaches Biological Principles of Environmental Engineering; Biodegradation and Bioremediation; Integrated Design of Water, Wastewater and Hazards; Waste Treatment Systems; Laboratory and Wastewater Treatment Operations and Wastewater Treatment; Water and Wastewater Treatment; Hazardous Waste Management; and Introduction to Environmental Engineering. (R. pp. 180-181) In addition, Dr. Freedman supervises graduate students and conducts research on hazardous waste management and bioremediation. Dr. Freedman has published extensively in professional journals in the field of bioremediation and hazardous waste management. (R. p. 181) Dr. Freedman has previously been qualified as an expert before the Administrative Law Court in cases involving storm water management issues and an animal waste lagoon for a hog farm to address waste management and groundwater movement of contamination. (R. p. 182, lines 1-15)

According to Dr. Freedman, environmental engineers study the movement of metals in general and their behavior in the environment. In preparation for his testimony, Dr. Freedman consulted literature that experts in his field customarily rely upon regarding these subjects, and he has studied the movement of metals through the environment in other contexts. (R. pp. 189-190) In his teaching Dr. Freedman uses

NPDES Permits as a basis for developing treatment plant designs to meet the requirements of the NPDES Permits. (R. p. 192) Dr. Freedman reviewed the pertinent DHEC NPDES and ISWLF permitting regulations, and other application documents provided by SCE&G relating to the landfill as well as the NPDES Permit, and was asked by the Appellant to render an opinion based in part on those documents. In addition to his general familiarity with NPDES Permits, movement of contaminant through groundwater, and waste treatment systems, Dr. Freedman visited the site on two occasions. During his visit in December 2008 he observed the close proximity of Monitoring Well 11 to the Wateree River. From the embankment just beyond the monitoring well, Dr. Freedman observed a back eddy of the river, where the water was moving counter to the movement of the river in a circular motion. From Dr. Freedman's vantage point during this December visit, the seeps later tested for arsenic would have been approximately ten yards to the north and ten yards to the south along the bank of the Wateree River. (R. pp. 201-204)

At trial Dr. Freedman was qualified as an expert in environmental engineering and movement of contaminants in soil. (R. p. 201) According to Dr. Freedman, leachate and runoff associated with the landfill will be collected and then that wastewater containing arsenic will be pumped from the landfill runoff pond to Ash Pond One. (R. pp. 210-211) Both fly ash and bottom ash will be permitted for disposal in the proposed landfill, not just the flue gas desulfurization solids. (R. p. 210) Ash Pond One and Two are the final steps in the sequence of waste treatment system before the outfall of Pond Two. These ponds are unlined, and Dr. Freedman observed piles of ash in ash pond one during his visit, as well as significant

photosynthetic growth on the top of ash pond one. This photosynthetic growth indicates that a more mobile form of arsenic exists in ash pond one according to Dr. Freedman. Upon review and consideration of the permit application and associated documents, including the Semi-Annual Monitoring Reports, Dr. Freedman is of the opinion that groundwater flows beneath the ash ponds and into the Wateree River carrying with it contaminants such as arsenic, a known human carcinogen. Arsenic's known toxicity led the EPA to reevaluate its health effects and ultimately revised the maximum contaminate level from 50 parts per billion to 10 parts per billion. (R. pp. 211-213)

According to DHEC Regulation 61-68, Water Classifications & Standards, arsenic is identified in the water quality and numeric criteria appendix entitled "Water Quality Numeric Criteria for the Protection of Aquatic Life and Human Health". The regulatory standard established with respect to human health for Arsenic is 10 parts per billion, the standard for water quality for human health. The aquatic life standards for Arsenic are 150 parts per billion average, and 340 parts per billion maximum. These numbers represent chronic exposure and short term exposure. (R. pp. 215-217) Dr. Freedman is of the opinion that arsenic poses a threat to aquatic life. (R. p. 219)

According to DHEC's Fact Sheet and Rationale, Petitioner's Exhibit 33, limits are needed for arsenic, because there is a reasonable potential for arsenic to exceed water quality criteria, and arsenic is known to be present in the wastewater. The proposed limits for the outfall located at the end of ash pond two, are 27 parts per billion average, and the daily maximum is 40 parts per billion, higher than the values

established by the human health based water quality standard for arsenic concentration, which is 10 parts per billion. The daily maximum is four times the human health based water quality standard, and the monthly average is more than two times that standard. (R. 224-225)

Dr. Freedman opined that waste leaves the treatment system other than through the outfall at the Wateree Power Station, via the seeps and groundwater primarily from Ash Pond One in violation of water quality standards. The inventory of ash remaining in Pond One contains arsenic and it is leaching from Pond One into the groundwater and then emerges via the groundwater and the seeps into the Wateree River. (R. p. 232) Further, seepage of waste that is occurring on the basin dikes and toe areas at the Wateree coal station has the potential to reach waters of the state. None of the documents reviewed by Dr. Freedman reflect that SCE&G notified DHEC about the seeps in the basin, dike or toe areas of the plant, nor has the company submitted to DHEC any proposed corrective action to address the seeps of arsenic passing through the dike to the ash basin. (R. pp. 233-234)

Dr. Freedman explained that arsenic has been present in the sediment of pond one for a number of decades since the company has been depositing ash into Pond 1 beginning in the 1970s. (R. p. 234) According to SCE&G, some of the fly ash is being sold to aggregate or cement companies. However, the landfill permit does not require diversion of arsenic for beneficial use. The actual sizing of the landfill is based on the assumption that 100 percent of the ash would go to the landfill. Based on the 10 years of data reviewed by Dr. Freedman, he is of the opinion that there is no discernable decrease in the levels of arsenic or in Monitoring Well 11. (R. p. 238)

Arsenic will continue to leech from the ash into the groundwater, and be transported through the groundwater into the river as well as from the seeps into the river as long as the unlined ponds are being utilized in the treatment process. (R. p. 243)

As for the design of the landfill, Dr. Freedman explained that because the permitted leakage rate from the landfill liner is 100 gallons per acre, per day, there is a potential for arsenic to move through the liner system as constructed, and that any leakage is not likely to be uniform, but would instead be finger-like plumes under the landfill rather than a homogeneously distributed plume, arising from the seams of the liner or a puncture. The seams of the proposed liner are not welded. Since any leakage would not be uniform, it is likely to exceed the groundwater standard for arsenic of 10 parts per billion. (R. pp. 252-254)

The landfill as constructed will retain most all of the leachate and runoff that entered the system, the majority of which will be collected in the wastewater collection pond and then pumped to unlined Ash Pond One. The landfill's leachate collection pond provides an opportunity for SCE&G to treat and remove the arsenic, otherwise, the landfill simply adds more arsenic to an already failing system. (R. pp. 254-255) Dr. Freedman described five well-established treatment technologies for removing arsenic from water: precipitation, membrane filtration, absorption, ion exchange and the use of permeability reactive barrier. Any one of these techniques could be used at Wateree Station to remove arsenic from the waste stream. EPA has evaluated these technologies and reports that precipitation is being used at more than 50 sites, 19 of which achieved arsenic levels below 10 parts per billion. (R. p. 260) Taking the arsenic off-site to a hazardous waste landfill or for beneficial use would

remove it from the waste stream at Wateree Station so that the arsenic never reaches the unlined ash ponds and into the groundwater and river. (R. p. 261)

At SCE&G's Request, DHEC agreed to a "Mixing Zone" in the groundwater below the site where contaminant concentrations are allowed to exceed otherwise applicable groundwater protection standards. (R. p. 10) The mixing zone for groundwater is limited to the site property. The mixing zone cannot be extended out into the bottom of the Wateree River, it stops at the company boundary. (R. 265) The Mixing Zone must be considered in the context of the entire waste stream system, leachate from the landfill, scrubber blow-down, sluicing of the ash into Pond One, into Pond Two, and the outfall. (R. pp. 272-273) Dr. Freedman testified that no measures have been taken to minimize the addition of contaminants in the groundwater, but there are measures that could be taken exclusive of the parameters set by the Mixing Zone. These measures could include certain treatment technologies, disposition of arsenic containing ash off site. Dr. Freedman asserted that further measures could be taken to control the migration of arsenic in groundwater, such as a permeable reactive barrier, and sealing the seeps. (R. pp. 277-280) The seeps represent a point of discharge of arsenic to surface waters of the state according to Dr. Freedman. (R. p. 281) Further, he characterized the arsenic as dangerously toxic, mobile and persistent. (R. pp. 282-284) Dr. Freedman opined that the discharge of arsenic from the seeps violates water quality standards because one seep contained 770 parts per billion arsenic and the other seep contained 1,900 parts per billion according to SCE&G's own results from the testing in September 2009. Both of the seeps were flowing over land as a surface water discharge, and the point

at which that surface water enters the Wateree River, the concentration of arsenic is going to be higher than what is permissible for humans or freshwater aquatic organisms. (R. pp. 284-285)

Mass of arsenic is not considered in the NPDES permit. (R. p. 297) Dr. Freedman is of the opinion that a low flow of the groundwater and seeps compared to the outfall, but with a higher concentration of arsenic, could lead to a significant mass rate or pounds per day entering the river. (R. pp. 299-300) Poor data exists about arsenic concentration and the seeps, and it is not known what the total inventory of arsenic is in the ash ponds, but such information would be helpful in determining the predicted amount of arsenic that would be leeching and for how long. (R. pp. 305-306)

The levels of arsenic reported in the three seeps in the Mixing Zone Application were 348 parts per billion, 34.5 parts per billion and 604 parts per billion. (R. p. 308) The seep values received into the record as admissions of a party opponent, outlined in *Field and Laboratory Studies to Develop Effective Waste Management Strategies for the Wateree Station, Final Report, August 1997*; prepared by D. Rai, J.M. Zacchara, and H.T. Schaef, Battelle Northwest Division, or "1997 EPRI Report", were identical to the values listed in the SCE&G Mixing Zone Application. (R. pp. 431-432) According to the Mixing Zone Application, arsenic concentrations in fish tissue samples taken adjacent to the ash ponds in the Wateree River were higher than samples taken upstream or downstream of the ash ponds. The fish sampled, in Dr. Freedman's opinion would not be safe to eat. (R. pp. 316-318) Further, Table Three of the Mixing Zone Application indicates a surface water

sample taken at the ponds indicated 103 parts per billion for arsenic, but the narrative portion referencing the table indicates that no arsenic was detected in the surface water samples. (R. p. 320)

According to Dr. Freedman's interpretation of the groundwater contour map, groundwater appears to flow both toward the Wateree River, and south, southwest toward Mr. Hill's property. (R. p. 322) Dr. Freedman is of the opinion that a possibility exists that Mr. Hill's irrigation pumping could cause contaminants to flow off the SCE&G site, but a pumping test was not completed by the time of the hearing. No information has been provided by SCE&G or DHEC that addresses this possibility. (R. p. 324)

DHEC allows an arsenic concentration of 3000 parts per billion for three wells in the mixing zone and 50 parts per billion for the remaining wells. Monitoring Well 11 is the only well capturing the flow of the groundwater characteristics coming out of Pond One according to Dr. Freedman. (R. p. 327) Dr. Freedman is of the opinion that the data from Monitoring Well 11 indicates elevated arsenic levels in that portion of the groundwater, but to adequately characterize the amount of arsenic leaving the Ash Pond One, that additional monitoring wells would be helpful to find out whether or not the level of contamination found in Monitoring Well 11 is representative of the full face of Pond One adjacent to the river. It is unknown whether Monitoring Well 11 captures the maximum concentration of the arsenic plume moving toward the river. (R. p. 340)

According to the First Semi-Annual Monitoring Report 2006, tests of Monitoring Well 11 revealed Arsenic concentration of 5100 parts per billion. In

2007, that level was 4051 parts per billion, and in 2008, 2149 parts per billion. (R. 342-343) Dr. Freedman is of the opinion that there is no conclusive trend in terms of arsenic levels in Monitoring Well 11 and the two data points from the seeps indicates that arsenic continues to leave ash pond one in significant concentrations. Dr. Freedman testified that water exiting the pond dike in the seeps and entering the Wateree River exceeds water quality standards. Further, the landfill and proposed NPDES permit will allow arsenic to leave the site through groundwater and seeps, exceeding water quality standards according to Dr. Freedman. (R. pp. 348-349)

Dr. Freedman testified that when determining appropriate limits of pollutants, including arsenic, the amount of flow of a receiving stream is important. (R. pp. 373-374) Dr. Freedman further opined that in order to arrive at an in stream calculation, all the sources of contaminants should be known. (R. p. 376) His estimate from the number of pounds of arsenic entering the river per day, was derived in part using his assumption of a discharge across the face of the ponds, but his estimate is sufficiently high to warrant attention. (R. p. 419)

Dr. Freedman contends that more seep data is needed to ascertain what the trend of arsenic concentration has been, and notwithstanding the seep values in 1997 of 348 and 604 parts per billion, they still represent a violation of surface water and quality standards. Likewise, Dr. Freedman testified that the 2009 seep samples violate surface water quality standards. (R. p. 443)

Dr. Freedman is of the opinion that, in the context of the NPDES permit, there is no mixing zone allowed where the seeps enter the river and the concentrations have been measured in excess of the surface water quality standards. (R. p. 447) Further,

at the point where that seep enters the water, it is a certainty that the concentrations are above the 40 parts per billion. (R. p. 452) The arsenic released from Pond One, via groundwater and the seeps, is upstream from the mixing zone designed to account for the outfall.

Mr. JC Hare collected samples from the seeps and monitoring wells on behalf of the Appellant. Mr. Hare is a Geologic and Environmental Consultant with Applied GeoSciences, Incorporated. Mr. Hare received a Bachelor of Science degree in Geology from the University of South Carolina in 1983, and a Masters of Science in Geology and Geophysics from the University of South Carolina in 1985. He has worked for the Department of the Interior US Geological Survey Water Resources Division, and worked as a consultant with a mining and environmental engineering firm doing geophysical and subsurface surveys. (R. p. 134) Mr. Hare collected aqueous grab samples on behalf of the Appellant from seeps below Ash Pond One at Wateree Station on September 9, 2009 as discussed above. The samples were collected from approximately midway down the containment berm in the vicinity of Monitoring Well 11, by holding the sample jar upstream to allow the water to flow into the container. SCE&G also took samples from those same seeps. As Mr. Hare explained at trial, the northern seep flowed into the floodplain, just to the east of the containment berm and then it turned south where it joined with the southern seep and then they both moved in the direction of the Wateree River. Samples from Monitoring Wells one, two, three, and eleven were also taken. (R. p. 149) Soil samples were taken from a drainage ditch along Highway 601 at Godspeed road, on the boundary of SCE&G's property and Highway 601. (R. p. 152) The ditch flows in

a south westerly direction under Highway 601 from SCE&G's property onto Mr. Hill's property. Mr. Hare used the standard protocol for collection and shared the soil sample with SCE&G's consultant. Samples collected by Mr. Hare were sent to Test America for analysis of arsenic. (R. p. 154)

According to Mr. Hare's observations at the time of testing the seeps, the northern seep had created a channel that could not have been created overnight. Mr. Hare concluded that the seeps could have been there for six months to a year or more. (R. p. 798). Mr. Hare confirmed that the seep samples actually had very low turbidity. According to Shealy Environmental, the turbidity levels measured in the seep samples were actually lower than the turbidity measured from Monitoring Well 11. (R. p. 799)

According to Mr. Landreth, the berm was inspected on a yearly basis, and knowledge of the seeps is now a concern for SCE&G, which they plan to remedy. However, SCE&G has no formal plan to remediate groundwater contamination of arsenic at the Wateree plant. According to Mr. Landreth, the seeps tested in September 2009 did not exist in November 2008, and that required notification of DHEC was satisfied because Roger Hall of DHEC was on site at the time the seep samples were taken in September 2009. (R. pp. 648-651) In 1997 and 1998, SCE&G reported seepage through the dike on the river side of Ash Pond 1, and DHEC was notified that a corrective action plan was underway, but no further evidence was presented at trial regarding any corrective action. (R. pp. 660-661) According to Mr. Landreth, SCE&G is in the process of trying to determine the source and the flow path of the seep, and then define the corrective action. (R. 665-666)

had been collected. (R. p. 508) However, data from the Mixing Zone Application indicates that arsenic was detected in a surface water sample. (R. p. 320) According to Ms. Vickers, the NPDES program requires permits for the discharge of pollutants from any point source into waters of the State and into waters of the United States. The terms pollutant, point source, waters of the State and waters of the United State are defined in Section 122.2 of the NPDES Regulation. Point source means a discernable, confined and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stop, concentrated animal feeding operation, vessel or other floating craft from which pollutants are or may be discharged. (R. pp. 532-533)

When Ms. Vickers asked for input from the employees at DHEC responsible for groundwater, they indicated to Ms. Vickers that a mixing zone covered any groundwater issues under a consent agreement between the Department and SCE&G, and as such, Ms. Vickers did not need to include any additional conditions in the NPDES Permit other than the condition requiring the groundwater monitoring plan associated with the landfill pond to be constructed. (R. p. 548)

Ms. Vickers testified that it was her job to establish permit conditions that are protective of water quality. (R. p. 562) Ms. Vickers had no background data on arsenic to use when she determined effluent limits for arsenic. (R. p. 567) Ms. Vickers received no information from the applicant SCE&G regarding arsenic found in the seeps, and as such no data was included in her calculations. However, Ms. Vickers asserted that if she had the data from the seeps, she would consider it. (R. p. 573) Ms. Vickers conceded that a seep sample with 1,900 parts per billion would

exceed the limit set by the application, but that dilution of the receiving stream must be considered. Ms. Vickers said this could be calculated but that such a calculation was not made. (R. p. 574) Ms. Vickers testified that she was not aware of the seeps. (R. p. 577) The amount of arsenic present in the river at outfall 03(a) would have affected Ms. Vickers' calculation, but Ms. Vickers had no data to determine if arsenic already existed in the river. (R. p. 581) According to Ms. Vickers, if she were writing the permit today, she would need to consider arsenic concentrations in the seeps discovered by the Appellant. (R. p. 585) In discharging her duties at DHEC, Ms. Vickers asserted that she would do what is necessary to correct it if she has the opportunity. (R. p. 587)

Mr. Jean Claude Younan is an associate environmental engineer with SCANA, with a background in civil engineering and business management. Mr. Younan works for the Environmental Services Department, and the project manager for the solid waste landfill construction. (R. pp. 691-693)

According to Mr. Younan, a ridge in the middle of the landfill splits the groundwater, half flows in the direction of the plant and half flows in the direction of Highway 601. The runoff pond adjacent to the landfill is designed to collect runoff from the gypsum, fly ash, bottom ash and the leachate that is collected in the leachate collection system above the liner of the landfill. (R. pp. 699-700) The liner is a geosynthetic clay liner, a manmade product that has bentonite in the middle between two fabrics and a plastic membrane on top of it. The bentonite is a clay material, naturally occurring that is mined with low permeability. (R. pp. 714-715) A clay layer is beneath the bentonite liner. (R. p. 717)

The bentonite clay liner cannot be welded because they have bentonite clay material sandwiched in them. The weakest link in the bentonite liner is the seam. (R. pp. 728-729) The landfill has monitoring wells in anticipation that some pollutants may pass through it and into the groundwater. (R. p. 730) Ultimately, the leachate containing contaminants, gets pumped from the leachate collection pond to Ash Pond One. (R. p. 732) Mr. Younan confirmed that landfill has been sized as if all of the bottom ash, fly ash and gypsum and other approved wastes will be deposited into the landfill. (R. p. 734) SCE&G consultants originally mapped wetlands that are within the footprint of the proposed landfill. (R. p. 742) The consultants also found archeological features of a slave community eligible for the National Register of Historic Places, but once completed, the footprint of the landfill would disturb this site as well. (R. p. 749)

A ridge exists in the middle of the proposed landfill, and Mr. Younan conceded that the movement of groundwater was altered only as far as the soil has been excavated; below the level of excavation, the groundwater will continue to flow where it flowed before, toward Appellant's property and Highway 601. (R. pp. 750-751)

1. WHERE A "MIXING ZONE" CONSENT ORDER WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO GROUNDWATER BELOW SCE&G'S LEAKING COAL ASH PONDS AT CONCENTRATIONS 300 TIMES THE WATER QUALITY STANDARD, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.

The pollution containment and control system proposed by SCE&G and approved by DHEC and the ALC for managing the pollutants removed from the coal

combustion process at the Wateree Station- most critically toxic arsenic- is simply designed to fail. So long as the arsenic-contaminated liquid "leachate" accumulated from the new landfill is routed through the unlined and leaking coal ash ponds before it gets to the permitted NPDES discharge pipe, this permit which solely addresses arsenic concentration as monitored at that discharge pipe, is designed to fail. If SCE&G proposed a wastewater treatment system with a gaping hole in the collection pipe which diverted pollution into the river before it flowed to the legal monitoring point, no responsible regulator would permit such a system. Just such a flawed and leaking system here allows high concentrations of arsenic to circumvent the permitted discharge outfall under the permits approved by DHEC and the ALC. Such an intolerable and unlawful result relies on a 2001 "Mixing Zone" Consent Agreement between DHEC and SCE&G which the Administrative Law Judge refused to consider in this case. Where the design and performance of the unlined and leaking coal ash ponds are an essential element in the approved landfill and NPDES wastewater systems, the ALC erred in refusing to consider the leaking ponds in her review of the permits and erred, further, in failing to deny the permits or require effective remedial measures to correct these design defects. A proposed pollution control system that is designed to fail must be rejected if the promise of protecting ground and surface water quality is to be honored.

In her Final Order and Decision the Administrative Law Judge acknowledges that "various contaminants, including arsenic" have been detected "in groundwater in the vicinity of the ash ponds," (R. p. 10), and that DHEC has agreed to waive SCE&G's compliance with otherwise applicable water quality standards for such

contaminants including arsenic. "The Consent Agreement established a groundwater mixing zone, which is an area where contaminants may exceed otherwise applicable groundwater protection standards, and set contaminant levels specific to the mixing zone." (R. p. 10)

The undisputed record in this case establishes that by that Consent Agreement DHEC allows concentrations of arsenic in groundwater at the facility as high as 3,000 parts per billion (ppb) (or the equivalent expressed as micrograms per liter (ug/l)), without any corrective action, as compared to the groundwater protection standard of 10 ppb or ug/l, R. 61-68, Water Classifications & Standards, and the NPDES end of pipe discharge permit limit for the facility of 40 ppb daily maximum. (R. p. 11) As Clemson Environmental Engineering Professor Dr. David Freedman testified from his review of SCE&G and DHEC records, monitored arsenic concentration levels in the single monitoring well, MW-11, located between the leaking ash ponds and the Wateree River have exhibited arsenic concentrations as high as 5100 ppb in 2006, (R. pp. 342-343), with no discernible trend of reduced concentrations over the years, with a groundwater flow path directly to the Wateree River, and with no measures required or taken to minimize the discharge of additional arsenic to groundwater or to clean up or remedy the ongoing groundwater contamination. (R. pp. 277-280) In the face of such evidence of arsenic discharges to groundwater below the ash ponds which circumvent the permitted NPDES discharge pipe and ongoing violations of groundwater quality protection standards condoned by DHEC, the ALJ was summarily dismissive:

Arsenic already present in the shallow groundwater at Wateree Station is being addressed by the 2001 Consent Agreement. Any challenge to

the terms of the 2001 consent Agreement is not properly before this Court.

(R. p. 11) Because such a conclusion reflects a failure by the ALC to decide the issues properly before her and condones facility permits which will continue unpermitted discharges of arsenic in violation of water quality standards the decision of the ALC must be reversed.

A review of the DHEC "mixing zone" regulation and the evidence in this case establishes that DHEC has impermissibly allowed SCE&G a permanent waiver of water quality requirements for a dangerously toxic pollutant- arsenic- which will continue to migrate offsite to the Wateree River, with no mandate to control, mitigate or remediate this unlawful pollution discharge.

Fundamental to qualifications for relaxation of water quality standards in a groundwater mixing zone under DHEC regulations are the express requirements that the mixing zone be limited to facility property; that the contaminants in question are not dangerously toxic, mobile, or persistent; and that measures will be taken to minimize additional contamination and control the migration of the contaminated groundwater; in short, that a clean up plan is in place and the contamination will not continue indefinitely. In addition, the mixing zone regulation expressly requires a demonstration by the polluter that future groundwater withdrawals- such as Heath Hill's nearby irrigations wells will not draw pollutants offsite.

11. Mixing zones for ground waters may be allowed by the Department. In order to ensure the maintenance and protection of the uses of the waters of the State and in compliance with Section D of this regulation, any mixing zone granted by the Department shall be determined on an individual basis by the Department as prescribed below.

a. The numeric standards for Class GB ground water, Section H.9., are applicable unless a mixing zone solely within the bounds of the property, setting forth certain conditions, is granted by the Department. Such a mixing zone shall be granted upon satisfactory demonstration to the Department that:

(1) Reasonable measures have been taken or binding commitments are made to minimize the addition of contaminants to ground water and/or control the migration of contaminants in ground water;

(2) The ground water in question is confined to a shallow geologic unit which has little or no potential of being an Underground Source of Drinking Water, and discharges or will discharge to surface waters without contravening the surface water standards set forth in this regulation;

(3) The contaminant(s) in question occurs within the bounds of the property, and there is minimum possibility for ground water withdrawals (present or future) to create drawdown such that contaminants would flow off-site; and

(4) The contaminants or combination of contaminants in question are not dangerously toxic, mobile, or persistent.

(R. p. 939) The evidence in this record demonstrates that SCE&G fails to meet each of these essential regulatory requirements.

As the undisputed expert testimony of Dr. David Freedman demonstrates, the contaminant in question- arsenic- is undeniably a dangerous toxin- a legendary poison of "Arsenic and Old Lace" infamy and a known human carcinogen. Its mobility from the ash ponds toward the river is well documented at this site; and, as an elemental metal it is persistent in the environment, concentrating

in river sediments and accumulating in aquatic organisms including fish consumed by sport and subsistence fishermen from the adjacent Wateree River. (R. p. 318) Moreover, the arsenic contamination is not confined to SCE&G's property boundary, but is moving below Monitoring Well 11 located on the ash pond dike offsite into the Wateree River. Despite the poor characterization of the arsenic inventory in the ash ponds and the inadequate single downgradient monitoring well which limits understanding of the full dimensions of the arsenic groundwater plume, there is no serious dispute that the high measured arsenic concentrations in MW-11 mean that arsenic pollution is leaving the site and entering the river. (R. pp. 348-349) Indeed, as will be discussed more fully below, historic and recent documentation of direct flows from leaks or "seeps" through the ash pond dike establish that high arsenic concentrations are leaving the site groundwater in a direct flow of surface water at levels- 1900 ppb- far exceeding surface water standards of 10 ppb. No groundwater "mixing zone" agreement can permissibly condone this on-going violation of surface water quality standards by SCE&G beyond its property boundary in the Wateree River. Human contact with such highly contaminated surface water would be dangerous beyond doubt, yet we assure the public that the Wateree River is safe for human contact and use and that the fish that swim in that arsenic contaminated water are safe to eat.

Particularly telling is the absence of any mandate by DHEC to SCE&G to end the arsenic pollution of the ground and surface water at the Wateree Station or to clean up the contaminated coal ash ponds and groundwater below. Implicit in the allowance of a groundwater mixing zone is the promise that pollution waiver will end

and the damage will be remedied. Here, to the contrary, the waiver of compliance is without limitation and apparently permanent. While the ALJ notes in her decision that SCE&G has diverted coal ash from the leaking ponds for sale offsite, Final Order and Decision at 11, nothing in the consent agreement approving the mixing zone mandates or binds SCE&G to any mitigation or clean-up plan or even to continue such voluntary offsite ash diversion. (R. p. 676) Notwithstanding any such voluntary ash diversions the concentrations of arsenic documented in groundwater below the ponds show no downward trend. (R. p. 238) Indeed, the high arsenic concentrations measured in the flow from the seeps demonstrate that the ponds and groundwater continue to flow high levels of contamination offsite.

The omission of any mandate to mitigate or remedy the continuing arsenic discharges to ground and surface waters is at odds with the mixing zone regulatory requirement to "minimize the addition of contaminants to ground water and/or control the migration of contaminants in ground water." R. 61-68C(11)(a)(1). (R. p. 939) SCE&G has been required to do neither, despite readily available measures to do both and stop arsenic water pollution. As Dr. Freedman testified such measures include various treatment technologies for arsenic removal from wastewater, mandatory disposition of arsenic containing ash offsite and the control of the migration of arsenic in groundwater by the use of a permeable reactive barrier to intercept the arsenic plume as it flows between the pond and the river, as well as sealing the seeps in the pond dike which have allowed arsenic to flow into the river. (R. pp. 299-280) Such measures are far less direct than simply retiring the leaking coal ash ponds and replacing them with an effective engineered disposal facility- much as SCE&G is

doing with the new lined landfill. As long as the arsenic-containing wastewater is routed through the weak and leaking link of the old unlined ponds the "addition of contaminants to groundwater will not be minimized" as required.

The standard of review for a court reviewing the decision of the ALC is set forth in the Administrative Procedures Act. S.C. Code Ann. § 1-23-610 (Supp. 2009). "The review of the administrative law judge's order must be confined to the record." § 1-23-610 (B). Under section 1-23-610 (B), this court may affirm or remand the case for further proceedings. Additionally, this court may reverse or modify the decision of the ALC if its findings, conclusions, or decisions are: (a) in violation of constitutional or statutory provisions; (b) in excess of the statutory authority of the agency; (c) made upon unlawful procedure; (d) affected by other error of law; (e) clearly erroneous in view of the reliable, probative, and substantial evidence on the whole record; or (f) arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion. §1-23-610 (B). The decision of the ALC should not be overturned unless it is unsupported by substantial evidence or controlled by some error of law. "Substantial evidence, when considering the record as a whole, would allow reasonable minds to reach the same conclusion as the [ALC] and is more than a mere scintilla of evidence." *Original Blue Ribbon Taxi Corp. v. S.C. Dept. of Motor Vehicles*, 380 S.C. 600, 604, 670 S.E.2d 674, 676 (Ct. App. 2008).

In the recent instructive case of *Sierra Club v. South Carolina Department of Health and Environmental Control and Chem-Nuclear Systems, LLC*, Opinion Number 4654 (S.C.Ct.App. 3-10-2010), also involving a challenge to a DHEC permit

renewal for a landfill with a history of groundwater contamination, this court determined that the ALC failed to decide whether the landfill was in compliance with a number of DHEC regulatory requirements in light of the ALC's findings of fact. The court remanded the matter to the ALC to consider these regulatory requirements in light of the factual record:

The Sierra Club expressed serious concern regarding several of Chem-Nuclear's vaults and trenches that have no cover or roof such that rain can fall directly into the vault. The ALC also noted the rainfall problem and stated: "The problems caused by rainfall are compounded . . . and [r]ainfall that accumulates in the trenches eventually percolates into the soil, and drives the groundwater movement that is carrying tritium and other radioactive materials into Mary's Branch Creek." We also remand this issue to the ALC with specific instructions to apply its factual findings to the technical requirements of section 7.23.6. We find section 7.23.6 imposes additional compliance requirements for Chem-Nuclear. Without a specific ruling, we cannot determine whether the ALC erred. Accordingly, we remand the issue to the ALC to give it opportunity to rule on whether Chem-Nuclear was in compliance with section 7.23.6.

Id. Slip Op. at p. 8. The ALC's decision here is similarly deficient and should be overturned.

Of course the 2001 Consent Agreement between DHEC and SCE&G is not binding on Heath Hill or on the ALC and cannot absolve SCE&G of failure to comply with regulatory requirements applicable to the proper design and operation of a landfill or an NPDES wastewater treatment and discharge system.

In the case of *Leventis v. South Carolina DHEC*, 340 S.C. 118, 530 S.E.2d 643 (Ct.App. 2000), another challenge to a DHEC landfill permit, the court rejected the notion that an ex parte agreement between DHEC and the landfill was binding on the third party challengers, or that it relieved the landfill of its burden of proof.

Although DHEC issued the final permit to Laidlaw after completing the procedures required for permit issuance, including issuing a draft permit, giving public notice, affording an opportunity for public comment, and preparing responses to oral and written comments received, DHEC then effectively circumvented the permitting procedures by modifying the final permit through ex parte negotiations with Laidlaw. DHEC's ex parte agreement with Laidlaw negatively impacted Sierra Club's due process rights, undermined the spirit of the APA whose statutory framework is designed to ensure notice to and participation by all interested parties, and called into question the fairness of the permitting procedures. Consequently, we limit our holding to the facts of this case because absent the exhaustive twenty-four day hearing and meaningful review by the DHEC Board, which Sierra Club concedes cured two of Sierra Club's three major concerns, DHEC's and Laidlaw's actions might well require reversal

Id. 340 S.C. 118 at 135. Similarly, to bind Heath Hill or any other member of the public by an ex parte consent agreement between DHEC and SCE&G would threaten Mr. Hill's and the public's right to due process.

As a matter of law the SC Pollution Control Act prohibits the discharges of pollution into the environment without a duly issued DHEC permit.

It shall be unlawful for any person, directly or indirectly, to throw, drain, run, allow to seep or otherwise discharge into the environment of the State organic or inorganic matter, including sewage, industrial wastes and other wastes, except as in compliance with a permit issued by the Department.

SC Code Ann. § 48-1-90 (a). Nothing in the proposed landfill or NPDES permits here purport to account for or authorize the unpermitted discharge of arsenic into groundwater and surface water documented in this record.

DHEC's National Pollutant Discharge Elimination System (NPDES) Regulations expressly require DHEC to impose such permit conditions as are necessary to assure compliance with water quality standards:

In addition to conditions required in all permits (sections 122.41 and 122.42), the Department shall establish conditions, as required on a

case-by-case basis, to provide for and assure compliance with all applicable requirements of CWA and PCA and regulations. These shall include conditions under section 122.46 (duration of permits), section 122.47(a) (schedules of compliance), and section 122.48 (monitoring).

R. 61-9.122.43(a). Establishing permit conditions. The ALC erred in failing to require DHEC to adhere to this regulatory duty to remedy and correct the discharges of arsenic to the environment as conditions of the landfill and NPDES permits.

The DHEC NPDES regulation further mandates that effluent limitations, standards and prohibitions shall be established for each outfall or discharge point at the facility- insuring that no point of discharge to the environment escapes control such as the unpermitted and uncontrolled ground and surface water leaks here.

All permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided under section 122.44(k) (BMPs where limitations are infeasible) and paragraph (h) of this section (limitations on internal waste streams).

R.61.9.122.45(a). "Calculating NPDES permit conditions. Outfalls and discharge points."

Finally, DHEC's NPDES regulation expressly contemplates and regulates the exceptional discharges from a permitted facility under accident or extraordinary and temporary conditions deemed excusable "upsets" or "bypasses." Neither provision authorizes or condones the chronic and uncontrolled discharges documented here. An excusable "upset" is narrowly allowed where there occurs "an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by

operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.” R. 61-9.122.41(n). The discharges here are neither temporary nor unintentional; and, indeed, are caused by either “improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.” In short, the discharges here are not excusable as upset. Alternatively, these discharges may be deemed prohibited “bypasses” defined as “the intentional diversion of waste streams from any portion of a treatment facility.” R. 61-9.122.41(m)(1)(I). Bypass is expressly prohibited except in the narrowly defined circumstances- clearly not present here- where the bypass “was unavoidable to prevent loss of life, personal injury, or severe property damage;” and “(T)here were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime.” R. 61-9.122.41(m)(4).

The uncontrolled, unpermitted, and prohibited discharges of high concentrations of toxic arsenic to ground and surface waters from SCE&G’s Wateree coal plant contrary to DHEC’s own regulations will continue unabated under the permits approved by DHEC. The decision of the ALC which fails to address and remedy these discharges should be overturned.

2. WHERE “SEEPS” OR LEAKS IN SCE&G’S COAL ASH POND DIKE WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO THE WATREEE RIVER EXCEEDING WATER QUALITY STANDARDS, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.

As early as 1997 leaks or “seeps” through the coal ash pond dike were identified and documented containing high concentrations of arsenic flowing into the

adjacent Wateree River. The levels of arsenic reported in the three seeps in the later Mixing Zone Application were 348 parts per billion, 34.5 parts per billion and 604 parts per billion. (R. p. 308) The seep values outlined in a 1997 report to SCE&G, "Field and Laboratory Studies to Develop Effective Waste management Strategies for the Wateree Station," which should have been received into evidence as an admission of a party opponent or its agent, (R. p. 439); Pet's. Ex. 3 for identification, were identical to the values listed in the Mixing Zone Application. (R. pp. 431-432) In addition, according to the Mixing Zone Application, arsenic concentrations in fish tissue samples taken from the river adjacent to the ash ponds were higher than samples taken upstream or downstream of the ash ponds. The fish sampled, in Dr. Freedman's opinion would not be safe to eat. (R. pp. 316-318) Further, Table Three of the Mixing Zone Application indicates a surface water sample taken from the river at the ponds indicated 103 parts per billion for arsenic, but the narrative portion referencing the table indicates that no arsenic was detected in the surface water samples. (R. p. 320) While apparently neglected by both SCE&G and DHEC such leaks or seeps through the pond dike are recurring failures of the waste containment system.

On the eve of hearing in this case before the ALC, environmental consultants for the Petitioner identified and sampled two active seeps from the coal ash pond dike with high concentrations of arsenic flowing directly into the Wateree River. Dr. Freedman established that these seeps represent a point of discharge of arsenic to surface waters of the state. (R. p. 281) Further, he characterized the arsenic as dangerously toxic, mobile and persistent. (R. pp. 282-284) Dr. Freedman is of the

opinion that the discharge of arsenic from the seeps violates water quality standards because one seep contained 770 parts per billion arsenic and the other seep contained 1,900 parts per billion according to SCE&G's own samples of the seep discharge and laboratory testing of those samples results in September 2009. Both of the seeps were flowing over land as a surface water discharge, and the point at which that surface water enters the Wateree River, the concentration of arsenic is going to be higher than what is permissible for humans or freshwater aquatic organisms. (R. pp. 284-285)

In the face of this damning evidence, acknowledged in her Final Order and Decision, p. 13, the Administrative law Judge concluded dismissively that such discharges were not germane to these permits:

Petitioner contends that the seeps discovered in monitoring well 11 are an unpermitted outfall, outside the mixing zone and in violation of Regulation 61-68 governing water classifications and standards. DHEC is charged with the responsibility of enforcing any violation of Regulation 61-68; that issue is outside the scope of the Court's review of the two permits issued by DHEC in this case.

Final Order and Decision, p. 18. (R. p. 18) To the contrary, where the coals ash ponds are integral to the design and proper functioning of the landfill leachate management and waste discharge system, the failure of the pond dike design to properly contain the arsenic wastes and the discharge of such wastes through the seeps to the Wateree River is a fatal flaw in the proposed landfill and NPDES permits.

As argued above, discharges from the ash ponds other than through the permitted and monitored discharge outfall represent unpermitted discharges; unauthorized bypasses or upset discharges, and a failure of proper facility design and

maintenance. DHEC is under a duty to impose such permit conditions as necessary to assure that water quality standards are protected in the operation of the proposed facility. The ALC erred in failing to determine that such facts constitute violations of express DHEC regulatory requirements essential to the proposed permits.

All permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided under section 122.44(k) (BMPs where limitations are infeasible) and paragraph (h) of this section (limitations on internal waste streams). R.61.9.122.45(a). "Calculating NPDES permit conditions. Outfalls and discharge points."

An excusable "upset" is narrowly allowed where there occurs

an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation." R. 61-9.122.41(n). The discharges here are neither temporary nor unintentional; and, indeed, are caused by either "improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation." In short, the discharges here are not excusable as upset. Alternatively, these discharges may be deemed prohibited "bypasses" defined as "the intentional diversion of waste streams from any portion of a treatment facility.

R. 61-9.122.41(m)(1)(I). Bypass is expressly prohibited except in the narrowly defined circumstances- clearly not present here- where the bypass "was unavoidable to prevent loss of life, personal injury, or severe property damage;" and "(T)here were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime." R. 61-9.122.41(m)(4).

DHEC's National Pollutant Discharge Elimination System (NPDES)

one and two are the final steps in the sequence of waste treatment system before the outfall of pond two. These ponds are unlined, and Dr. Freedman observed piles of ash in ash pond one during his visit, as well as significant photosynthetic growth on the top of ash pond one. This photosynthetic growth indicates that a more mobile form of arsenic exists in ash pond one according to Dr. Freedman. Upon review and consideration of the permit application and associated documents, including the Semi-Annual Monitoring Reports, Dr. Freedman is of the opinion that groundwater flows beneath the ash ponds and into the Wateree River carrying with it contaminants such as arsenic, a known human carcinogen. Arsenic's known toxicity led the EPA to reevaluate its health effects and ultimately revised the maximum contaminate level from 50 parts per billion to 10 parts per billion. (R. pp. 211-213) The landfill as constructed will retain most all of the leachate and runoff that entered the system, the majority of which will be collected in the wastewater collection pond and then pumped to unlined ash pond one. However, Dr. Freedman established that the landfill's leachate collection pond provides an opportunity for SCE&G to treat and remove the arsenic; otherwise, the landfill will simply add more arsenic to an already failing system. (R. pp. 254-255)

Dr. Freedman described five well-established treatment technologies for removing arsenic from water: precipitation, membrane filtration, absorption, ion exchange and the use of a permeable reactive barrier. Any one of these techniques could be used at Wateree Station to remove arsenic from the waste stream. EPA has evaluated these technologies and reports that precipitation is being used at more than 50 sites, 19 of which achieved arsenic levels below 10 parts per billion. (R. p. 260)

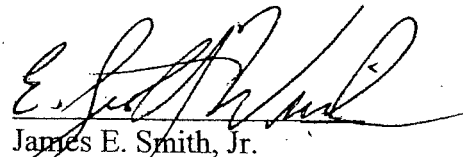
Taking the arsenic off-site to a hazardous waste landfill or for beneficial use would remove it from the waste stream at Wateree Station so that the arsenic never reaches the unlined ash ponds and into the groundwater and river. (R. p. 261)

Where the evidence in this record demonstrates conclusively that arsenic contaminated waste will be discharged from the proposed Wateree facility at concentrations well in excess of water quality standards through the uncontrolled groundwater and surface seep pathways without adequate arsenic removal treatment, the ALC erred in approving these permits which were not conditioned to require the effective use of one or more of the established arsenic waste treatment technologies. R. 61-9.122.43(a).

CONCLUSION

For the foregoing reasons, Appellant Heath Hill respectfully urges the court to reverse the Final Order and Decision of the Administrative Law Court and to deny the permits sought by Respondent SCE&G for an industrial solid waste landfill and a wastewater discharge or NPDES permit allowing the discharge of arsenic contamination to groundwater and surface water from SCE&G's Wateree coal station.

August 11, 2010


James E. Smith, Jr.
E. Scott Winburn
James E. Smith, Jr., P.A.
1422 Laurel Street
Columbia, South Carolina 29201

(803) 933-9801

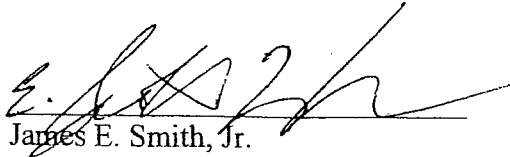
Robert Guild
314 Pall Mall
Columbia, South Carolina 29201
(803) 252 1419
ATTORNEYS FOR

APPELLANT

HEATH HILL

Certificate of Counsel

The undersigned hereby certifies that the Final Briefs filed by Appellant comply with Rule 211(b) of the Appellate Court Rules.

A handwritten signature in black ink, appearing to read "E. Smith, Jr.", is written over a horizontal line.

James E. Smith, Jr.
E. Scott Winburn
James E. Smith, Jr., P.A.
1422 Laurel Street
Columbia, SC 29201
(803) 933-9800

August 11, 2010

THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM THE ADMINISTRATIVE LAW COURT
Carolyn C. Matthews, Administrative Law Judge

Docket No. 08-ALJ-07—183-CC

Heath Hill,

Appellant,

v.

South Carolina Department of Health and
Environmental Control and South Carolina
Electric & Gas Company,

Respondents.

FINAL REPLY BRIEF OF APPELLANT

August 11, 2010

James E. Smith, Jr.
E. Scott Winburn
James E. Smith, Jr., P.A.
1422 Laurel Street
Columbia, South Carolina 29201
(803) 933-9801

Robert Guild
314 Pall Mall
Columbia, South Carolina 29201
(803) 252 1419

ATTORNEYS FOR APPELLANT

TABLE OF CONTENTS

TABLE OF AUTHORITIES.....	i
STATEMENT OF ISSUES ON APPEAL.....	ii
ARGUMENT.....	1
1. WHERE A "MIXING ZONE" CONSENT ORDER WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO GROUNDWATER BELOW SCE&G'S LEAKING COAL ASHO PONDS AT CONCENTRATIONS 300 TTIMES THE WATER QUALITY STANDARD, DHEC PERMIT WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.....	
2. WHERE "SEEPS" OR LEAKS IN SCE&G'S COAL ASH POND DIKE WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO THE WATEREE RIVER EXCEEDING WATER QUALITY STANDARDS, DHEC PERMITS WITH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.....	
3. WHERE SCE&G'S LANDFILL "LEACHATE" LIQUID CONTAMINATED WITH TOXIC ARSENIC WILL BE ROUTED TO LEAKING UNLINED COAL ASH PONDS WITHOUT PROPER TREATMENT, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.....	
CONCLUSION.....	6

TABLE OF AUTHORITIES

STATUTES AND ACTS

33 U.S.C. §1362 (14).....	3
---------------------------	---

REGULATIONS

R. 61-68(C).....	1,2,6
------------------	-------

R. 61-9.122.41(n).....	4
------------------------	---

R. 61-9.122.41(m)(1)(I).....	4
------------------------------	---

STATEMENT OF ISSUES ON APPEAL

1. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE A 2001 "MIXING ZONE" CONSENT AGREEMENT WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO GROUNDWATER BELOW SCE&G'S LEAKING COAL ASH PONDS AT CONCENTRATIONS 300 TIMES THE WATER QUALITY STANDARD?
2. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE "SEEPS" OR LEAKS IN SCE&G'S COAL ASH POND DIKE WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO THE WATEREE RIVER AT CONCENTRATIONS OVER 300 TIMES WATER QUALITY STANDARDS?
3. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE SCE&G'S LANDFILL "LEACHATE" LIQUID CONTAMINATED WITH TOXIC ARSENIC WILL BE ROUTED TO LEAKING UNLINED COAL ASH PONDS WITHOUT PROPER TREATMENT?

ARGUMENT

1. WHERE A "MIXING ZONE" CONSENT ORDER WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO GROUNDWATER BELOW SCE&G'S LEAKING COAL ASH PONDS AT CONCENTRATIONS 300 TIMES THE WATER QUALITY STANDARD, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.

The original adoption of the Mixing Zone and 2001 Consent Agreement are not being challenged, but its application to excuse a flawed landfill design and NPDES permit is being challenged in this appeal. As a component of the waste treatment system, which includes components such as the landfill leachate collection system, the leachate collection pond, and the two unlinded ash ponds, the mixing zone component must be discussed to provide depth and context necessary to describe the path of toxic arsenic. Simply put, the mixing zone does not extend into the river. According to DHEC Regulation 61-68C, "The contaminant(s) in question occurs within the bounds of the property;" yet contaminants are leaving the site. From the mixing zone established by the 2001 Consent Agreement, arsenic discharges to groundwater, to seeps and into the river in violation of water quality standards. To the extent the water treatment system has the potential to impact the river, it is relevant to show what is happening in the mixing zone to cause violations of water quality standards.

Respondent contends that for the first time on appeal, Appellant argues that the mixing zone was improperly granted. Fundamental to qualifications for relaxation of water quality standards in a groundwater mixing zone under DHEC regulations are the express requirements that the mixing zone be limited to facility property; that the contaminants in question are not dangerously toxic, mobile, or persistent; and that measures will be taken to minimize additional contamination and control migration of the

contaminated groundwater; in short, that a clean up plan is in place and that the contamination will not continue indefinitely. DHEC Regulation 61-68C. The evidence in this record demonstrates that SCE&G fails to meet each of these essential regulatory requirements. Expert testimony from Dr. David Freedman demonstrates that the arsenic in question is dangerously toxic, mobile and persistent. (R. p. 318) The requirements for granting a mixing zone inform the issues in this case, and highlight the dangers of the arsenic plume that exists between the ash ponds and the river. Furthermore, Appellant was not a party to the 2001 Consent Agreement. The ALC was Appellant's first and only opportunity for redress, and consideration of the express requirements of the mixing zone is entirely proper.

The uncontrolled, unpermitted, and prohibited discharges of high concentrations of toxic arsenic to ground and surface waters of SCE&G's Wateree coal plant, contrary to DHEC'S own regulations will continue unabated under the permits approved by DHEC. The decision of the ALC which fails to address and remedy these discharges should therefore be overturned.

2. WHERE "SEEPS" OR LEAKS IN SCE&G'S COAL ASH POND DIKE WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO THE WATREEE RIVER EXCEEDING WATER QUALITY STANDARDS, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.

The decision of the ALC fails to address the seeps discovered by Appellant. Respondent argues that SCE&G has performed its required inspection of the dikes pursuant to its existing NPDES permit every year since 1993. Whether SCE&G complied with their inspection requirements is largely irrelevant to the issues of this appeal. Seeps were found in 1997 and were rediscovered by Appellant in 2009. Further, in an effort to show the intermittent nature of the seeps, Respondent asserts that seeps

discovered in 2009 were not the same ones mapped in 1997 due to their location with respect to Monitoring Well 11. (R. p. 768) However, the precision of the 1997 map was not established at trial. What was established at trial was that at least two seeps discharging toxic arsenic existed in 1997 and that two seeps discharging toxic arsenic existed in 2009.

In further effort to minimize the impact of the seeps, Respondent cites 33 U.S.C. § 1362 (14) to assert that seeps are not "point sources" of pollution. However, the Respondent's brief omits the words: "including but not limited to any pipe, ditch, channel, tunnel..." within the definition of point source. 33 U.S.C. § 1362 (14). The word "channel" precisely describes the nature of the path of each seep traveling along the surface of the bank and into the river. These channels caused by water flowing from the ash pond are evidenced in Appellant's video Exhibit 17. As expert David Freedman testified, the point at which the seep enters the river, water quality standards are violated. (R. pp. 305-306) The ALC decision erred by failing to address this question or mandate some form of remediation of the Respondent.

Respondent points out that an effluent limit at the "end of the pipe" is based on the dilution of the receiving stream. (R. pp. 373-375) The issue here is not a question of "end of the pipe", it's a question of "end of the seep." No provision in the NPDES permit allows for any discharge other than from the outfall. Likewise, dilution of the receiving stream is only a factor at the outfall. Dr. Freedman testified that the seeps discharge into a back eddy of the river. (R. pp. 447-448) The point at which the seep enters the river, according to Dr. Freedman, water quality standards are violated. Dr. Freedman also testified that more data is needed to fully evaluate the arsenic contamination problem at

Wateree Station, such as the inventory of arsenic in ash pond one. (R. pp. 305-306)

According to Footnote 3 of Respondent's brief, Respondent argues that it has not failed to meet effluent limits and has not asserted an "upset" defense for such an alleged violation, insinuating the Appellant's use of "upset" and "bypass" is misplaced. Appellant uses DHEC's own NPDES regulation regarding "upsets" or "bypasses" to point out that DHEC specifically contemplates and regulates these types of discharges at issue in this case. These provisions of the regulation do not condone the chronic or uncontrolled discharges documented here. R. 61-9.122.41(n). However, Respondent concedes that seeps have existed at least as far back as 1997. The discharges from the seeps are neither temporary nor unintentional; and, indeed, are caused by either "improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation," as described in the regulation. The discharges here are not excusable upset. Alternatively, these discharges *may* be deemed prohibited "bypasses" defined as "the intentional diversion of waste streams from any portion of a treatment facility." R. 61-9.122.41(m)(1)(I). A long history of seeps, uncorrected, raises a strong inference that Appellant had knowledge of their existence, or at least raises the inference of willful ignorance. Regardless, "bypass" defined in the regulations makes the point that discharges at issue here are contemplated by the regulation. And for Respondent to assert that they have not had to use the "upset" defense, as proof that a violation of effluent limits has not occurred because of the seeps, is akin to a criminal saying that no crime has been committed because he has not yet been accused.

According to Footnote 7 of Respondent's brief, SCE&G concedes that the seeps

should be addressed, but they argue that their existence does not affect the permits issued in this case. However, DHEC permit writer Melinda Vickers testified that she would need to consider arsenic concentrations in the seeps discovered by Appellant. (R. p. 587) Respondent attempts to minimize the impact of the arsenic in the seeps by utilizing Dr. Freedman's calculations. Admittedly, Dr. Freedman's calculation was limited by the data available to him, and he conceded that more data would be necessary determine the size and flow of the arsenic plume. (R. pp. 305-306) Again, Melinda Vicker's testimony echoes that sentiment. Despite Respondent's attempts to minimize the impact of the seeps, the point at which the point source of pollution enters the river, water quality standards are violated, and arsenic from the seeps must be considered before calculation of effluent limits.

The uncontrolled, unpermitted, and prohibited discharges of high concentrations of toxic arsenic to ground and surface waters of SCE&G's Wateree coal plant, contrary to DHEC'S own regulations will continue unabated under the permits approved by DHEC. The decision of the ALC which fails to address and remedy these discharges should therefore be overturned.

3. WHERE SCE&G'S LANDFILL "LEACHATE" LIQUID CONTAMINATED WITH TOXIC ARSENIC WILL BE ROUTED TO LEAKING UNLINED COAL ASH PONDS WITHOUT PROPER TREATMENT, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.

Both fly ash and bottom ash will be permitted for disposal in the proposed landfill, not just the flue gas desulfurization scrubber solids. (R. p. 210) There is no requirement that SCE&G continue its program of selling ash off-site for beneficial use to concrete companies, there is no inventory of arsenic in ash pond one, and there is no guarantee that Respondent will continue to remove ash from ash pond one. As designed,

SCE&G is free to dispose of all coal combustion byproducts into the landfill, including ash laden with arsenic. All of this contrary to the provisions of the Mixing Zone regulation, which requires a binding commitment to minimize the addition of contaminant to ground water and/or control the migration of contaminants in ground water. Regulation 61-68C. According to Dr. Freedman, the continued use of the unlined ash ponds will guarantee arsenic loading. (R. p. 243) Unlined Ash ponds one and two are the final steps in the sequence of waste treatment before the outfall of pond two. Dr. Freedman concedes that the liner of the landfill meets the requirements of the regulation as Respondent points out. However, collecting the toxic material with an effective liner, just to sluice that same toxic material to an unlined ash pond presents a flaw in the waste treatment system being appealed in this case. Dr. Freedman established that the leachate collection pond provides an opportunity for SCE&G to treat and remove arsenic; otherwise, the landfill runoff will simply add more arsenic to an already failing system. (R. pp. 254-255) (R. pp. 677-678)

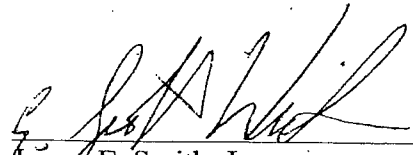
The uncontrolled, unpermitted, and prohibited discharges of high concentrations of toxic arsenic to ground and surface waters of SCE&G's Wateree coal plant, contrary to DHEC'S own regulations will continue unabated under the permits approved by DHEC. The decision of the ALC which fails to address and remedy these discharges should therefore be overturned.

CONCLUSION

For the foregoing reasons, Appellant Heath Hill respectfully urges the court to reverse the Final Order and Decision of the Administrative Law Court and to deny the permits sought by Respondent SCE&G for an industrial solid waste landfill and a

wastewater discharge or NPDES permit allowing the discharge of arsenic contamination to groundwater and surface water from SCE&G's Wateree coal station.

August 11, 2010

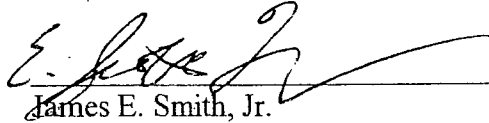


James E. Smith, Jr.
E. Scott Winburn
James E. Smith, Jr., P.A.
1422 Laurel Street
Columbia, SC 29201
(803) 933-9800

Robert Guild
314 Pall Mall
Columbia, SC 29201
(803) 252-1419
ATTORNEYS FOR APPELLANT
HEATH HILL

Certificate of Counsel

The undersigned hereby certifies that the Final Briefs filed by Appellant comply with Rule 211(b) of the Appellate Court Rules.

A handwritten signature in black ink, appearing to read "E. Smith, Jr.", is written over a horizontal line.

James E. Smith, Jr.
E. Scott Winburn
James E. Smith, Jr., P.A.
1422 Laurel Street
Columbia, SC 29201
(803) 933-9800

August 11, 2010

JAMES E. SMITH, JR., P.A.
ATTORNEYS AT LAW

JAMES E. SMITH, JR. *†
E. SCOTT WINBURN
DYLAN W. GOFF

OF COUNSEL:
NINA NELSON SMITH

DEBRA SHERMAN TEDESCHI*
THE TEDESCHI LAW FIRM, P.A.

* ALSO ADMITTED IN NC
† ALSO ADMITTED IN GA
• ALSO ADMITTED IN PA

1422 LAUREL STREET
COLUMBIA, SOUTH CAROLINA 29201

March 15, 2010

VIA FIRST-CLASS U.S. MAIL

SHANNON S. STUCKEY
(1969-2000)

TELEPHONE:
(803) 933-9800
FACSIMILE:
(803) 933-9801

EMAIL:
FIRM@JAMESSMITHPA.COM
WEBPAGE:
www.JamesSmithPA.com

The Honorable Tanya Gee
South Carolina Court of Appeals
P.O. Box 11629
Columbia, S.C. 29211

Re: Heath Hill v. South Carolina Department of Health and Environmental
Control and South Carolina Electric and Gas Company,
Docket No. 08-ALJ-07-0183-CC and Docket No. 08-ALJ-07-0534-CC
JESPA File No.: 1025/08-0098

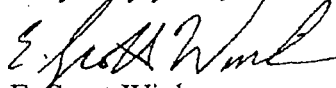
Dear Clerk Gee:

Enclosed please find for filing with your office in the above-referenced appeal one (1) original and two (2) copies of the Initial Brief of Appellant and the Appellant's Designation of Matter to Be Included on the Record on Appeal. We would appreciate your office filing the original and returning the clocked-in copies in the postage prepaid envelope.

By copy of this letter to counsel for the Respondents, we are hereby serving them with a copy of the same.

With kind regards, I am,

Very truly yours,


E. Scott Winburn

Enclosures: (as referenced)
Cc: Elizabeth Partlow, Esq.
Etta Williams, Esq.
Roger P. Hall, Esq.
Stephen P. Hightower, Esq.
Robert Guild, Esq.
Francis G. Delleney, Jr., Esq.
John M.S. Hofer, Esq.

THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM THE ADMINISTRATIVE LAW COURT
Carolyn C. Matthews, Administrative Law Judge

Docket No. 08-ALJ-07—183-CC

Heath Hill,

Appellant,

v.

South Carolina Department of Health and
Environmental Control and SCE&G,

Respondents.

INITIAL BRIEF OF APPELLANT

March 15, 2010

James E. Smith, Jr.
E. Scott Winburn
James E. Smith, Jr., P.A.
1422 Laurel Street
Columbia, South Carolina 29201
(803) 933-9801

Robert Guild
314 Pall Mall
Columbia, South Carolina 29201
(803) 252 1419

ATTORNEYS FOR APPELLANT

TABLE OF CONTENTS

TABLE OF AUTHORITIES.....	i
STATEMENT OF ISSUES ON APPEAL.....	ii
STATEMENT OF THE CASE.....	1
STATEMENT OF FACTS.....	2
ARGUMENT.....	21
1. WHERE A 2001 "MIXING ZONE" CONSENT AGREEMENT WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO GROUNDWATER BELOW SCE&G'S LEAKING COAL ASH PONDS AT CONCENTRATIONS 300 TIMES THE WATER QUALITY STANDARD, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.	
2. WHERE "SEEPS" OR LEAKS IN SCE&G'S COAL ASH POND DIKE WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO THE WATEREE RIVER AT CONCENTRATIONS OVER 100 TIMES WATER QUALITY STANDARDS, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.	
3. WHERE SCE&G'S LANDFILL "LEACHATE" LIQUID CONTAMINATED WITH TOXIC ARSENIC WILL BE ROUTED TO LEAKING UNLINED COAL ASH PONDS WITHOUT PROPER TREATMENT, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.	
CONCLUSION.....	37

TABLE OF AUTHORITIES

CASES

<u>Blue Ribbon Taxi Corp. v. S.hC. Dept. of Motor Vehicles</u> , 380 S.C. 600, 670 S.E.2d 674, 676 (Ct. App. 2008).....	28
<u>Leventis v. South Carolina DHEC</u> , 340 S.C. 118, 530 S.E.2d 643 (Ct.App. 2000).....	29
<u>Sierra Club v. South Carolina Department of Health and Environmental Control and Chem-Nuclear Systems, LLC</u> , Opinion Number 4654 (S.C.Ct.App. 3-10-2010).....	28,35

STATUTES AND ACTS

S.C. Code Ann. § 1-23-610 (Supp. 2009).....	27
S.C. Code Ann. § 48-1-90 (a).....	29

REGULATIONS

R. 61-68, “Water Classifications & Standards”.....	22,33
R. 61-68(C).....	25
R. 61-68C(11)(a)(1).....	26
R. 61-9.122.41(m)(1)(I).....	31,34
R. 61-9.122.41(m)(4).....	31,35
R. 61-9.122.41(n).....	31,34
R. 61-9.122.43(a).....	30,35,37
R. 61.9.122.45(a).....	30,34
Clean Air Interstate Rule (CAIR), 70 Fed. Reg. 25162 (May 12, 2005).....	2

OTHER AUTHORITIES

Final Order and Decision, Docket No.: 08-ALC-07-0183-CC.....	2,11,22,23,26,33,37
--	---------------------

STATEMENT OF ISSUES ON APPEAL

1. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE A 2001 "MIXING ZONE" CONSENT AGREEMENT WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO GROUNDWATER BELOW SCE&G'S LEAKING COAL ASH PONDS AT CONCENTRATIONS 300 TIMES THE WATER QUALITY STANDARD?
2. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE "SEEPS" OR LEAKS IN SCE&G'S COAL ASH POND DIKE WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO THE WATEREE RIVER AT CONCENTRATIONS OVER 100 TIMES WATER QUALITY STANDARDS?
3. DID THE ADMINISTRATIVE LAW COURT ERR IN APPROVING DHEC PERMITS WHICH FAIL TO CONTROL POLLUTION WHERE SCE&G'S LANDFILL "LEACHATE" LIQUID CONTAMINATED WITH TOXIC ARSENIC WILL BE ROUTED TO LEAKING UNLINED COAL ASH PONDS WITHOUT PROPER TREATMENT?

STATEMENT OF THE CASE

This is an appeal by neighboring landowner and farmer Heath Hill from a decision of the Administrative Law Court approving permits by the Department of Health and Environmental control (DHEC) which allow the discharge of toxic arsenic to groundwater and the Wateree River from a landfill and coal ash storage ponds at the Wateree coal-fired power plant of South Carolina Electric and Gas Company (SCE&G) in the Eastover community in Richland County. Mr. Hill contends that use of his farmland and natural resources are threatened by DHEC permits for a Class Two Solid Waste Landfill and related National Pollutant Discharge Elimination System (NPDES) wastewater discharge, which fail to adequately control arsenic contamination of groundwater below the leaking unlined coal ash storage ponds and surface water leaking or seeping through the ash pond dike into the Wateree River.

Mr. Hill timely requested the conduct of a contested case hearing by the Administrative Law Court to review the final DHEC decisions received on or about July 28, 2008 to issue SCE&G Wateree Station Industrial Solid Waste Landfill (ISWL) Permit No. SCR10H934, and the decision received on or about August 29, 2008, to issue NPDES wastewater discharge Permit No.: SC0002038 for SCE&G's Wateree Station.

A contested case hearing was conducted over three days: October 6, 7, and 8, 2009. Mr. Hill presented the testimony of three witnesses: Clemson Environmental Engineering Professor and expert, Dr. David Freedman, the Appellant, Heath Hill, and environmental consultant JC Hare.

Respondent DHEC presented the testimony of one staff witness: permit

writer Melinda Vickers. Respondent SCE&G presented three witnesses: Vice President Jim Landreth, environmental engineer Jean Claude Younan and environmental manager Tom Effinger. Numerous exhibits were received.

The ALC's Final Order and Decision was filed December 3, 2009. A timely Motion to Reconsider was filed by Heath Hill on December 14, 2009. An Order Denying Motion to Reconsider was filed January 13, 2010, which was received on January 15, 2010. Notice of Appeal was served and filed on February 11, 2010.

STATEMENT OF FACTS

Respondent South Carolina Department of Health and Environmental Control issued a Class Two Solid Waste Landfill Permit and an NPDES Discharge Permit to South Carolina Electric and Gas in connection with the installation of a Flue Gas Desulfurization Scrubber System (FGD Scrubber) at Wateree Station, a coal-fired power plant. Final Order And Decision at 2. The Clean Air Interstate Rule (CAIR), 70 Fed. Reg. 25162 (May 12, 2005) promulgated by the U.S. Environmental Protection Agency pursuant to the Federal Clean Air Act, requires SCE&G to reduce sulfur dioxide emissions from the combustion of coal. *Id.* The FGD Scrubber uses calcium carbonate to remove sulfur and other contaminants from the smokestack during the production of electricity. *Id.*

As coal is burned to produce electricity, fly ash and bottom ash is produced. FGD gypsum is a waste material produced in the desulfurization of flue gases. *Tr.* 10-8-09, p. 112. Once the FGD Scrubber is operational, the gypsum byproduct is removed from the scrubber and transferred to the scrubber blow down pond, which is also part of the NPDES system. *Tr.* 10-8-09, p. 23. From the scrubber blow down

pond, the waste gypsum from the FGD scrubber will be removed, stacked and transported by dump truck to the landfill for permanent storage. Tr. 10-8-09, p. 124-125. Any liquid associated with this process or any rainfall affecting the site, becomes part of the waste discharge subject to the NPDES permit application. Id.

The ISWLF was constructed to handle the disposal of the gypsum, as well as *all* other byproducts of coal combustion including fly ash and bottom ash, which contain high levels of contaminants like arsenic. Tr. October 8, 2009, p. 189. Gypsum, fly ash and bottom ash deposited in the landfill is exposed to rainfall and other liquid and creates contaminated liquid called "leachate." Id. As described by Jean Claude Younan, engineer and project manager for SCE&G, leachate is water that percolates and "seeps" through the gypsum and the coal combustion product of the landfill into the leachate collection system. Id. Any liquid trapped above the liner of the landfill is considered leachate or runoff. Tr. 10-8-09, p. 198. Unfortunately, leachate containing contaminants such as arsenic pools in the landfill, either due to natural rain events or leachate associated with the production process. The liquid waste must be disposed of properly. Id. Above the liner of the landfill is a leachate collection system that collects the water or leachate that percolates and seeps through the gypsum, fly ash and bottom ash. Tr. October 9, 2009, p. 189. Gravity forces the leachate from the landfill into a lined leachate collection pond. From the lined leachate collection pond, the leachate is pumped to *unlined* Ash Pond 1, which overflows to *unlined* Ash Pond 2. Ash Pond 1 and Ash Pond 2 are 80 acre former borrow pits that have been in operation for nearly forty years. Tr. October 8, 2009, p. 219. These two unlined ponds are a simple form of passive treatment of

contaminants like arsenic through sedimentation. The NPDES permit for the outfall at Ash Pond 2 addresses only the monitored contaminants discharging from the outfall, but it does not address the contaminants discharging from the groundwater and seeps. Tr. 10-6-09, p. 211. These ponds are leaking arsenic into the groundwater below the ponds. They are leaking arsenic through seeps adjacent to the Wateree River. Id.

The waste treatment "system" designed by SCE&G at Wateree Station is designed to fail because it begins with two newly lined wastewater collection ponds, but it ends with two old unlined borrow pits now serving as ash ponds that feed into the Wateree River. Tr. 10-8-09, p. 165. Wateree Station burns 1,797,000 tons of coal annually, and produces 197,000 tons of coal combustion byproducts including fly ash and bottom ash according to Jim Landreth, SCE&G Vice President of Fossil-Hydro Operations. Tr. 10-8-09, p. 98. Fly ash includes the lighter particles of the ash that follow the flue gas up the furnace. Bottom ash is the ash that falls to the bottom of the furnace, and is sluiced to Ash Pond One. Tr. 10-8-09, pp. 102-103.

SCE&G's carbon burnout unit further incinerates the ash, to lower the carbon content of the fly ash so that it becomes a marketable product for aggregate and cement companies. Tr. 10-8-09, pp. 105-106. According to Mr. Landreth, 146,000 tons of fly ash goes to the carbon burnout unit per year. Tr. 10-8-09, p. 107. On average, 86,000 tons of ash are removed and sold from pond one each year, according to Mr. Landreth. Tr. 10-8-09, p. 125. However, SCE&G has no binding agreement with DHEC or anyone else to reduce the ash in Pond One through the sale of coal ash byproducts. Tr. 10-8-09, p. 164. Other than selling off the ash to remove the source

of the arsenic, SCE&G does not have another plan for remediation of the contaminated groundwater. Tr. 10-8-09, p. 168.

Appellant Harold Heath Hill lives in Lower Richland County, Eastover, and farms approximately 1000 acres, contiguous to the proposed ISWLF and SCE&G's Wateree Station, which lies between Mr. Hill's property and the Wateree River. Two irrigation wells exist on Mr. Hill's property, which irrigate over 900 acres of farmland a short distance from the location of the proposed ISWLF. Mr. Hill and his family have utilized the natural resources along the Wateree River for hunting and fishing all of their lives, and he is concerned for the safety of his family and that of the community. Tr. 10-6-09, pp.48-53.

Mr. Hill's has nearby irrigation wells capable of pumping more than 1000 gallons per minute. These wells draw water from the same aquifers that exist on SCE&G's property, both the shallow and deep aquifers and he is concerned that leachate, or runoff from the proposed landfill could contaminate surface water and groundwater on his property, and fears that the landfill as proposed will devalue his property. Tr. 10-6-09, pp.56-57.

Appellant has standing to bring this appeal. He is concerned about the adverse impacts of the proposed landfill and additional waste streams associated with the operation of the flue gas desulfurization scrubber system on his health, use and enjoyment of his property, the value of his property, and on the environment and natural resources in the community including the Wateree River. Tr. 10-6-09, pp. 48-53. The proposed landfill will generate additional arsenic and other wastes, which

ultimately end up in two unlined 80 acre ash ponds before emptying in the Wateree River. Tr. 10-8-09, p. 96.

Dr. David Freedman is professor of Environmental Engineering and Science at Clemson University. He reviewed the waste treatment system at issue in this case on behalf of Mr. Hill. Dr. Freedman holds a Ph. D. In Environmental Engineering from Cornell University. Tr. 10-6-09, pp.157-158. He currently teaches Biological Principles of Environmental Engineering; Biodegradation and Bioremediation; Integrated Design of Water, Wastewater and Hazards; Waste Treatment Systems; Laboratory and Wastewater Treatment Operations and Wastewater Treatment; Water and Wastewater Treatment; Hazardous Waste Management; and Introduction to Environmental Engineering. Tr. 10-6-09, pp 159-160. In addition, Dr. Freedman supervises graduate students and conducts research on hazardous waste management and bioremediation. Dr. Freedman has published extensively in professional journals in the field of bioremediation and hazardous waste management. Tr. 10-6-09, p. 160. Dr. Freedman has previously been qualified as an expert before the Administrative Law Court in cases involving storm water management issues and an animal waste lagoon for a hog farm to address waste management and groundwater movement of contamination. . Tr. 10-6-09, p. 161.

According to Dr. Freedman, environmental engineers study the movement of metals in general and their behavior in the environment. In preparation for his testimony, Dr. Freedman consulted literature that experts in his field customarily rely upon regarding these subjects, and he has studied the movement of metals through the environment in other contexts. Tr. 10-6-09, pp. 168-169. In his teaching Dr.

Freedman uses NPDES Permits as a basis for developing treatment plant designs to meet the requirements of the NPDES Permits. Tr. 10-6-09, p. 171. Dr. Freedman reviewed the pertinent DHEC NPDES and ISWLF permitting regulations, and other application documents provided by SCE&G relating to the landfill as well as the NPDES Permit, and was asked by the Appellant to render an opinion based in part on those documents. In addition to his general familiarity with NPDES Permits, movement of contaminant through groundwater, and waste treatment systems, Dr. Freedman visited the site on two occasions. During his visit in December 2008 he observed the close proximity of Monitoring Well 11 to the Wateree River. From the embankment just beyond the monitoring well, Dr. Freedman observed a back eddy of the river, where the water was moving counter to the movement of the river in a circular motion. From Dr. Freedman's vantage point during this December visit, the seeps later tested for arsenic would have been approximately ten yards to the north and ten yards to the south along the bank of the Wateree River. Tr. 10-6-09, pp. 180-183.

At trial Dr. Freedman was qualified as an expert in environmental engineering and movement of contaminants in soil. Tr. 10-6-09 p. 180. According to Dr. Freedman, leachate and runoff associated with the landfill will be collected and then that wastewater containing arsenic will be pumped from the landfill runoff pond to Ash Pond One. Tr. 10-6-09 pp. 188-189. Both fly ash and bottom ash will be permitted for disposal in the proposed landfill, not just the flue gas desulfurization solids. Tr. 10-6-09 p. 189. Ash Pond One and Two are the final steps in the sequence of waste treatment system before the outfall of Pond Two. These ponds are unlined,

and Dr. Freedman observed piles of ash in ash pond one during his visit, as well as significant photosynthetic growth on the top of ash pond one. This photosynthetic growth indicates that a more mobile form of arsenic exists in ash pond one according to Dr. Freedman. Upon review and consideration of the permit application and associated documents, including the Semi-Annual Monitoring Reports, Dr. Freedman is of the opinion that groundwater flows beneath the ash ponds and into the Wateree River carrying with it contaminants such as arsenic, a known human carcinogen. Arsenic's known toxicity led the EPA to reevaluate its health effects and ultimately revised the maximum contaminate level from 50 parts per billion to 10 parts per billion. Tr. 10-6-09 pp. 190-192.

According to DHEC Regulation 61-68, Water Classifications & Standards, arsenic is identified in the water quality and numeric criteria appendix entitled "Water Quality Numeric Criteria for the Protection of Aquatic Life and Human Health". The regulatory standard established with respect to human health for Arsenic is 10 parts per billion, the standard for water quality for human health. The aquatic life standards for Arsenic are 150 parts per billion average, and 340 parts per billion maximum. These numbers represent chronic exposure and short term exposure. Tr. 10-6-09 pp. 194-196. Dr. Freedman is of the opinion that arsenic poses a threat to aquatic life. Tr. 10-6-09 p. 198.

According to DHEC's Fact Sheet and Rationale, Petitioner's Exhibit 33, limits are needed for arsenic, because there is a reasonable potential for arsenic to exceed water quality criteria, and arsenic is known to be present in the wastewater. The proposed limits for the outfall located at the end of ash pond two, are 27 parts per

billion average, and the daily maximum is 40 parts per billion, higher than the values established by the human health based water quality standard for arsenic concentration, which is 10 parts per billion. The daily maximum is four times the human health based water quality standard, and the monthly average is more than two times that standard. Tr. 10-6-09 pp. 203-204.

Dr. Freedman opined that waste leaves the treatment system other than through the outfall at the Wateree Power Station, via the seeps and groundwater primarily from Ash Pond One in violation of water quality standards. The inventory of ash remaining in Pond One contains arsenic and it is leaching from Pond One into the groundwater and then emerges via the groundwater and the seeps into the Wateree River. Tr. 10-6-09, p. 211. Further, seepage of waste that is occurring on the basin dikes and toe areas at the Wateree coal station has the potential to reach waters of the state. None of the documents reviewed by Dr. Freedman reflect that SCE&G notified DHEC about the seeps in the basin, dike or toe areas of the plant, nor has the company submitted to DHEC any proposed corrective action to address the seeps of arsenic passing through the dike to the ash basin. Tr. 10-6-09, pp 212-213.

Dr. Freedman explained that arsenic has been present in the sediment of pond one for a number of decades since the company has been depositing ash into Pond 1 beginning in the 1970s. Tr. 10-6-09, p. 213. According to SCE&G, some of the fly ash is being sold to aggregate or cement companies. However, the landfill permit does not require diversion of arsenic for beneficial use. The actual sizing of the landfill is based on the assumption that 100 percent of the ash would go to the landfill. Based on the 10 years of data reviewed by Dr. Freedman, he is of the

opinion that there is no discernable decrease in the levels of arsenic or in Monitoring Well 11. Tr. 10-6-09, p. 217. Arsenic will continue to leech from the ash into the groundwater, and be transported through the groundwater into the river as well as from the seeps into the river as long as the unlined ponds are being utilized in the treatment process. Tr. 10-6-09 p. 222.

As for the design of the landfill, Dr. Freedman explained that because the permitted leakage rate from the landfill liner is 100 gallons per acre, per day, there is a potential for arsenic to move through the liner system as constructed, and that any leakage is not likely to be uniform, but would instead be finger-like plumes under the landfill rather than a homogeneously distributed plume, arising from the seams of the liner or a puncture. The seams of the proposed liner are not welded. Since any leakage would not be uniform, it is likely to exceed the groundwater standard for arsenic of 10 parts per billion. Tr. 10-6-09, pp. 231-233.

The landfill as constructed will retain most all of the leachate and runoff that entered the system, the majority of which will be collected in the wastewater collection pond and then pumped to unlined Ash Pond One. The landfill's leachate collection pond provides an opportunity for SCE&G to treat and remove the arsenic, otherwise, the landfill simply adds more arsenic to an already failing system. Tr. 10-6-09, pp. 233-234. Dr. Freedman described five well-established treatment technologies for removing arsenic from water: precipitation, membrane filtration, absorption, ion exchange and the use of permeability reactive barrier. Any one of these techniques could be used at Wateree Station to remove arsenic from the waste stream. EPA has evaluated these technologies and reports that precipitation is being

used at more than 50 sites, 19 of which achieved arsenic levels below 10 parts per billion. Tr. 10-6-09, p. 239. Taking the arsenic off-site to a hazardous waste landfill or for beneficial use would remove it from the waste stream at Wateree Station so that the arsenic never reaches the unlined ash ponds and into the groundwater and river. Tr. 10-6-09, p. 240.

At SCE&G's Request, DHEC agreed to a "Mixing Zone" in the groundwater below the site where contaminant concentrations are allowed to exceed otherwise applicable groundwater protection standards. Final Order and Decision, at 10. The mixing zone for groundwater is limited to the site property. The mixing zone cannot be extended out into the bottom of the Wateree River, it stops at the company boundary. Tr. 10-6-09, p. 244. The Mixing Zone must be considered in the context of the entire waste stream system, leachate from the landfill, scrubber blow-down, sluicing of the ash into Pond One, into Pond Two, and the outfall. Tr. 10-6-09, pp. 251-251. Dr. Freedman testified that no measures have been taken to minimize the addition of contaminants in the groundwater, but there are measures that could be taken exclusive of the parameters set by the Mixing Zone. These measures could include certain treatment technologies, disposition of arsenic containing ash off site. Dr. Freedman asserted that further measures could be taken to control the migration of arsenic in groundwater, such as a permeable reactive barrier, and sealing the seeps. Tr. 10-6-09, pp. 256-259. The seeps represent a point of discharge of arsenic to surface waters of the state according to Dr. Freedman. Tr. 10-6-09, p. 260. Further, he characterized the arsenic as dangerously toxic, mobile and persistent. Tr. 10-6-09 pp. 261-263. Dr. Freedman opined that the discharge of arsenic from the seeps

violates water quality standards because one seep contained 770 parts per billion arsenic and the other seep contained 1,900 parts per billion according to SCE&G's own results from the testing in September 2009. Both of the seeps were flowing over land as a surface water discharge, and the point at which that surface water enters the Wateree River, the concentration of arsenic is going to be higher than what is permissible for humans or freshwater aquatic organisms. Tr. 10-6-09, pp. 263-264.

Mass of arsenic is not considered in the NPDES permit. Tr. 10-7-09, p. 10. Dr. Freedman is of the opinion that a low flow of the groundwater and seeps compared to the outfall, but with a higher concentration of arsenic, could lead to a significant mass rate or pounds per day entering the river. Tr. 10-7-09, pp. 12-13. Poor data exists about arsenic concentration and the seeps, and it is not known what the total inventory of arsenic is in the ash ponds, but such information would be helpful in determining the predicted amount of arsenic that would be leeching and for how long. Tr. 10-7-09, pp. 18-19.

The levels of arsenic reported in the three seeps in the Mixing Zone Application were 348 parts per billion, 34.5 parts per billion and 604 parts per billion. Tr. 10-7-09, p. 21. The seep values received into the record as admissions of a party opponent, outlined in *Field and Laboratory Studies to Develop Effective Waste Management Strategies for the Wateree Station, Final Report, August 1997*; prepared by D. Rai, J.M. Zacchara, and H.T. Schaef, Battelle Northwest Division, or "1997 EPRI Report", were identical to the values listed in the SCE&G Mixing Zone Application. Tr. 10-7-09, pp144-145. According to the Mixing Zone Application, arsenic concentrations in fish tissue samples taken adjacent to the ash ponds in the

Wateree River were higher than samples taken upstream or downstream of the ash ponds. The fish sampled, in Dr. Freedman's opinion would not be safe to eat. Tr. 10-7-09 pp. 29-31. Further, Table Three of the Mixing Zone Application indicates a surface water sample taken at the ponds indicated 103 parts per billion for arsenic, but the narrative portion referencing the table indicates that no arsenic was detected in the surface water samples. Tr. 10-7-09, p. 33.

According to Dr. Freedman's interpretation of the groundwater contour map, groundwater appears to flow both toward the Wateree River, and south, southwest toward Mr. Hill's property. Tr. 10-7-09, p. 35. Dr. Freedman is of the opinion that a possibility exists that Mr. Hill's irrigation pumping could cause contaminants to flow off the SCE&G site, but a pumping test was not completed by the time of the hearing. No information has been provided by SCE&G or DHEC that addresses this possibility. Tr. 10-7-09, p. 37.

DHEC allows an arsenic concentration of 3000 parts per billion for three wells in the mixing zone and 50 parts per billion for the remaining wells. Monitoring Well 11 is the only well capturing the flow of the groundwater characteristics coming out of Pond One according to Dr. Freedman. Tr. 10-7-09, p. 40. Dr. Freedman is of the opinion that the data from Monitoring Well 11 indicates elevated arsenic levels in that portion of the groundwater, but to adequately characterize the amount of arsenic leaving the Ash Pond One, that additional monitoring wells would be helpful to find out whether or not the level of contamination found in Monitoring Well 11 is representative of the full face of pond one adjacent to the river. It is unknown

whether Monitoring Well 11 captures the maximum concentration of the arsenic plume moving toward the river. Tr. 10-7-09, p. 53.

According to the First Semi-Annual Monitoring Report 2006, tests of Monitoring Well 11 revealed Arsenic concentration of 5100 parts per billion. In 2007, that level was 4051 parts per billion, and in 2008, 2149 parts per billion. Tr. 10-7-09, pp. 55-56. Dr. Freedman is of the opinion that there is no conclusive trend in terms of arsenic levels in Monitoring Well 11 and the two data points from the seeps indicates that arsenic continues to leave ash pond one in significant concentrations. Dr. Freedman testified that water exiting the pond dike in the seeps and entering the Wateree River exceeds water quality standards. Further, the landfill and proposed NPDES permit will allow arsenic to leave the site through groundwater and seeps, exceeding water quality standards according to Dr. Freedman. Tr. 10-7-09, pp. 61-62.

Dr. Freedman testified that when determining appropriate limits of pollutants, including arsenic, the amount of flow of a receiving stream is important. Tr. 10-7-09, pp. 86-87. Dr. Freedman further opined that in order to arrive at an in stream calculation, all the sources of contaminants should be known. Tr. 10-7-09, p. 89. His estimate from the number of pounds of arsenic entering the river per day, was derived in part using his assumption of a discharge across the face of the ponds, but his estimate is sufficiently high to warrant attention. Tr. 10-7-09, p. 132.

Dr. Freedman contends that more seep data is needed to ascertain what the trend of arsenic concentration has been, and notwithstanding the seep values in 1997 of 348 and 604 parts per billion, they still represent a violation of surface water and

quality standards. Likewise, Dr. Freedman testified that the 2009 seep samples violate surface water quality standards. Tr. 10-7-09 p. 156.

Dr. Freedman is of the opinion that, in the context of the NPDES permit, there is no mixing zone allowed where the seeps enter the river and the concentrations have been measured in excess of the surface water quality standards. Tr. 10-7-09, p. 160. Further, at the point where that seep enters the water, it is a certainty that the concentrations are above the 40 parts per billion. Tr. 10-7-09, p. 165. The arsenic released from Pond One, via groundwater and the seeps, is upstream from the mixing zone designed to account for the outfall.

Mr. JC Hare collected samples from the seeps and monitoring wells on behalf of the Appellant. Mr. Hare is a Geologic and Environmental Consultant with Applied GeoSciences, Incorporated. Mr. Hare received a Bachelor of Science degree in Geology from the University of South Carolina in 1983, and a Masters of Science in Geology and Geophysics from the University of South Carolina in 1985. He has worked for the Department of the Interior US Geological Survey Water Resources Division, and worked as a consultant with a mining and environmental engineering firm doing geophysical and subsurface surveys. Tr. 10-6-09, p. 113. Mr. Hare collected aqueous grab samples on behalf of the Appellant from seeps below Ash Pond 1 at Wateree Station on September 9, 2009 as discussed above. The samples were collected from approximately midway down the containment berm in the vicinity of Monitoring Well 11, by holding the sample jar upstream to allow the water to flow into the container. SCE&G also took samples from those same seeps. As Mr. Hare explained at trial, the northern seep flowed into the floodplain, just to the east of

the containment berm and then it turned south where it joined with the southern seep and then they both moved in the direction of the Wateree River. Samples from the Monitoring Wells one, two, three, and eleven were also taken. Tr. 10-6-09, p. 128. Soil samples were taken from a drainage ditch along Highway 601 at Godspeed road, on the boundary of SCE&G's property and Highway 601. Tr. 10-6-09, p. 131. The ditch flows in a south westerly direction under Highway 601 from SCE&G's property onto Mr. Hill's property. Mr. Hare used the standard protocol for collection and shared the soil sample with SCE&G's consultant. Samples collected by Mr. Hare were sent to Test America for analysis of arsenic. Tr. 10-6-09 p. 133.

According to Mr. Hare's observations at the time of testing the seeps, the northern seep had created a channel that could not have been created overnight. Mr. Hare concluded that the seeps could have been there for six months to a year or more. Tr. 10-8-09, p. 286. Mr. Hare confirmed that the seep samples actually had very low turbidity. According to Shealy Environmental, the turbidity levels measured in the seep samples were actually lower than the turbidity measured from Monitoring Well 11. Tr. 10-8-09, p. 287.

According to Mr. Landreth, the berm was inspected on a yearly basis, and knowledge of the seeps is now a concern for SCE&G, which they plan to remedy. However, SCE&G has no formal plan to remediate groundwater contamination of arsenic at the Wateree plant. According to Mr. Landreth, the seeps tested in September 2009 did not exist in November 2008, and that required notification of DHEC was satisfied because Roger Hall of DHEC was on site at the time the seep samples were taken in September 2009. Tr. 10-8-09, pp. 136-139. In 1997 and 1998,

SCE&G reported seepage through the dike on the river side of Ash Pond 1, and DHEC was notified that a corrective action plan was underway, but no further evidence was presented at trial regarding any corrective action. Tr. 10-8-09, pp. 148-149. According to Mr. Landreth, SCE&G is in the process of trying to determine the source and the flow path of the seep, and then define the corrective action. Tr. 10-8-09, pp. 153-154.

Mr. Tom Effinger is a manager in SCANA'S corporate environmental services department, and supervises Mr. Younan. He is registered professional engineer and responsible for permitting, licensing, compliance, remediation, and hazardous waste management. Tr. 10-8-09, pp. 248-249. Mr. Effinger was present on September 9, 2009 when the seeps were observed and tested. Mr. Effinger video taped the sampling. Tr. 10-8-09, p. 252. According to Mr. Effinger, turbidity or a few particles of sediment can skew the result and raise arsenic readings. Tr. 10-8-09, p. 254. Mr. Effinger confirmed that seeps in the vicinity of Monitoring Well 11 were discovered as far back as 1998 as indicated by the hydrogeologic assessment report. Tr. 10-8-09, pp. 269-274.

Mr. Landreth confirmed that the expanded use of the added landfill, SCE&G will continue to use the ash ponds and add runoff waste water to it containing arsenic. Tr. 10-8-09, p. 165. Mr. Landreth confirmed that SCE&G does not know the inventory of arsenic in Ash Pond One. By his calculation, approximately 33,000 pounds per year of arsenic exists in the coal burned each year at Wateree Station. Tr. 10-8-09, pp. 144-145. The operation of the FGD Scrubber will add arsenic to the waste stream.

Ms. Melinda Vickers is an engineer and NPDES Permit writer in the industrial waste water section at DHEC. Ms. Vickers' is charged with developing the conditions of the NPDES Permit according to the NPDES regulation and other associated regulations. She reviews the application and other data to determine those conditions. Tr. 10-7-09, pp. 195-195. When setting the limit for arsenic, DHEC first determines what arsenic exists in the river already. When Ms. Vickers checked the data from the upstream DHEC monitoring station, she determined that no arsenic data had been collected. Tr. 10-7-09, p. 221. However, data from the Mixing Zone Application indicates that arsenic was detected in a surface water sample. Tr. 10-7-09, p. 33. According to Ms. Vickers, the NPDES program requires permits for the discharge of pollutants from any point source into waters of the State and into waters of the United States. The terms pollutant, point source, waters of the State and waters of the United State are defined in Section 122.2 of the NPDES Regulation. Point source means a discernable, confined and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stop, concentrated animal feeding operation, vessel or other floating craft form which pollutants are or may be discharged. Tr. 10-8-09, pp. 20-21.

When Ms. Vickers asked for input from the employees at DHEC responsible for groundwater, they indicated to Ms. Vickers that a mixing zone covered any groundwater issues under a consent agreement between the Department and SCE&G, and as such, Ms. Vickers did not need to include any additional conditions in the NPDES Permit other than the condition requiring the groundwater monitoring plan associated with the landfill pond to be constructed. Tr. 10-8-09, p. 36.

Ms. Vickers testified that it was her job to establish permit conditions that are protective of water quality. Tr. 10-8-09, p. 50. Ms. Vickers had no background data on arsenic to use when she determined effluent limits for arsenic. Tr. 10-8-09, p. 55. Ms. Vickers received no information from the applicant SCE&G regarding arsenic found in the seeps, and as such no data was included in her calculations. However, Ms. Vickers asserted that if she had the data from the seeps, she would consider it. Tr. 10-8-09, p. 61. Ms. Vickers conceded that a seep sample with 1,900 parts per billion would exceed the limit set by the application, but that dilution of the receiving stream must be considered. Ms. Vickers said this could be calculated but that such a calculation was not made. Tr. 10-8-09, p. 62. Ms. Vickers testified that she was not aware of the seeps. Tr. 10-8-09, p. 65. The amount of arsenic present in the river at outfall 03(a) would have affected Ms. Vickers' calculation, but Ms. Vickers had no data to determine if arsenic already existed in the river. Tr. 10-8-09, p. 69. According to Ms. Vickers, if she were writing the permit today, she would need to consider arsenic concentrations in the seeps discovered by the Appellant. Tr. 10-8-09, p. 73. In discharging her duties at DHEC, Ms. Vickers asserted that she would do what is necessary to correct it if she has the opportunity. Tr. 10-8-09, p. 75.

Mr. Jean Claude Younan is an associate environmental engineer with SCANA, with a background in civil engineering and business management. Mr. Younan works for the Environmental Services Department, and the project manager for the solid waste landfill construction. Tr. 10-8-09, pp. 179-181.

According to Mr. Younan, a ridge in the middle of the landfill splits the groundwater, half flows in the direction of the plant and half flows in the direction of

Highway 601. The runoff pond adjacent to the landfill is designed to collect runoff from the gypsum, fly ash, bottom ash and the leachate that is collected in the leachate collection system above the liner of the landfill. Tr. 10-8-09, pp. 187-188. The liner is a geo-synthetic clay liner, a manmade product that has bentonite in the middle between two fabrics and a plastic membrane on top of it. The bentonite is a clay material, naturally occurring that is mined with low permeability. Tr. 10-8-09, pp. 202-203. A clay layer is beneath the bentonite liner. Tr. 10-8-09, p. 205.

The bentonite clay liner cannot be welded because they have bentonite clay material sandwiched in them. The weakest link in the bentonite liner is the seam. Tr. 10-8-09, pp. 216-217. The landfill has monitoring wells in anticipation that some pollutants may pass through it and into the groundwater. Tr. 10-8-09, p. 218. Ultimately, the leachate containing contaminants, gets pumped from the leachate collection pond to Ash Pond One. Tr. 10-8-09, p. 220. Mr. Younan confirmed that landfill has been sized as if all of the bottom ash, fly ash and gypsum and other approved wastes will be deposited into the landfill. Tr. 10-8-09, p. 222. SCE&G consultants originally mapped wetlands that are within the footprint of the proposed landfill. Tr. 10-8-09, p. 230. The consultants also found archeological features of a slave community eligible for the National Register of Historic Places, but once completed, the footprint of the landfill would disturb this site as well. Tr. 10-8-09, p. 237.

A ridge exists in the middle of the proposed landfill, and Mr. Younan conceded that the movement of groundwater was altered only as far as the soil has been excavated; below the level of excavation, the groundwater will continue to flow

where it flowed before, toward Appellant's property and Highway 601. Tr: 10-8-09, pp. 238-239.

1. WHERE A "MIXING ZONE" CONSENT ORDER WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO GROUNDWATER BELOW SCE&G'S LEAKING COAL ASH PONDS AT CONCENTRATIONS 300 TIMES THE WATER QUALITY STANDARD, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.

The pollution containment and control system proposed by SCE&G and approved by DHEC and the ALC for managing the pollutants removed from the coal combustion process at the Wateree Station- most critically toxic arsenic- is simply designed to fail. So long as the arsenic-contaminated liquid "leachate" accumulated from the new landfill is routed through the unlined and leaking coal ash ponds before it gets to the permitted NPDES discharge pipe, this permit which solely addresses arsenic concentration as monitored at that discharge pipe, is designed to fail. If SCE&G proposed a wastewater treatment system with a gaping hole in the collection pipe which diverted pollution into the river before it flowed to the legal monitoring point, no responsible regulator would permit such a system. Just such a flawed and leaking system here allows high concentrations of arsenic to circumvent the permitted discharge outfall under the permits approved by DHEC and the ALC. Such an intolerable and unlawful result relies on a 2001 "Mixing Zone" Consent Agreement between DHEC and SCE&G which the Administrative Law Judge refused to consider in this case. Where the design and performance of the unlined and leaking coal ash ponds are an essential element in the approved landfill and NPDES wastewater systems, the ALC erred in refusing to consider the leaking ponds in her review of the

permits and erred, further, in failing to deny the permits or require effective remedial measures to correct these design defects. A proposed pollution control system that is designed to fail must be rejected if the promise of protecting ground and surface water quality is to be honored.

In her Final Order and Decision the Administrative Law Judge acknowledges that "various contaminants, including arsenic" have been detected "in groundwater in the vicinity of the ash ponds," Final Order and Decision at 10, and that DHEC has agreed to waive SCE&G's compliance with otherwise applicable water quality standards for such contaminants including arsenic. "The Consent Agreement established a groundwater mixing zone, which is an area where contaminants may exceed otherwise applicable groundwater protection standards, and set contaminant levels specific to the mixing zone." Id.

The undisputed record in this case establishes that by that Consent Agreement DHEC allows concentrations of arsenic in groundwater at the facility as high as 3,000 parts per billion (ppb) (or the equivalent expressed as micrograms per liter (ug/l)), without any corrective action, as compared to the groundwater protection standard of 10 ppb or ug/l, R. 61-68, Water Classifications & Standards, and the NPDES end of pipe discharge permit limit for the facility of 40 ppb daily maximum. Final Order and Decision at 11. As Clemson Environmental Engineering Professor Dr. David Freedman testified from his review of SCE&G and DHEC records, monitored arsenic concentration levels in the single monitoring well, MW-11, located between the leaking ash ponds and the Wateree River have exhibited arsenic concentrations as high as 5100 ppb in 2006, Tr. 10-7-09, pp. 55-56, with no discernible trend of

reduced concentrations over the years, with a groundwater flow path directly to the Wateree River, and with no measures required or taken to minimize the discharge of additional arsenic to groundwater or to clean up or remedy the ongoing groundwater contamination. Tr. 10-6-09, pp. 256-259. In the face of such evidence of arsenic discharges to groundwater below the ash ponds which circumvent the permitted NPDES discharge pipe and ongoing violations of groundwater quality protection standards condoned by DHEC, the ALJ was summarily dismissive:

Arsenic already present in the shallow groundwater at Wateree Station is being addressed by the 2001 Consent Agreement. Any challenge to the terms of the 2001 consent Agreement is not properly before this Court.

Final Order and Decision at 11. Because such a conclusion reflects a failure by the ALC to decide the issues properly before her and condones facility permits which will continue unpermitted discharges of arsenic in violation of water quality standards the decision of the ALC must be reversed.

A review of the DHEC "mixing zone" regulation and the evidence in this case establishes that DHEC has impermissibly allowed SCE&G a permanent waiver of water quality requirements for a dangerously toxic pollutant- arsenic- which will continue to migrate offsite to the Wateree River, with no mandate to control, mitigate or remediate this unlawful pollution discharge.

Fundamental to qualifications for relaxation of water quality standards in a groundwater mixing zone under DHEC regulations are the express requirements that the mixing zone be limited to facility property; that the contaminants in question are not dangerously toxic, mobile, or persistent; and that measures will be taken to minimize additional contamination and control the migration of the contaminated

groundwater; in short, that a clean up plan is in place and the contamination will not continue indefinitely. In addition, the mixing zone regulation expressly requires a demonstration by the polluter that future groundwater withdrawals- such as Heath Hill's nearby irrigations wells will not draw pollutants offsite.

11. Mixing zones for ground waters may be allowed by the Department. In order to ensure the maintenance and protection of the uses of the waters of the State and in compliance with Section D of this regulation, any mixing zone granted by the Department shall be determined on an individual basis by the Department as prescribed below.

a. The numeric standards for Class GB ground water, Section H.9., are applicable unless a mixing zone solely within the bounds of the property, setting forth certain conditions, is granted by the Department. Such a mixing zone shall be granted upon satisfactory demonstration to the Department that:

(1) Reasonable measures have been taken or binding commitments are made to minimize the addition of contaminants to ground water and/or control the migration of contaminants in ground water;

(2) The ground water in question is confined to a shallow geologic unit which has little or no potential of being an Underground Source of Drinking Water, and discharges or will discharge to surface waters without contravening the surface water standards set forth in this regulation;

(3) The contaminant(s) in question occurs within the bounds of the property, and there is minimum possibility for ground water withdrawals (present or future) to create drawdown such that contaminants would flow off-site; and

(4) The contaminants or combination of contaminants in question are not dangerously toxic, mobile, or persistent.

DHEC Regulation 61-68C. The evidence in this record demonstrates that SCE&G fails to meet each of these essential regulatory requirements.

As the undisputed expert testimony of Dr. David Freedman demonstrates, the contaminant in question- arsenic- is undeniably a dangerous toxin- a legendary poison of "Arsenic and Old Lace" infamy and a known human carcinogen. Its mobility from the ash ponds toward the river is well documented at this site; and, as an elemental metal it is persistent in the environment, concentrating in river sediments and accumulating in aquatic organisms including fish consumed by sport and subsistence fishermen from the adjacent Wateree River. Tr. 10-7-09, p. 31. Moreover, the arsenic contamination is not confined to SCE&G's property boundary, but is moving below Monitoring Well 11 located on the ash pond dike offsite into the Wateree River. Despite the poor characterization of the arsenic inventory in the ash ponds and the inadequate single downgradient monitoring well which limits understanding of the full dimensions of the arsenic groundwater plume, there is no serious dispute that the high measured arsenic concentrations in MW-11 mean that arsenic pollution is leaving the site and entering the river. Tr. 10-7-09, pp. 61-62. Indeed, as will be discussed more fully below, historic and recent documentation of direct flows from leaks or "seeps" through the ash pond dike establish that high arsenic concentrations are leaving the site groundwater in a direct flow of surface water at levels- 1900 ppb- far exceeding surface water standards of 10 ppb. No groundwater "mixing zone" agreement can permissibly condone this on-going violation of surface water quality standards by SCE&G beyond its property boundary in the Wateree River. Human contact with such highly contaminated surface water

would be dangerous beyond doubt, yet we assure the public that the Wateree River is safe for human contact and use and that the fish that swim in that arsenic contaminated water are safe to eat.

Particularly telling is the absence of any mandate by DHEC to SCE&G to end the arsenic pollution of the ground and surface water at the Wateree Station or to clean up the contaminated coal ash ponds and groundwater below. Implicit in the allowance of a groundwater mixing zone is the promise that pollution waiver will end and the damage will be remedied. Here, to the contrary, the waiver of compliance is without limitation and apparently permanent. While the ALJ notes in her decision that SCE&G has diverted coal ash from the leaking ponds for sale offsite, Final Order and Decision at 11, nothing in the consent agreement approving the mixing zone mandates or binds SCE&G to any mitigation or clean-up plan or even to continue such voluntary offsite ash diversion. Tr. 10-8-09, p. 164. Notwithstanding any such voluntary ash diversions the concentrations of arsenic documented in groundwater below the ponds show no downward trend. Tr. 10-6-09, p. 217. Indeed, the high arsenic concentrations measured in the flow from the seeps demonstrate that the ponds and groundwater continue to flow high levels of contamination offsite.

The omission of any mandate to mitigate or remedy the continuing arsenic discharges to ground and surface waters is at odds with the mixing zone regulatory requirement to "minimize the addition of contaminants to ground water and/or control the migration of contaminants in ground water." R. 61-68C(11)(a)(1). SCE&G has been required to do neither, despite readily available measures to do both and stop arsenic water pollution. As Dr. Freedman testified such measures include various

treatment technologies for arsenic removal from wastewater, mandatory disposition of arsenic containing ash offsite and the control of the migration of arsenic in groundwater by the use of a permeable reactive barrier to intercept the arsenic plume as it flows between the pond and the river, as well as sealing the seeps in the pond dike which have allowed arsenic to flow into the river. Tr. 10-6-09, pp. 256-259. Such measures are far less direct than simply retiring the leaking coal ash ponds and replacing them with an effective engineered disposal facility- much as SCE&G is doing with the new lined landfill. As long as the arsenic-containing wastewater is routed through the weak and leaking link of the old unlined ponds the "addition of contaminants to groundwater will not be minimized" as required.

The standard of review for a court reviewing the decision of the ALC is set forth in the Administrative Procedures Act. S.C. Code Ann. § 1-23-610 (Supp. 2009). "The review of the administrative law judge's order must be confined to the record." § 1-23-610 (B). Under section 1-23-610 (B), this court may affirm or remand the case for further proceedings. Additionally, this court may reverse or modify the decision of the ALC if its findings, conclusions, or decisions are: (a) in violation of constitutional or statutory provisions; (b) in excess of the statutory authority of the agency; (c) made upon unlawful procedure; (d) affected by other error of law; (e) clearly erroneous in view of the reliable, probative, and substantial evidence on the whole record; or (f) arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion. §1-23-610 (B). The decision of the ALC should not be overturned unless it is unsupported by substantial evidence or controlled by some error of law. "Substantial evidence, when

considering the record as a whole, would allow reasonable minds to reach the same conclusion as the [ALC] and is more than a mere scintilla of evidence." Original Blue Ribbon Taxi Corp. v. S.C. Dept. of Motor Vehicles, 380 S.C. 600, 604, 670 S.E.2d 674, 676 (Ct. App. 2008).

In the recent instructive case of *Sierra Club v. South Carolina Department of Health and Environmental Control and Chem-Nuclear Systems, LLC*, Opinion Number 4654 (S.C.Ct.App. 3-10-2010), also involving a challenge to a DHEC permit renewal for a landfill with a history of groundwater contamination, this court determined that the ALC failed to decide whether the landfill was in compliance with a number of DHEC regulatory requirements in light of the ALC's findings of fact. The court remanded the matter to the ALC to consider these regulatory requirements in light of the factual record:

The Sierra Club expressed serious concern regarding several of Chem-Nuclear's vaults and trenches that have no cover or roof such that rain can fall directly into the vault. The ALC also noted the rainfall problem and stated: "The problems caused by rainfall are compounded . . . and [r]ainfall that accumulates in the trenches eventually percolates into the soil, and drives the groundwater movement that is carrying tritium and other radioactive materials into Mary's Branch Creek." We also remand this issue to the ALC with specific instructions to apply its factual findings to the technical requirements of section 7.23.6. We find section 7.23.6 imposes additional compliance requirements for Chem-Nuclear. Without a specific ruling, we cannot determine whether the ALC erred. Accordingly, we remand the issue to the ALC to give it opportunity to rule on whether Chem-Nuclear was in compliance with section 7.23.6.

Id. Slip Op. at p. 8. The ALC's decision here is similarly deficient and should be overturned.

Of course the 2001 Consent Agreement between DHEC and SCE&G is not binding on Heath Hill or on the ALC and cannot absolve SCE&G of failure to

comply with regulatory requirements applicable to the proper design and operation of a landfill or an NPDES wastewater treatment and discharge system.

In the case of *Leventis v. South Carolina DHEC*, 340 S.C. 118, 530 S.E.2d 643 (Ct.App. 2000), another challenge to a DHEC landfill permit, the court rejected the notion that an ex parte agreement between DHEC and the landfill was binding on the third party challengers, or that it relieved the landfill of its burden of proof.

Although DHEC issued the final permit to Laidlaw after completing the procedures required for permit issuance, including issuing a draft permit, giving public notice, affording an opportunity for public comment, and preparing responses to oral and written comments received, DHEC then effectively circumvented the permitting procedures by modifying the final permit through ex parte negotiations with Laidlaw. DHEC's ex parte agreement with Laidlaw negatively impacted Sierra Club's due process rights, undermined the spirit of the APA whose statutory framework is designed to ensure notice to and participation by all interested parties, and called into question the fairness of the permitting procedures. Consequently, we limit our holding to the facts of this case because absent the exhaustive twenty-four day hearing and meaningful review by the DHEC Board, which Sierra Club concedes cured two of Sierra Club's three major concerns, DHEC's and Laidlaw's actions might well require reversal

Id. 340 S.C. 118 at 135. Similarly, to bind Heath Hill or any other member of the public by an ex parte consent agreement between DHEC and SCE&G would threaten Mr. Hill's and the public's right to due process.

As a matter of law the SC Pollution Control Act prohibits the discharges of pollution into the environment without a duly issued DHEC permit.

It shall be unlawful for any person, directly or indirectly, to throw, drain, run, allow to seep or otherwise discharge into the environment of the State organic or inorganic matter, including sewage, industrial wastes and other wastes, except as in compliance with a permit issued by the Department.

SC Code Ann. § 48-1-90 (a). Nothing in the proposed landfill or NPDES permits

here purport to account for or authorize the unpermitted discharge of arsenic into groundwater and surface water documented in this record.

DHEC's National Pollutant Discharge Elimination System (NPDES) Regulations expressly require DHEC to impose such permit conditions as are necessary to assure compliance with water quality standards:

In addition to conditions required in all permits (sections 122.41 and 122.42), the Department shall establish conditions, as required on a case-by-case basis, to provide for and assure compliance with all applicable requirements of CWA and PCA and regulations. These shall include conditions under section 122.46 (duration of permits), section 122.47(a) (schedules of compliance), and section 122.48 (monitoring).

R. 61-9.122.43(a). Establishing permit conditions. The ALC erred in failing to require DHEC to adhere to this regulatory duty to remedy and correct the discharges of arsenic to the environment as conditions of the landfill and NPDES permits.

The DHEC NPDES regulation further mandates that effluent limitations, standards and prohibitions shall be established for each outfall or discharge point at the facility- insuring that no point of discharge to the environment escapes control such as the unpermitted and uncontrolled ground and surface water leaks here.

All permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided under section 122.44(k) (BMPs where limitations are infeasible) and paragraph (h) of this section (limitations on internal waste streams).

R.61.9.122.45(a). "Calculating NPDES permit conditions. Outfalls and discharge points."

Finally, DHEC's NPDES regulation expressly contemplates and regulates the exceptional discharges from a permitted facility under accident or extraordinary and

temporary conditions deemed excusable "upsets" or "bypasses." Neither provision authorizes or condones the chronic and uncontrolled discharges documented here. An excusable "upset" is narrowly allowed where there occurs "an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation." R. 61-9.122.41(n). The discharges here are neither temporary nor unintentional; and, indeed, are caused by either "improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation." In short, the discharges here are not excusable as upset. Alternatively, these discharges may be deemed prohibited "bypasses" defined as "the intentional diversion of waste streams

from any portion of a treatment facility." R. 61-9.122.41(m)(1)(I). Bypass is expressly prohibited except in the narrowly defined circumstances- clearly not present here- where the bypass "was unavoidable to prevent loss of life, personal injury, or severe property damage;" and "(T)here were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime." R. 61-9.122.41(m)(4).

The uncontrolled, unpermitted, and prohibited discharges of high concentrations of toxic arsenic to ground and surface waters from SCE&G's Wateree coal plant contrary to DHEC's own regulations will continue unabated under the

permits approved by DHEC. The decision of the ALC which fails to address and remedy these discharges should be overturned.

2. WHERE "SEEPS" OR LEAKS IN SCE&G'S COAL ASH POND DIKE WILL ALLOW CONTINUED DISCHARGE OF TOXIC ARSENIC TO THE WATEREE RIVER EXCEEDING WATER QUALITY STANDARDS, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.

As early as 1997 leaks or "seeps" through the coal ash pond dike were identified and documented containing high concentrations of arsenic flowing into the adjacent Wateree River. The levels of arsenic reported in the three seeps in the later Mixing Zone Application were 348 parts per billion, 34.5 parts per billion and 604 parts per billion. Tr. 10-7-09, p. 21. The seep values outlined in a 1997 report to SCE&G, "Field and Laboratory Studies to Develop Effective Waste management Strategies for the Wateree Station," which should have been received into evidence as an admission of a party opponent or its agent, Tr. 10-7-09, p. 152; Pet's. Ex. 3 for identification, were identical to the values listed in the Mixing Zone Application Tr. 10-7-09, pp144-145. In addition, according to the Mixing Zone Application, arsenic concentrations in fish tissue samples taken from the river adjacent to the ash ponds were higher than samples taken upstream or downstream of the ash ponds. The fish sampled, in Dr. Freedman's opinion would not be safe to eat. Tr. 10-7-09 pp. 29-31. Further, Table Three of the Mixing Zone Application indicates a surface water sample taken from the river at the ponds indicated 103 parts per billion for arsenic, but the narrative portion referencing the table indicates that no arsenic was detected in the surface water samples. Tr. 10-7-09, p. 33. While apparently neglected by both SCE&G and DHEC such leaks or seeps through the pond dike are recurring failures of the waste containment system.

On the eve of hearing in this case before the ALC, environmental consultants for the Petitioner identified and sampled two active seeps from the coal ash pond dike with high concentrations of arsenic flowing directly into the Wateree River. Dr. Freedman established that these seeps represent a point of discharge of arsenic to surface waters of the state. Tr. 10-6-09, p. 260. Further, he characterized the arsenic as dangerously toxic, mobile and persistent. Tr. 10-6-09 pp. 261-263. Dr. Freedman is of the opinion that the discharge of arsenic from the seeps violates water quality standards because one seep contained 770 parts per billion arsenic and the other seep contained 1,900 parts per billion according to SCE&G's own samples of the seep discharge and laboratory testing of those samples results in September 2009. Both of the seeps were flowing over land as a surface water discharge, and the point at which that surface water enters the Wateree River, the concentration of arsenic is going to be higher than what is permissible for humans or freshwater aquatic organisms. Tr. 10-6-09, pp. 263-264.

In the face of this damning evidence, acknowledged in her Final Order and Decision, p. 13, the Administrative law Judge concluded dismissively that such discharges were not germane to these permits:

Petitioner contends that the seeps discovered in monitoring well 11 are an unpermitted outfall, outside the mixing zone and in violation of Regulation 61-68 governing water classifications and standards. DHEC is charged with the responsibility of enforcing any violation of Regulation 61-68; that issue is outside the scope of the Court's review of the two permits issued by DHEC in this case.

Final Order and Decision, p. 18. To the contrary, where the coals ash ponds are integral to the design and proper functioning of the landfill leachate management and

waste discharge system, the failure of the pond dike design to properly contain the arsenic wastes and the discharge of such wastes through the seeps to the Wateree River is a fatal flaw in the proposed landfill and NPDES permits.

As argued above, discharges from the ash ponds other than through the permitted and monitored discharge outfall represent unpermitted discharges; unauthorized bypasses or upset discharges, and a failure of proper facility design and maintenance. DHEC is under a duty to impose such permit conditions as necessary to assure that water quality standards are protected in the operation of the proposed facility. The ALC erred in failing to determine that such facts constitute violations of express DHEC regulatory requirements essential to the proposed permits.

All permit effluent limitations, standards and prohibitions shall be established for each outfall or discharge point of the permitted facility, except as otherwise provided under section 122.44(k) (BMPs where limitations are infeasible) and paragraph (h) of this section (limitations on internal waste streams). R.61-9.122.45(a). "Calculating NPDES permit conditions. Outfalls and discharge points."

An excusable "upset" is narrowly allowed where there occurs

an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation." R. 61-9.122.41(n). The discharges here are neither temporary nor unintentional; and, indeed, are caused by either "improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation." In short, the discharges here are not excusable as upset. Alternatively, these discharges may be deemed prohibited "bypasses" defined as "the intentional diversion of waste streams from any portion of a treatment facility.

R. 61-9.122.41(m)(1)(I). Bypass is expressly prohibited except in the narrowly

defined circumstances- clearly not present here- where the bypass "was unavoidable to prevent loss of life, personal injury, or severe property damage;" and "(T)here were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime." R. 61-9.122.41(m)(4).

DHEC's National Pollutant Discharge Elimination System (NPDES) Regulations expressly require DHEC to impose such permit conditions as are necessary to assure compliance with water quality standards:

In addition to conditions required in all permits (sections 122.41 and 122.42), the Department shall establish conditions, as required on a case-by-case basis, to provide for and assure compliance with all applicable requirements of CWA and PCA and regulations. These shall include conditions under section 122.46 (duration of permits), section 122.47(a) (schedules of compliance), and section 122.48 (monitoring).

R. 61-9.122.43(a). Establishing permit conditions. The ALC erred in failing to require DHEC and SCE&G to adhere to this regulatory duty to remedy and correct the discharges of arsenic to the environment through the pond dike seeps as conditions of the landfill and NPDES permits; or in the absence of such conditions, to deny such permits. *Sierra Club v. South Carolina Department of Health and Environmental Control and Chem-Nuclear Systems, LLC*, 4654 (S.C.Ct.App. 3-10-2010).

3. WHERE SCE&G'S LANDFILL "LEACHATE" LIQUID CONTAMINATED WITH TOXIC ARSENIC WILL BE ROUTED TO LEAKING UNLINED COAL ASH PONDS WITHOUT PROPER TREATMENT, DHEC PERMITS WHICH FAIL TO CONTROL THIS POLLUTION MUST BE DENIED.

As described by Clemson Environmental Engineering Professor Dr. David Freedman, contaminated landfill liquid or "leachate" and rainfall runoff associated with the landfill will be collected and then that wastewater containing arsenic will be pumped from the landfill runoff pond to the leaking coal Ash Pond One. Tr. 10-6-09 pp. 188-189. Both fly ash and bottom ash will be permitted for disposal in the proposed landfill, not just the flue gas desulfurization scrubber solids. Tr. 10-6-09 p. 189. Ash ponds one and two are the final steps in the sequence of waste treatment system before the outfall of pond two. These ponds are unlined, and Dr. Freedman observed piles of ash in ash pond one during his visit, as well as significant photosynthetic growth on the top of ash pond one. This photosynthetic growth indicates that a more mobile form of arsenic exists in ash pond one according to Dr. Freedman. Upon review and consideration of the permit application and associated documents, including the Semi-Annual Monitoring Reports, Dr. Freedman is of the opinion that groundwater flows beneath the ash ponds and into the Wateree River carrying with it contaminants such as arsenic, a known human carcinogen. Arsenic's known toxicity led the EPA to reevaluate its health effects and ultimately revised the maximum contaminate level from 50 parts per billion to 10 parts per billion. Tr. 10-6-09 pp. 190-192. The landfill as constructed will retain most all of the leachate and runoff that entered the system, the majority of which will be collected in the wastewater collection pond and then pumped to unlined ash pond one. However, Dr. Freedman established that the landfill's leachate collection pond provides an opportunity for SCE&G to treat and remove the arsenic; otherwise, the landfill will simply add more arsenic to an already failing system. Tr. 10-6-09, pp. 233-234.

Dr. Freedman described five well-established treatment technologies for removing arsenic from water: precipitation, membrane filtration, absorption, ion exchange and the use of a permeable reactive barrier. Any one of these techniques could be used at Wateree Station to remove arsenic from the waste stream. EPA has evaluated these technologies and reports that precipitation is being used at more than 50 sites, 19 of which achieved arsenic levels below 10 parts per billion. Tr. 10-6-09, p. 239. Taking the arsenic off-site to a hazardous waste landfill or for beneficial use would remove it from the waste stream at Wateree Station so that the arsenic never reaches the unlined ash ponds and into the groundwater and river. Tr. 10-6-09, p. 240.

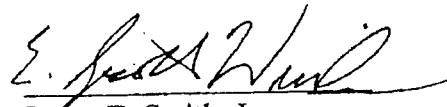
Where the evidence in this record demonstrates conclusively that arsenic contaminated waste will be discharged from the proposed Wateree facility at concentrations well in excess of water quality standards through the uncontrolled groundwater and surface seep pathways without adequate arsenic removal treatment, the ALC erred in approving these permits which were not conditioned to require the effective use of one or more of the established arsenic waste treatment technologies. R. 61-9.122.43(a).

CONCLUSION

For the foregoing reasons, Appellant Heath Hill respectfully urges the court to reverse the Final Order and Decision of the Administrative Law Court and to deny the permits sought by Respondent SCE&G for an industrial solid waste landfill and a wastewater discharge or NPDES permit allowing the discharge of arsenic

contamination to groundwater and surface water from SCE&G's Wateree coal station.

March 15, 2010



James E. Smith, Jr.

E. Scott Winburn

James E. Smith, Jr., P.A.

1422 Laurel Street

Columbia, South Carolina 29201

(803) 933-9801

Robert Guild

314 Pall Mall

Columbia, South Carolina 29201

(803) 252 1419

ATTORNEYS FOR

APPELLANT

HEATH HILL

THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM THE ADMINISTRATIVE LAW COURT
Carolyn C. Matthews, Administrative Law Judge

Docket No. 08-ALJ-07-0183-CC

Heath Hill,

Appellant,

v.

South Carolina Department of Health and
Environmental Control and SCE&G,

Respondents.

APPELLANT'S
DSIGNATION OF MATTER
TO BE INCLUDED IN THE RECORD ON APPEAL

Appellant proposes the following matter be included in the record on appeal and counsel certifies that this designation contains no matter that is irrelevant to this appeal:

1. Final Order and Decision, Docket No. 08-ALJ-07-0183-CC (December 3, 2009).
2. Transcript of Testimony and Proceedings in ALC Docket No. 08-ALJ-07-0183-CC:
THE CASE

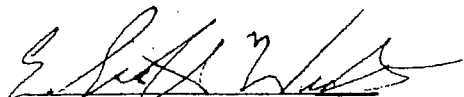
Tr. October 6, 2009, pp.48-53; Tr. October 6, 2009, pp.56-57; Tr. October 6, 2009, pp.157-158; Tr. October 6, 2009, pp 159-160; Tr. October 6, 2009, p. 211; Tr. October 6, 2009, p. 160; Tr. October 8, 2009, p. 23; Tr. October 8, 2009, p. 96; Tr. October 8, 2009, p. 98; Tr. October 8, 2009, pp. 102-103; Tr. October 8, 2009, pp. 105-106; Tr. October 8, 2009, p. 107; Tr. October 8, 2009, p. 112; Tr. October 8, 2009, p. 124-125; Tr. October 8, 2009, p. 164; Tr. October 8, 2009, p. 165; Tr. October 8, 2009, p. 168; Tr. October 8, 2009, p. 189; Tr. October 8, 2009, p. 198; Tr. October 8, 2009 p. 189; Tr. October 8, 2009, p. 219; Tr. October 6, 2009, p. 161; Tr. October 6, 2009, pp. 168-169; Tr. October 6, 2009, p. 171; Tr. October 6, 2009, pp. 180-183; Tr. October 6, 2009, pp. 188-189; Tr. October 6, 2009, pp. 190-192; Tr. October 6, 2009 pp. 194-196; Tr. October 6, 2009, p. 198; Tr. October 6, 2009 pp. 203-204; Tr. October 6, 2009 , p. 211; . Tr. October 6, 2009, pp. 212-213; Tr. October 6, 2009, p. 213; Tr. October 6, 2009, p. 217; Tr. October 6, 2009, p. 222; Tr. Tr. October 6, 2009, pp. 231-233; Tr. October 6, 2009, pp. 233-234; Tr. October 6, 2009, p. 239; Tr. October 6, 2009, p. 240;

Tr. October 6, 2009, p. 244; Tr. October 6, 2009, pp. 251; Tr. October 6, 2009, pp. 256-259; Tr. October 6, 2009, p. 260; Tr. October 6, 2009, pp. 261-263; Tr. October 6, 2009, pp. 263-264; Tr. October 7, 2009, p. 10; Tr. October 7, 2009, pp. 12-13; Tr. October 7, 2009, pp. 18-19; Tr. October 7, 2009, p. 21; Tr. October 7, 2009, pp. 144-145; Tr. October 7, 2009, pp. 29-31; Tr. October 7, 2009, p. 33; Tr. October 7, 2009, p. 35; Tr. October 7, 2009, p. 37; Tr. October 7, 2009, p. 40; Tr. October 7, 2009, p. 53; Tr. October 7, 2009, pp. 55-56; Tr. October 7, 2009, pp. 61-62; Tr. October 7, 2009, pp. 86-87; Tr. October 7, 2009, p. 89; Tr. October 7, 2009, p. 132; Tr. October 7, 2009, p. 156; Tr. October 7, 2009, p. 160; Tr. October 7, 2009, p. 165; Tr. October 6, 2009, p. 113; Tr. October 6, 2009, p. 128; Tr. October 6, 2009, p. 131; Tr. October 6, 2009, p. 133; Tr. October 8, 2009, p. 286; Tr. October 8, 2009, p. 287; Tr. October 8, 2009, pp. 136-139; Tr. October 8, 2009, pp. 148-149; Tr. October 8, 2009, pp. 153-154; Tr. October 8, 2009, pp. 248-249; Tr. October 8, 2009, p. 252; Tr. October 8, 2009, p. 254; Tr. October 8, 2009, pp. 269-274; Tr. October 8, 2009, p. 165; Tr. October 8, 2009, pp. 144-145; Tr. October 7, 2009, p. 195; Tr. October 7, 2009, p. 221; Tr. October 7, 2009, p. 33; Tr. October 8, 2009, pp. 20-21; Tr. October 8, 2009, p. 36; Tr. October 8, 2009, p. 50; Tr. October 8, 2009, p. 55; Tr. October 8, 2009, p. 61; Tr. October 8, 2009, p. 62; Tr. October 8, 2009, p. 65; Tr. October 8, 2009, p. 69; Tr. October 8, 2009, p. 73; Tr. October 8, 2009, p. 75; Tr. October 8, 2009, pp. 179-181; Tr. October 8, 2009, pp. 187-188. Tr. October 8, 2009, pp. 202-203; Tr. October 8, 2009, p. 205; Tr. October 8, 2009, pp. 216-217; Tr. October 8, 2009, p. 218; Tr. October 8, 2009, p. 220; Tr. October 8, 2009, p. 222; Tr. October 8, 2009, p. 230; Tr. October 8, 2009, p. 237; Tr. October 8, 2009, pp. 238-239; Tr. October 7, 2009, pp. 55-56; Tr. October 6, 2009, pp. 256-259; Tr. October 7, 2009, p. 31; Tr. October 7, 2009, pp. 61-62; Tr. October 8, 2009, p. 164; Tr. October 6, 2009, p. 217; Tr. October 6, 2009, pp. 256-259; Tr. October 7, 2009, p. 21; Tr. October 7, 2009, p. 152; Tr. October 7, 2009, pp. 144-145; Tr. October 7, 2009, pp. 29-31; Tr. October 7, 2009, p. 33; Tr. October 6, 2009, p. 260; Tr. October 6, 2009, pp. 261-263; Tr. October 6, 2009, pp. 263-264. Tr. October 6, 2009, pp. 188-189; Tr. October 6, 2009, pp. 190-192; Tr. October 6, 2009, pp. 233-234; Tr. October 6, 2009, p. 239; Tr. October 6, 2009, p. 240.

3. Exhibits in ALC Docket No. 08-ALJ-07-0183-CC:
Petitioner's Exhibits 1, 2, 3, 4, 6, 11, 17, 37

4. Notice of Appeal.

March 15, 2010



James E. Smith, Jr.
E. Scott Winburn
1422 Laurel Street
Columbia, South Carolina 29201
(803) 933-9801

Robert Guild
314 Pall Mall
Columbia, South Carolina 29201

(803) 252 1419
ATTORNEYS FOR APPELLANT
HEATH HILL

THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM THE ADMINISTRATIVE LAW COURT
Carolyn C. Matthews, Administrative Law Judge

Docket No. 08-ALJ-07-0183-CC
Docket No. 08-ALJ-07-0534-CC

Heath Hill,

Appellant,

v.

South Carolina Department of
Health and Environmental Control
and South Carolina Electric and Gas
Company,

Respondents.

PROOF OF SERVICE

I certify that I have served the attached Initial Brief of Appellant and the Appellant's Designation of Matter on the below-named parties, at the addresses given, by depositing a copy of it in the United States Mail, postage prepaid, on this day of March 15, 2010.

The Honorable Tanya Gee
South Carolina Court of Appeals
PO Box 11629
Columbia, SC 29211

Stephen P. Hightower, Esquire
SCDHEC Office of General Counsel

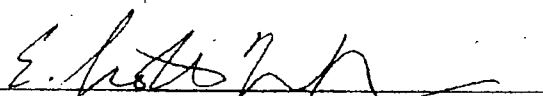
2600 Bull Street
Columbia, SC 29201

Elizabeth B. Partlow
Ogletree Deakins Nash Smoak & Stewart, PC
1320 Main Street
Columbia, South Carolina 29201

John M. S. Hoefer
Willoughby & Hoefer, PA
930 Richland Street
Columbia, South Carolina 29201

Francis G. Delleney, Jr.
Post Office Box 808
Chester, South Carolina 29706

March 15th, 2010


E. Scott Winburn
1422 Laurel Street
Columbia, South Carolina 29201

Attorney for Appellant

THE STATE OF SOUTH CAROLINA

In the Court of Appeals

JOHN W. HARRIS, JR., Appellant,

vs.

THE STATE OF SOUTH CAROLINA,

Appellee.

JOHN W. HARRIS, JR., Appellant,

vs.

THE STATE OF SOUTH CAROLINA,
Appellee.

Final Brief of Respondent South Carolina
Department of Health and Environmental
Control

JOHN W. HARRIS, JR., Appellant,
vs.
THE STATE OF SOUTH CAROLINA,
Appellee.

TABLE OF CONTENTS

TABLE OF AUTHORITIES	ii
STATEMENT OF THE ISSUES ON APPEAL.....	iv
STATEMENT OF THE CASE.....	1
STATEMENT OF FACTS	2
ARGUMENT.....	8
STANDARD OF REVIEW	8
1. THE ADMINISTRATIVE LAW COURT PROPERLY CONSIDERED THE EFFECT OF THE 2001 "MIXING ZONE" CONSENT AGREEMENT BETWEEN DHEC AND SCE&G ON WATER QUALITY IN THE WATEREE RIVER.....	10
2. THE ADMINISTRATIVE LAW COURT PROPERLY DETERMINED THAT SEEPS OF GROUNDWATER FROM THE WATEREE RIVER BANK INTO THE WATEREE RIVER WOULD NOT RESULT IN A VIOLATION OF WATER QUALITY STANDARDS IN THE WATEREE RIVER	13
3. THE ADMINISTRATIVE LAW COURT PROPERLY DETERMINED THAT DHEC'S ISSUANCE OF AN INDUSTRIAL SOLID WASTE LANDFILL PERMIT TO SCE&G WAS CORRECT	17
CONCLUSION.....	19

TABLE OF AUTHORITIES

Cases

<u>DuRant v. South Carolina Department of Health and Environmental Control</u> , 361 S.C. 416, 604 S.E.2d 704 (Ct. App. 2004).....	10
<u>Leventis v. S.C. Department of Health and Environmental Control</u> , 340 S.C. 118, 530 S.E.2d 643 (Ct. App. 2000)	9
<u>Linda Mc Company, Inc., v. Shore</u> , 375 S.C. 432, 653 S.E.2d 279 (S.C. App. 2007).....	12
<u>Marlboro Park Hosp. v. South Carolina Department of Health and Environmental Control</u> , 358 S.C. 573, 595 S.E.2d 851 (Ct. App. 2004).....	8
<u>Sierra Club v. El Paso Gold Mines, Inc.</u> , 421 F.3d 1133 (10th Cir. 2005), <u>cert. denied</u> , 547 U.S. 1065 (2006)	15
<u>South Carolina Coastal Conservation League v. South Carolina Department of Health and Environmental Control</u> , 380 S.C. 349, 669 S.E.2d 899 (Ct. App. 2008).....	9
<u>Terry v. South Carolina Department of Health and Environmental Control</u> , 377 S.C. 569, 660 S.E.2d 291 (Ct. App. 2008).....	8

Statutes

33 U.S.C. § 1362(14) (2009).....	15
S. C. Code Ann. §1-23-610(B) (Supp. 2009)	9
S. C. Code Ann. §44-1-60 (Supp. 2009)	8
S.C. Code Ann. § 48-1-50 (2009)	12
S.C. Code Ann. § 48-1-90(a) (2009)	12
S.C. Code Ann. §1-23-600(A) (Supp. 2009)	8

Other Authorities

Doc. No. 3161, April 25, 2008, <i>State Register</i>	7
--	---

Regulations

24 S.C. Code Ann. Regs. 61-9.122.2 (Supp. 2009)	8
24 S.C. Code Ann. Regs. 61-9.122.41(m) (Supp. 2009)	13

24 S.C. Code Ann. Regs. 61-9.122.41(n) (Supp. 2009)	12
24 S.C. Code Ann. Regs. 61-9.122.45(f)(ii) (Supp. 2009)	16
24 S.C. Code Ann. Regs. 61-9.122.6 (Supp. 2009)	5
25 S.C. Code Ann Regs 61-68(Priority Toxic Pollutant)(Supp. 2009).....	3
25 S.C. Code Ann. Regs. 61-68 (Supp. 2009)	10
25 S.C. Code Ann. Regs. 61-68(C)(11) (Supp. 2009).....	10
25A S.C. Code Ann. Regs. 61-107.11 (Supp. 2009)	17
70 Federal Register 25162 (May 12, 2005)	4
S.C. Code Ann. Regs. 61-107.16 (Supp. 2009)	18
S.C. Code Ann. Regs. 61-107.16 (Supp. 2009) (repealed)	18

STATEMENT OF ISSUES ON APPEAL

1. DID THE ADMINISTRATIVE LAW COURT PROPERLY CONSIDER THE EFFECT OF THE 2001 "MIXING ZONE" CONSENT AGREEMENT BETWEEN DHEC AND SCE&G ON WATER QUALITY IN THE WATEREE RIVER?
2. DID THE ADMINISTRATIVE LAW COURT PROPERLY DETERMINE THAT SEEPS OF GROUNDWATER FROM THE WATEREE RIVER BANK INTO THE WATEREE RIVER WOULD NOT RESULT IN A VIOLATION OF WATER QUALITY STANDARDS IN THE WATEREE RIVER?
3. DID THE ADMINISTRATIVE LAW COURT PROPERLY DETERMINE THAT DHEC'S ISSUANCE OF AN INDUSTRIAL SOLID WASTE LANDFILL PERMIT TO SCE&G WAS CORRECT?

STATEMENT OF THE CASE

The Appellant, Heath Hill, is challenging the Final Decision and Order of the Honorable Carolyn Matthews, Administrative Law Judge, affirming the Department's issuance of a permit to South Carolina Electric & Gas Company ("SCE&G") to construct and operate a Class 2 Industrial Solid Waste Landfill ("ISWLF") and a National Pollutant Discharge Elimination System ("NPDES") permit for the continued discharge of effluent at SCE&G's Wateree Station coal fired electric generation facility located in lower Richland County, South Carolina. Judge Matthews' decision was rendered after a three-day hearing in the office of the Administrative Law Court (ALC). At that hearing, the Court heard testimony from seven witnesses; three for Appellant, three for SCE&G, and one for the South Carolina Department of Health and Environmental Control ("Department" or "DHEC"). Additionally, the ALC received in to evidence numerous exhibits.

The ALC issued its Final Order and Decision on December 3, 2009 ("Final Order"). Thereafter, on December 14, 2009, Appellant filed a Motion to Reconsider with the ALC. After considering the Appellant's motion and the response to it, the ALC, on January 13, 2010, filed an order entitled "Order Denying Motion to Reconsider" denying Appellant's motion. A Notice of appeal was filed by Appellant with this Court on February 11, 2010.

The Department files this brief to supplement the Statement of Facts section in the brief filed by SCE&G. Since the Department supports the arguments raised by SCE&G, the Arguments raised in this brief are identical to those raised by SCE&G in its brief.

STATEMENT OF FACTS

SCE&G owns and operates a coal-fired electrical generation facility known as Wateree Station, which is located in lower Richland County, South Carolina. Rep. Ex. 6; R. p. 874. The facility includes the generation facility, a coal pile runoff pond, a holding pond, and two approximately 80-acre coal combustion by-product holding ponds. Id. The burning of coal produces fly ash and bottom ash. Fly ash comprises approximately 92% of the total ash produced, and it is collected in pollution control devices called baghouses. R. p. 614; Final Order, Tr. p. 4. Bottom ash comprises approximately 8% of the ash produced from coal combustion, and is transported with water to an on-site storage area known as Ash Pond 1. R. p. 637; Final Order, pp. 4-5. Other wastewater streams at Wateree Station are also directed to Ash Pond 1, including recirculated cooling tower blowdown, low volume wastes, and storm water. Res. Ex. 15, R. p. 1040; Final Order, R. p. 4.

In the mid-1990's, the Department became aware that arsenic was detected in shallow groundwater beneath Ash Ponds 1 and 2. Res. Ex. 6; R. p. 843-844. The Department initiated an enforcement action against SCE&G and required it to initiate a groundwater investigation in 1997, and throughout 1998 and 1999, conduct investigations to determine the extent of any groundwater, soil, and surface water impacts, both on and off-site. Id. at 844. After reviewing the data submitted by SCE&G, the Department made the following finds of fact: 1) the source, and the horizontal and vertical boundaries of the groundwater plume have been adequately delineated; 2) the hydraulics and contamination transport mechanisms are understood; 3) there is reasonable knowledge and expectation that the ultimate fate, future migration, and potential impacts

of the contamination to human health and the environmental is incomplete: 4) SCE&G has taken reasonable steps to eliminate or minimize the additional groundwater contamination; 5) the plume is contained in the shallow aquifer by a confining clay layer that separates the shallow aquifer from the deep aquifer, and groundwater withdrawals by Appellant are unlikely to cause the plume to migrate off-site; 6) the contamination on-site is not dangerously mobile, persistent, or toxic, and it is not causing and are unlikely to cause an adverse impact to surface water. Id. at 844-845. Based on these findings, the Department determined that the enforcement action should be resolved by a Consent Agreement between the Department and SCE&G. Res. Ex. 6. The Consent Agreement authorizes SCE&G to maintain a Groundwater Mixing Zone with monitoring requirements until acceptable groundwater standards are attained. Id. Pertinent to this case, the Consent Agreement established the following Mixing Zone Contaminant Levels (MZCLs) for arsenic in the Groundwater Mixing Zone: 3,000 ppb for Monitoring Wells 3, 4, and 11; and 50 ppb, the Maximum Contaminant Level (MCL) for arsenic, for Monitoring Wells 1, 2, 5, 6, 8, and 9.¹² Id.

In the nine years that the Consent Agreement has been effective, the semi-annual monitoring of the mixing zone has shown that the MZCL for arsenic was exceeded only twice. In 2006, a sample taken from Monitoring Well 11 was 5,100 ppb; however, after resampling, pursuant to the protocol set forth in the Consent Agreement the concentration

¹ The term "ppb" refers to parts per billion.

² The MCL for arsenic as stated in Regulation 61-68 is currently 10 micrograms per liter ($\mu\text{g/l}$). 25 S.C. Code Ann Regs 61-68(Priority Toxic Pollutant)(Supp. 2009). One micro gram per liter is equivalent to one part per billion, and during the hearing in the ALC, these terms were used interchangeably in the testimony and exhibits presented by the parties. To prevent confusion, all references to micrograms per liter in this brief will be represented as ppb.

for arsenic was 968 ppb. Res. Ex. 16; R. p. 1078; Table 2, p. 3 of 3. Similarly, in 2007, a sample from Monitoring Well 11 was 4,051 ppb and on retest it was 252 ppb. Id.

On May 12, 2005, the United States Environmental Protection Agency promulgated the Clean Air Interstate Rule (CAIR), 70 Federal Register 25162 (May 12, 2005), pursuant to the Federal Clean Air Act to facilitate the removal of SO₂ from the combustion of coal. To comply with this rule, SCE&G sought and was granted an air quality permit to install a flue gas desulfurization (FGD) scrubber system at Wateree Station.³ Final Order and Decision; R. p. 5. The FGD scrubber uses calcium carbonate (limestone), which reacts chemically with the emissions in the furnace smokestack to remove more than 95% of the SO₂. Final Order, R. p. 5. The byproduct of this chemical reaction is calcium sulfate or gypsum, which is the principle component of drywall. Id. Another byproduct generated by the FGD is the scrubber blowdown (wastewater generated by flushing the FGD). Id.

On February 11, 2008, the Department issued a ISWLF permit to SCE&G to properly dispose of the solid waste generated by the FGD. Id. The ISWLF is permitted to accept for disposal bottom ash, fly ash, and FGD solid waste. Id. Although the ISWLF was permitted as a Class 2 landfill in accordance with 25A S.C. Code Ann. Regs. 61-107.16, which was in effect at the time that the Department issued the permit, the landfill also meets all the design characteristics for Class 3 landfills contained in the superseding regulation 25A S.C. Code Ann. Regs. 61-107.19. Final Order, R. p. 7. The SCE&G ISWLF consists of a compacted clay layer with a permeability of no more than a one times 10 to the minus seven centimeters per second at its base, with a geo-synthetic clay liner made of bentonite, which has a guaranteed permeability of five times 10 to the

³ The air quality permit issued to SCE&G by the Department was not appealed.

minus 10, located on top of the compacted clay liner, and a leachate collection system on top of the bentonite layer.⁴ R. p. 701; p. 708; p. 714; p. 716; and p. 720. The leachate collection system is designed to prevent water from accumulating to a depth greater than one foot in the ISWLF, and will discharge it into Ash Pond 1. Final Order, R. p. 9; Res. Ex. 15, R. p. 1041.

On August 29, 2008, the Department issued a NPDES permit to SCE&G for Wateree Station, which replaced the facility's existing expired NPDES permit.⁵ The permitted NPDES system is authorized to accept scrubbed blowdown, a liquid waste generated by the FGD system and leachate from the ISWLF. Res. Ex 15, R. pp. 1039-1040. The NPDES system will collect all liquid wastes in Ash Pond 1, which will act as a settling pond from which treated effluent will be discharged in to the Wateree River in accordance with the limits established in the permit. Id.

Both the ISWLF permit and the NPDES permit were challenged by Mr. Hill. The re-issued permit was challenged by Mr. Hill on the grounds that the permits failed to meet the requirements of the regulations and presented a threat to the environment. At the hearing, Mr. Hill called three witnesses including himself. His primary witness was Dr. David Freedman, a professor of Environmental Engineering and Science at Clemson University. Tr. p. 178. Dr. Freedman was qualified as an expert by the ALC in environmental engineering and the movement of contaminants in the soil. Tr. pp. 200-201. The ALC, however, declined to qualify Dr. Freedman as an expert in hazardous waste management or as an expert in water pollution. Tr. p. 201. Further, the ALC

⁴ Leachate is the term given to water that seeps into a landfill from above and settles at the base of the landfill. R. p. 710.

⁵ Pursuant to 24 S.C. Code Ann. Regs. 61-9.122.6 (Supp. 2009), if a permit holder files an application to renew a permit at 180 days before the permit is to expire, the permit holder's existing permit remains in effect until the Department renders a decision on the renewal application.

stated that Dr. Freedman's lack of direct experience with reviewing NPDES permit applications, making 7Q10 determinations, evaluating Agency for Toxic Substances and Disease Registry documents, and designing or evaluating wastewater treatment systems, industrial landfills, and coal ash ponds would go to the weight that the Court gave to his testimony. R. pp. 184-185; pp. 192-193; p. 195; p. 197, and p. 200.

The Department called one witness, Ms. Melinda Vickers, an engineer with sixteen (16) years of experience with the Department. R. pp. 481-482. Ms. Vickers drafted the permit and prepared the Fact Sheet and Permit Rationale document that explained in detail the basis for the Department's permitting decision. R. p. 492; Res. Ex. 15, R. p. 1038. Ms. Vickers' review of the SCE&G application and other data led her to conclude that the SCE&G waste steam with the FGD system had a reasonable potential to emit arsenic at level exceeding water quality criteria and as a result a limit for arsenic in the discharge to the Wateree River was necessary. This determination was not unexpected, as the Department had made the same determination with regard to the previous NPDES permit that SCE&G was renewing and modifying. Res. Ex., 14, R. p. 1007; R. pp. 488-491. To set the limit, Ms. Vickers applied the relevant water quality standard applicable during the permit decision making process. Specifically, Ms. Vickers applied the water and organism standard for arsenic, which is 0.18 ppb and is significantly more protective of human health than the human health MCL standard of 10 ppb. R. pp. 502-503. In setting the limit at the discharge point, Ms. Vickers took into account the fact that the average annual flow of the receiving water body, Wateree River, had to be taken into account because arsenic is a carcinogenic substance. *Id.* The limit for arsenic determined by Ms. Vickers' calculation is a monthly average of 0.027 ppb and

a daily maximum of 0.40 ppb. R. p. 506; Res. Ex. 15, R. p. 1051. Although these limits are higher than the water and organism standard of 0.18 ppb, they reflect the dilution of the Wateree River. R. p. 506. In the river, the limits would result in a concentration of 0.018 ppb or 18 parts per trillion. Final Order, R. p. 11. Further, these limits are still higher, more restrictive than the MCL for human health, which is 10 ppb.⁶

As part of her testimony, Ms. Vickers addressed the issue of the seeps that were discovered in the bank of the Wateree River near Monitoring Well 11. The seeps were discovered during a site visit to Wateree Station on September 9, 2009, and samples of the discharges were taken and analyzed by both the Petitioner and SCE&G. The first seep, which is located upstream of Monitoring Well 11 had measured values for arsenic of 476 and 770 ppb. The second seep, which is located downstream of Monitoring Well 11, had measured values for arsenic of 1600 and 1900 ppb.⁷ Ms. Vickers testified that had the seeps been observed at the time that the permit decision making process, she would have considered the arsenic in the seeps in her consideration of arsenic already in the Wateree River. R. pp. 573-574. Moreover, Ms. Vickers stated that if determined necessary by the ALC she would take the newly discovered information and run her calculations regarding the NPDES limit and the dilution factor for the river to determine if the permit limit for arsenic need to be changed. R. p. 587.

The Court found that the Department did not need to recalculate the permit limits for arsenic. Dr. Freeman prepared an exhibit that calculated the mass of arsenic entering the Wateree River from seeps and other groundwater discharges at Wateree Station by

⁶ In April 2008, 25 S.C. Code Ann. Regs. 61-68 was amended to eliminate the 0.018 ppb in-stream standard. Doc. No. 3161, April 25, 2008, *State Register*. Therefore, the most stringent in-stream standard currently available is the drinking water MCL of 10 ppb. Final Order, R. p. 12.

⁷ Seeps were previously discovered during the enforcement assessment in 1997, but those seeps were both located downstream of Monitoring Well 11. Final Order, R. p. 13.

averaging the two worst measurements from the September 2009 seeps and treated the discharge as if it was continuous along the 1,600 foot bank adjacent to Ash Pond 1. Final Order, R. p. 14. In response to questioning on cross-examination, Dr. Freeman conceded that the scenario in his exhibit would produce 0.26 pounds of arsenic per day. Converting mass to volume, in accordance with 24 S.C. Code Ann. Regs. 61-9.122.2, Dr. Freeman determined that a continuous seep of 1,600 feet discharging 1335 ppb would produce 0.11 ppb of arsenic. This figure is less than the standard of 0.18 ppb used for the permit limit and significantly less than the current standard of 10 ppb, which would have to be used during any recalculation. Id.

The ALC rejected Appellant's claims raised at trial and on his motion for Reconsideration, ruling that Appellant had failed to prove by a preponderance of the evidence that the permits were improperly issued. On appeal, Appellant has abandoned his claim that arsenic will affect groundwater on his property and focuses instead on his claims that arsenic will adversely affect water quality in the Wateree River.

ARGUMENT

Standard of Review

The ALC presides over all hearings of contested DHEC permitting cases. S.C. Code Ann. §§ 1-23-600(A) (Supp. 2009) and 44-1-60 (Supp. 2009). In such cases, the ALC serves as the fact-finder and is not restricted by the findings of the administrative agency. Terry v. South Carolina Department of Health and Environmental Control, 377 S.C. 569, 573, 660 S.E.2d 291, 293 (Ct. App. 2008); Marlboro Park Hosp. v. South Carolina Department of Health and Environmental Control, 358 S.C. 573, 577, 595 S.E.2d 851, 853 (Ct. App. 2004).

This Court's scope of review is set forth in Section 1-23-610(B) (Supp. 2009) of the South Carolina Code:

The review of the administrative law judge's order must be confined to the record. The court may not substitute its judgment for the judgment of the administrative law judge as to the weight of the evidence on questions of fact. The court of appeals may affirm the decision or remand the case for further proceedings; or it may reverse or modify the decision if the substantive rights of the petitioner have been prejudiced because the finding, conclusion, or decision is:

- (a) in violation of constitutional or statutory provisions;
- (b) in excess of the statutory authority of the agency;
- (c) made upon unlawful procedure;
- (d) affected by other error of law;
- (e) clearly erroneous in view of the reliable, probative, and substantial evidence on the whole record; or
- (f) arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion.

The Court may not substitute its judgment for that of the ALC as to the weight of the evidence on questions of fact unless the ALC's findings are "unsupported by substantial evidence or controlled by some error of law." South Carolina Coastal Conservation League v. South Carolina Department of Health and Environmental Control, 380 S.C. 349, 361, 669 S.E.2d 899, 905 (Ct. App. 2008) rehearing denied 2008, Substantial evidence is not a mere scintilla of evidence, but evidence which, considering the record as a whole, would allow reasonable minds to reach the conclusion the ALC reached. Leventis v. S.C. Department of Health and Environmental Control, 340 S.C. 118, 130, 530 S.E.2d 643, 650 (Ct. App. 2000). However, "[t]he mere possibility of drawing two inconsistent conclusion from the evidence does not prevent a finding from being supported by substantial evidence." DuRant v. South Carolina Department of

Health and Environmental Control, 361 S.C. 416, 420, 604 S.E.2d 704, 707 (Ct. App. 2004).

1. The Administrative Law Court properly considered the effect of the 2001 "Mixing Zone" Consent Agreement between DHEC and SCE&G on water quality in the Wateree River.

In 2001, SCE&G and DHEC entered into Consent Agreement 01-053-W to address arsenic in groundwater near the ash ponds that had been detected at levels above South Carolina Class GB Maximum Contaminant Levels established by 25 S.C. Code Ann. Regs. 61-68 (Supp. 2009). See Res. Ex. 6, R. p. 843. The Consent Agreement authorized a mixing zone pursuant to 25 S.C. Code Ann. Regs. 61-68(C)(11) (Supp. 2009), established a monitoring network and required sampling frequencies, set MZCLs, and prescribed actions that SCE&G must take if a MZCL were exceeded.

At the hearing before the ALC, Appellant expressly stated that he was not seeking to have the 2001 Consent Order declared invalid. Following an objection by SCE&G and DHEC to testimony about the regulatory standards for granting a mixing zone, the following colloquy between counsel and the ALC occurred:

MS. PARTLOW: Actually until he said that Dr. Freedman was the expert in wastewater designs, I was mostly agreeing with him. To the extent that there is water from the wastewater treatment system and by that, I mean, the way water moves through the site whether it's a leachate from the new landfill, scrubber blow down, sluicing of the ash into pond one, into pond two, in the discharge, to the extent that the water system has the possibility to impact the river, I agree that that is relevant. If they wish to show that what's happening in the mixing zone is going to cause the site to violate water quality standards in the river, that's relevant. To the extent they want to say ooh, you should not have been allowed to have that level in that monitoring well in that consent agreement, that's irrelevant.

THE COURT: And I sustain you on that.

MR. GUILD: And Your Honor, that's our solution. That's our solution. I'm asking you to assume that we don't deal with the validity of what happened in 2001. But we've got to deal with it in the context that the mixing zone is part of that system as Ms. Partlow just acknowledged.

THE COURT: And I think Ms. Partlow phrased it very well. So, as long as your questions are within the ambit of that inquiry, ...

MR. GUILD: Yes, they are, Your Honor. They are.

THE COURT: ... then it's okay.

MR. GUILD: We're not asking you to declare the 2001 order invalid. We're asking you to consider that mixing zone as it relates to the system for managing the waste today.

THE COURT: The potential for degrading water quality?

MR. GUILD: You got it.

THE COURT: As the whole ...

MR. SMITH: That's it, Your Honor.

THE COURT: ... Okay.

MR. SMITH: Yes.

R. p. 272-274 (emphasis added).

At the hearing, Appellant stated plainly that his contention was that the arsenic levels allowed by the mixing zone had an effect on arsenic levels in the Wateree River. Appellant did not argue that the 2001 order was invalid; his "whole point. . .[was how]. . . groundwater gets to surface water." R. p. 278.

For the first time on appeal, Appellant argues that the mixing zone was improperly granted and discusses at length the requirements for authorizing a mixing

zone. This issue was not presented to the trial court and is not preserved for appellate review. See Linda Mc Company, Inc., v. Shore, 375 S.C. 432, 653 S.E.2d 279 (S.C. App. 2007); In re Michael H., 360 S.C. 540, 546, 602 S.E.2d 729, 732 (2004) (“An issue may not be raised for the first time on appeal. In order to preserve an issue for appeal, it must be raised to and ruled upon by the trial court.”).

Further, Appellant cannot mount a collateral attack against a nine-year-old Consent Order in the guise of an appeal of recent landfill and NPDES permits. The time for requesting a contested case hearing on the 2001 Consent Order has long since passed, and SCE&G has undertaken a significant amount of work pursuant to the Consent Order. Nevertheless, if Appellant believes he has the right to challenge that Order, he may file a request for contested case hearing.

Finally, Appellant’s argument conflates and confuses the level of arsenic in groundwater allowed by the MZCLs and the effect of arsenic in groundwater discharged to the Wateree River. Appellant seems to suggest that the NPDES permit, apparently in addition to the Consent Order, should have addressed the concentrations of arsenic in groundwater, a suggestion for which he provides no support in the law.⁸ To the extent that groundwater is discharged to surface water through “seeps” or otherwise, the ALC did indeed consider whether the NPDES permit was appropriately protective of water quality.⁹ Any seeps of groundwater to the Wateree River are addressed through the

⁸ Appellant argues that the South Carolina Pollution Control Act, S.C. Code Ann. § 48-1-90(a) prohibits the discharge of arsenic to groundwater beneath the ash ponds. DHEC concluded exactly the same thing in the Consent Agreement, and the Consent Agreement constituted DHEC’s enforcement response pursuant to the Pollution Control Act, S.C. Code Ann. § 48-1-50.

⁹ Appellant argues that the presence of arsenic in groundwater is not authorized as an “upset” under the NPDES regulations, or that the presence of arsenic in groundwater is a “bypass.” An “upset” is a defense that a permittee may raise to an alleged failure to meet effluent limits in a permit. 24 S.C. Code Ann. Regs. 61-9.122.41(n) (Supp. 2009). Here, SCE&G has neither failed to meet effluent limits nor asserted no such defense. A “bypass” is an intentional diversion of waste streams from any portion of a

mechanism imposed by the Consent Agreement pursuant to the Pollution Control Act. Further, the ALC correctly concluded that seeps of groundwater would not cause arsenic in the Wateree River to exceed drinking water standards. That issue is discussed more fully in Section 2 of this Brief.

2. The Administrative Law Court properly determined that seeps of groundwater from the Wateree River bank into the Wateree River would not result in a violation of water quality standards in the Wateree River.

The distance between Pond 1 and the Wateree River is approximately 150 feet. R. p. 790. Groundwater beneath Wateree Station, like groundwater adjacent to any river, flows toward the river. R. pp. 406-405. When the level of the river falls below the level of groundwater, groundwater can be expected to discharge to the river. Thus, SCE&G's NPDES permit requires that SCE&G:

periodically survey all ash basin dikes and toe areas and to determine that seepage is not occurring. In the event that seepage does occur and has the potential to reach waters of the State, the permittee shall notify SCDHEC within five (5) days of becoming aware of the situation and provide a proposed course of corrective action and implementation schedule.

Res. Ex. 14, R. p. 1068. Similar conditions had existed in NPDES permits at least as far back as 1993. R. pp. 778-779.

SCE&G has performed an inspection of the dikes pursuant to its existing NPDES permit every year, generally in October or November, since at least 1993. Pet. Ex. 44, R. p. 994. In its 1997 survey of the ash basin dike and toe areas, SCE&G noted a seep, notified DHEC, and performed a hydrogeological investigation.¹⁰ Res. Ex. 19, R. p.

treatment facility. 24 S.C. Code Ann. Regs. 61-9.122.41(m) (Supp. 2009). There exists *no* evidence in the record to support a contention that waste streams were diverted from a treatment facility, much less that a diversion was intentional.

¹⁰ The hydrogeologic assessment report and meetings between SCE&G and DHEC culminated in the 2001 Consent Agreement establishing the mixing zone.

1094. Arsenic in two groundwater seeps into the Wateree River was measured at 348 and 604 ppb. Res. Ex. 19, R. p. 1094.

Except for the seeps noted in 1997-98 and addressed through the hydrogeological investigation, no seeps were detected in any annual inspection through 2008. R. pp. 641-643; Pet. Ex. 44, R. p. 994.

At a visit to the Wateree Station property on September 9, 2009, representatives of both Appellant and Respondent observed and collected samples from two seeps from the bank of the Wateree River to the east of Pond 1. R. pp. 143-146; R. p. 147. One seep sampled on September 9, 2009, was upstream of Monitoring Well 11, and the other seep was downstream of Monitoring Well 11. R. pp. 138-141; R. p. 142. Arsenic in the upstream samples was measured at 476 and 770 ppb, and arsenic in the downstream samples was measured at 1600 and 1900 ppb. Pet. Ex. 11; Res. Ex. 14, R. p. 893; R. p. 1007.

At least one of the seeps identified and sampled in September 2009 was different from one of the seeps identified and sampled in 1997. The seeps identified and sampled in 1997 were both downstream of Monitoring Well 11. Res. Ex. 18, Fig. 3, R. p. 1114; R. p. 769. In September 2009, one seep was upstream of Monitoring Well 11, and the other was downstream of Monitoring Well 11. R. p. 768; Res. Ex. 19, R. p. 1094.

Seeps may appear and then disappear. R. pp. 769-77; R. p. 788. When Appellant's Representative Mr. Hare went to SCE&G's property on September 9, 2009, he looked for, but was unable to locate, a seep on the west side of the ash pond. That seep had apparently been present in 1997. R. pp. 160-161; R. p. 770.

Pursuant to the NPDES permit, if a seep is detected, SCE&G must notify DHEC and propose a course of corrective action and implementation plan. A DHEC representative was present when the seep was detected in September 2009. Jim Landreth, SCE&G's Vice President for Fossil-Hydro Operations, testified at the hearing in October 2009 that SCE&G had already begun the investigation of the seep and that the schedule for doing the work was "as quick as we can get people scheduled in to get this done." R. pp. 665-666. Thomas Effinger, P.E., a manager in SCANA Corporation's corporate environmental services department, likewise testified that he expected SCE&G to be following up with the seeps that had been identified in September 2009.¹¹ R. p. 779.

Although seeps must be addressed pursuant to SCE&G's NPDES permit, seeps are not point source discharges that require an NPDES permit. See 33 U.S.C. § 1362(14) (2009) (defining a point source as "any discernible, confined and discrete conveyance ... from which pollutants are or may be discharged."); see also Sierra Club v. El Paso Gold Mines, Inc., 421 F.3d 1133 (10th Cir. 2005), cert. denied, 547 U.S. 1065 (2006). Instead, the appropriate inquiry for these non-point sources is whether they cause the Wateree River to exceed the maximum contaminant level for arsenic. The undisputed testimony in this case is that the effect of the seeps on the Wateree River is miniscule, and there is no reasonable possibility that the seeps would cause the Wateree River to exceed the drinking water MCL of 10 ppb.

Appellant's witness, Dr. David Freedman, was qualified as an expert in the areas of environmental engineering and movement of contaminants in soil. In his brief, Appellant cited Dr. Freedman's opinion "that the discharge of arsenic from the seeps violates water quality standards." Dr. Freedman admitted, however, that a discharge is

¹¹ SCE&G is a one of the largest subsidiaries of SCANA Corporation. R. p. 760.

not required to meet drinking water standards at the "end of the pipe"; the level of arsenic allowed at the "end of the pipe" is based on the dilution in the receiving stream. R. p. 373; R. p. 375. Dr. Freedman further agreed that permitting contaminant levels in a discharge to exceed the drinking water standard and allowing those contaminants to "mix" with the water in the receiving stream is entirely consistent with state regulations. Id.; R. pp. 377-378. Any discharge from these intermittent seeps results in an undetectable difference in arsenic in the river.

Dr. Freedman testified that DHEC should have required mass limits as well as concentration limits for arsenic in the NPDES permit. R. p. 299-300. Dr. Freedman conceded that he did not know whether the applicable regulation required DHEC to impose limits for mass or for concentration. R. p. 377. Dr. Freedman had not read the South Carolina regulation. R. p. 376-377. Thus, he did not know that South Carolina Regulations do not require mass limits where the applicable standard is expressed in terms of concentration. 24 S.C. Code Ann. Regs. 61-9.122.45(f)(ii) (Supp. 2009).

Dr. Freedman prepared an exhibit, admitted into evidence as Respondent's Exhibit 23, that purported to calculate the mass of arsenic entering the Wateree River from the seeps and groundwater discharges, although Dr. Freedman stated that there was considerable uncertainty about his assumptions because of the lack of data. Res. Ex. 23, R. p. 1168; R. pp. 413-419. His assumptions represented a worst case scenario. He assumed that groundwater was discharging across the entire 1800-foot eastern face of Pond 1 along the Wateree River at a concentration of 1335 micrograms per liter, which was the average of the two worst measurements from the September 2009 seeps. R. p. 356; R. pp. 410-411. This is vastly more groundwater, at exceptionally high

concentrations, than has ever been observed discharging to the Wateree River from Wateree Station. Even so, Dr. Freedman's calculation indicated 0.26 pounds per day of arsenic entering the river from seeps and groundwater. R. pp. 418-419.

On cross-examination, Dr. Freedman calculated the concentration of arsenic that would be expected, after mixing with the receiving stream, if 0.26 pounds of arsenic per day were in fact entering the river. Dr. Freedman's calculation indicated that 0.11 ppb of arsenic would be present in the river from the seeps and groundwater discharges, far below the drinking water standard of 10 ppb. Res. Ex. 24, (large demonstrative exhibit to be submitted by ALC); R. pp. 425-426. Thus, even assuming Dr. Freedman's exaggerated assumptions about both volume of water and concentration of arsenic were true, Dr. Freedman's own calculations demonstrated that the Wateree River would continue to meet water quality standards for arsenic.

Although Appellant argues repeatedly that DHEC has a duty to impose permit conditions as necessary to assure that water quality standards are protected, Appellant cannot demonstrate that any water quality standard is or will be exceeded in the Wateree River. Indeed, the reliable, probative evidence in the record establishes that DHEC has imposed conditions that will protect the Wateree River.

3. The Administrative Law Court properly upheld DHEC's issuance of an Industrial Solid Waste Landfill Permit to SCE&G.

The ISWLF Permit authorizes SCE&G to dispose of gypsum by-product, coal combustion products, and on-site waste listed in Appendix I of 25A S.C. Code Ann. Regs. 61-107.11 (Supp. 2009). The permit also requires SCE&G to install groundwater monitoring wells around the landfill, to follow an approved Groundwater Sampling and

Analysis Plan, and to take specified actions if a groundwater protection standard has potentially been exceeded at any monitoring well. Res. Ex. 4, R. p. 1001.

The ALC made extensive Findings of Fact about the landfill's conformity to state regulations. Final Order, R. pp. 7-9. The ALC found that the proposed landfill exceeded regulatory requirements for permeability of the liner and separation from groundwater. SCE&G and its contractor performed more than 160 quality control/quality assurance tests on the landfill liner. R. pp. 718-719.

Appellant presented no testimony that the landfill failed to meet the requirements of S.C. Code Ann. Regs. 61-107.16.¹² Indeed, Appellant's expert witness, Dr. Freedman, stated at the hearing that the ISWLF met the requirements of the regulation. R. p. 402-403.

Appellant now argues that the landfill permit is somehow deficient because it allows wastewater from the leachate collection system to be routed to Pond 1. For the reasons set forth in Section 2, the Wateree River is in no danger of exceeding the drinking water standard for arsenic because of groundwater seeps from Pond 1. Appellant produced no evidence at the hearing that the addition of wastewater from the leachate collection system to Pond 1 will threaten the Wateree River and now argues only that the amount of arsenic will be "more." Appellant offers Dr. Freedman's laundry list of ways that arsenic in the leachate might be treated, all without a scintilla of evidence that such treatment is even necessary.

¹² SCE&G's landfill permit was issued under S.C. Code Ann. Regs. 61-107.16, the regulation in effect when the permit was issued on February 11, 2008. On May 23, 2008, Regulation 61-107.16 was repealed and replaced by Regulation 61-107.19. Jean-Claude Younan, the environmental engineer who served as SCANA's project manager for the landfill, testified without contradiction that the landfill met all the requirements of the new regulation. R. p. 696-697.

Appellant failed in the Administrative Law Court to demonstrate that DHEC's issuance of the NPDES and ISWLF permit was erroneous. The ALC correctly affirmed DHEC's decisions. Likewise, Appellant has failed to meet his burden of showing that the ALC's decision is unsupported by substantial evidence or affected by an error of law. Accordingly, his appeal should be dismissed.

CONCLUSION

Appellant has failed to demonstrate that the Final Decision and Order of the ALC was affected by an error of law or was unsupported by the reliable, probative, and substantial evidence in the record. Accordingly, the decision of the ALC must be affirmed.

Respectfully submitted,



Stephen P. Hightower

Roger Hall

South Carolina Department of Health
and Environmental Control

2600 Bull Street

Columbia, SC 29201

Attorneys for Respondent

August 13, 2010
Columbia, South Carolina

Final Brief of Respondent South Carolina
Electric & Gas Company

TABLE OF CONTENTS

TABLE OF AUTHORITIES	ii
STATEMENT OF THE ISSUES ON APPEAL.....	1
STATEMENT OF THE CASE	2
STATEMENT OF FACTS	3
ARGUMENT	6
1. THE ADMINISTRATIVE LAW COURT PROPERLY CONSIDERED THE EFFECT OF THE 2001 "MIXING ZONE" CONSENT AGREEMENT BETWEEN DHEC AND SCE&G ON WATER QUALITY IN THE WATEREE RIVER	8
2. THE ADMINISTRATIVE LAW COURT PROPERLY DETERMINED THAT SEEPS OF GROUNDWATER FROM THE WATEREE RIVER BANK INTO THE WATEREE RIVER WOULD NOT RESULT IN A VIOLATION OF WATER QUALITY STANDARDS IN THE WATEREE RIVER	11
3. THE ADMINISTRATIVE LAW COURT PROPERLY DETERMINED THAT DHEC'S ISSUANCE OF AN INDUSTRIAL SOLID WASTE LANDFILL PERMIT TO SCE&G WAS CORRECT	16
CONCLUSION.....	18

TABLE OF AUTHORITIES

CASES

<i>Bailey v. S.C. Dep't of Health & Env'tl. Control</i> , 388 S.C. 1, 693 S.E.2d 426, reh'g denied, 2010 App. LEXIS 98 (2010)	7
<i>Comm'rs of Pub. Works v. S.C. Dep't of Health & Env'tl. Control</i> , 372 S.C. 351, 358, 641 S.E.2d 763, 766-67 (Ct. App. 2007)	7
<i>In re Michael H.</i> , 360 S.C. 540, 546, 602 S.E.2d 729, 732 (2004)	10
<i>Leventis v. S.C. Dep't of Health & Env'tl. Control</i> , 340 S.C. 118, 130, 530 S.E.2d 643, 650 (Ct. App. 2000)	8
<i>Linda Mc Company, Inc., v. Shore</i> , 375 S.C. 432, 653 S.E.2d 279 (S.C. App. 2007)	9
<i>Marlboro Park Hosp. v. S.C. Dep't of Health & Env'tl. Control</i> , 358 S.C. 573, 577, 595 S.E.2d 851, 853 (Ct. App. 2004)	7
<i>Sierra Club v. El Paso Gold Mines, Inc.</i> , 421 F.3d 1133 (10th Cir. 2005), cert. denied, 547 U.S. 1065 (2006)	13
<i>Terry v. S.C. Dep't of Health & Env'tl. Control</i> , 377 S.C. 569, 573, 660 S.E.2d 291, 293 (Ct. App. 2008)	6

STATUTES

33 U.S.C. § 1362 (14)	13
S.C. Code Ann. § 1-23-600(A) (Supp. 2009)	6
S.C. Code Ann. § 1-23-610(B) (Supp. 2009)	7
S.C. Code Ann. § 48-1-50 (2008)	10
S.C. Code Ann. § 48-1-90(a) (2008)	10

OTHER AUTHORITIES

70 Fed. Reg. 25162 (May 12, 2005)	5
24 S.C. Code Ann. Regs. 61-9.122.41(m) (Supp. 2009)	10
24 S.C. Code Ann. Regs. 61-9.122.41(n) (Supp. 2009)	10

24 S.C. Code Ann. Regs. 61-9.122.45(f)(ii) (Supp. 2009)	15
25 S.C. Code Ann. Regs. 61-68 (Supp. 2009)	8
25 S.C. Code Ann. Regs. 61-68(C)(11) (Supp. 2009)	8
25A S.C. Code Ann. Regs. 61-107.11 (Supp. 2009)	16
25A S.C. Code Ann. Regs. 61-107.16 (Supp. 2009)(repealed)	17
25A S.C. Code Ann. Regs. 61-107.19 (Supp. 2009)	17

STATEMENT OF ISSUES ON APPEAL

1. DID THE ADMINISTRATIVE LAW COURT PROPERLY CONSIDER THE EFFECT OF THE 2001 "MIXING ZONE" CONSENT AGREEMENT BETWEEN DHEC AND SCE&G ON WATER QUALITY IN THE WATEREE RIVER?
2. DID THE ADMINISTRATIVE LAW COURT PROPERLY DETERMINE THAT SEEPS OF GROUNDWATER FROM THE WATEREE RIVER BANK INTO THE WATEREE RIVER WOULD NOT RESULT IN A VIOLATION OF WATER QUALITY STANDARDS IN THE WATEREE RIVER?
3. DID THE ADMINISTRATIVE LAW COURT PROPERLY DETERMINE THAT DHEC'S ISSUANCE OF AN INDUSTRIAL SOLID WASTE LANDFILL PERMIT TO SCE&G WAS CORRECT?

STATEMENT OF THE CASE

South Carolina Electric & Gas Company ("SCE&G") owns and operates Wateree Station, a 700-megawatt coal-fired power plant in Richland County, South Carolina. On February 11, 2008, the South Carolina Department of Health and Environmental Control ("DHEC") issued SCE&G a permit to construct and operate a Class 2 Industrial Solid Waste Landfill ("ISWLF") at the Wateree Station to dispose of coal combustion products and gypsum byproduct generated by a new flue-gas desulfurization ("FGD") system being installed to remove sulfur dioxide ("SO₂") from Wateree Station's air discharge.

Appellant, a neighboring landowner, requested a Final Review Conference before the South Carolina Board of Health and Environmental Control ("DHEC Board") concerning the DHEC staff decision to issue the ISWLF permit. The DHEC Board denied Appellant's request for a Final Review Conference, and on April 14, 2008, Appellant filed a Petition for Administrative Review with the South Carolina Administrative Law Court ("ALC") pursuant to S.C. Code Ann. § 1-23-600(G)(2).

On August 29, 2008, DHEC re-issued SCE&G's National Pollutant Discharge Elimination System ("NPDES") permit for Wateree Station. Appellant also requested a Final Review Conference before the DHEC Board concerning this permit, which the DHEC Board denied. Appellant thereafter filed a Petition for Administrative Review with the ALC.

By orders dated April 9, 2009, and August 20, 2009, the ALC consolidated these cases for hearing. The ALC presided over the contested case hearing on October 6-8, 2009, at which all parties presented witnesses and exhibits. On

December 3, 2009, the ALC issued its Final Order and Decision upholding DHEC's decision to issue the landfill and NPDES permits.

STATEMENT OF FACTS

SCE&G operates Wateree Station, a 700 megawatt, two-unit coal fired power plant in lower Richland County. (R. p. 611, line 24 - p. 612, line 7.) Wateree Station is situated on a tract of land owned by SCE&G, which is bordered on the west by U.S. Highway 601 and on the east by the Wateree River.

The primary waste streams of coal combustion are fly ash and bottom ash. Fly ash comprises approximately 92% of the total ash produced, and it is collected in pollution control devices called baghouses. (R. p. 614, line 5 - p. 615, line 1.) At Wateree Station, most fly ash from the baghouses is sent to the carbon burnout unit ("CBO") where the remaining fuel content is recovered. Residual ash from the CBO is sold for beneficial use, primarily to aggregate and cement companies. (R. p. 616, line 3 - p. 618, line 22.)

Bottom ash comprises approximately 8% of the ash produced from coal combustion. Bottom ash is sluiced, or transported with water, to Ash Pond 1 on the Wateree Station site. (R. p. 637, lines 11-21.) Other wastewater streams at Wateree Station are also directed to Pond 1, including recirculated cooling tower blowdown, low volume wastes, and storm water. (R. pp. 1038 -1077 at 1040.)

Ash Pond 1 acts as a settling pond, and water from Pond 1 flows through a gravity pipe to Pond 2, which also acts as a settling pond. Pond 2 discharges

to the Wateree River under conditions prescribed by Wateree Station's NPDES permit.

Arsenic was detected in shallow groundwater around the ash ponds at Wateree Station in the mid-1990s. A confining clay layer exists between the shallow groundwater aquifer and the deep aquifer at Wateree Station, and arsenic has not been detected in the deep aquifer. (R. p. 362, line 24 - p. 363, line 6.)

In 2001, DHEC and SCE&G entered into a Consent Agreement to address the presence of various contaminants, including arsenic, in groundwater in the vicinity of the ash ponds. The Consent Agreement established a groundwater mixing zone, which is an area where contaminants may exceed otherwise applicable groundwater protection standards, and set contaminant levels specific to the mixing zone. The Consent Agreement required semi-annual monitoring of groundwater monitoring wells and prescribed measures that SCE&G must take if a groundwater Mixing Zone Contaminant Level ("MZCL") were exceeded. (R. pp. 843 - 852.)

SCE&G has performed the semi-annual monitoring required by the mixing zone Consent Agreement. On two occasions, once in 2006 and once in 2007, the arsenic concentration in Monitoring Well 11 exceeded the MZCL. SCE&G subsequently retested the wells as required by the Consent Agreement, and arsenic concentrations measured by these retests were below the MZCL. (R. p. 352, line 21 - p. 354, line 9.) Pursuant to the Consent Agreement, if the subsequent retest indicates arsenic levels below the MZCL, SCE&G is not

required to take any action until the next scheduled sampling event. (R. pp. 843-852.)

Since the Consent Agreement was executed, SCE&G has continued to divert ash from Pond 1 by sending fly ash to the CBO instead of to Pond 1. The eight-year average amount of fly ash sold from the CBO is 146,000 tons per year. (R. p. 637, line 25 - p. 638, line 5.) SCE&G has also sold pond ash directly out of Pond 1. The eight-year average amount of ash sold from Pond 1 is 86,000 tons per year. (R. p. 638, lines 6 - 13.) The effect of diverting ash to the CBO and selling ash from Pond 1 has been a net reduction in the amount of ash in Pond 1, despite SCE&G's continuing to burn coal (and generate ash) at Wateree Station.¹ (R. pp. 1078 - 1093.)

The Clean Air Interstate Rule ("CAIR"), 70 Fed. Reg. 25162 (May 12, 2005), promulgated by the U.S. Environmental Protection Agency pursuant to the Federal Clean Air Act, requires SCE&G to reduce SO₂ emissions from the combustion of coal. To comply with the new regulations, SCE&G has installed a \$250 million FGD scrubber system. The scrubber uses calcium carbonate (limestone) in a chemical reaction to remove more than 95% of the SO₂ produced during coal combustion. This process results in the creation of calcium sulfate, or gypsum, the primary component of drywall. SCE&G applied for and was granted a permit for an ISWLF to manage the calcium sulfate and other products of coal combustion.

¹ Appellant cites the statement of Dr. David Freedman that arsenic will continue to leach from the ash to groundwater. (App. Br. pp. 9-10.) However, Dr. Freedman admitted on cross-examination that he did not know the rate at which arsenic leaches from ash or whether only part of the arsenic in ash leaches at all. (R. p. 360, line 24 - p. 361, line 11.)

The FGD system also generates a liquid waste stream known as "scrubber blowdown." SCE&G applied for and was granted a re-issued NPDES permit to manage and discharge scrubber blowdown and ISWLF landfill leachate, as well as wastewater already discharged pursuant to the existing NPDES permit. Pursuant to the re-issued NPDES permit, scrubber blowdown will be collected in a scrubber blowdown pond, then directed to Pond 1. Landfill leachate will be collected in the leachate collection pond, then directed to Pond 1.

Appellant challenged both the ISWLF permit and the re-issued NPDES permit. He alleged generally that the permits failed to meet the requirements of the regulations and presented a threat to the environment. At the hearing, Appellant's evidence centered on arsenic already present in shallow groundwater at Wateree Station and the effect of the two permits on arsenic potentially reaching the Wateree River or groundwater on Appellant's property.

The ALC rejected Appellant's claims, ruling that Appellant had failed to prove by a preponderance of the evidence that the permits were improperly issued. On appeal, Appellant has abandoned his claim that arsenic will affect groundwater on his property and focuses instead on his claims that arsenic will adversely affect water quality in the Wateree River.

ARGUMENT

Standard of Review

The ALC presides over all hearings of contested DHEC permitting cases. S.C. Code Ann. § 1-23-600(A) (Supp. 2009). In such cases, the ALC serves as the fact-finder and is not restricted by the findings of the administrative agency. *Terry v. S.C. Dep't of Health & Env'tl. Control*, 377 S.C. 569, 573, 660 S.E.2d

291, 293 (Ct. App. 2008); *Marlboro Park Hosp. v. S.C. Dep't of Health & Env'tl. Control*, 358 S.C. 573, 577, 595 S.E.2d 851, 853 (Ct. App. 2004).

This Court's scope of review is set forth in Section 1-23-610(B) (Supp. 2009) of the South Carolina Code:

The review of the administrative law judge's order must be confined to the record. The court may not substitute its judgment for the judgment of the administrative law judge as to the weight of the evidence on questions of fact. The court of appeals may affirm the decision or remand the case for further proceedings; or it may reverse or modify the decision if the substantive rights of the petitioner have been prejudiced because the finding, conclusion, or decision is:

- (a) in violation of constitutional or statutory provisions;
- (b) in excess of the statutory authority of the agency;
- (c) made upon unlawful procedure;
- (d) affected by other error of law;
- (e) clearly erroneous in view of the reliable, probative, and substantial evidence on the whole record; or
- (f) arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion.

The Court may not substitute its judgment for that of the ALC as to the weight of the evidence on questions of fact unless the ALC's findings are clearly erroneous in view of the reliable, probative, and substantial evidence in the whole record. *Bailey v. S.C. Dep't of Health & Env'tl. Control*, 388 S.C. 1, 693 S.E.2d 426, *reh'g denied*, 2010 App. LEXIS 98 (2010); *Comm'rs of Pub. Works v. S.C. Dep't of Health & Env'tl. Control*, 372 S.C. 351, 358, 641 S.E.2d 763, 766-67 (Ct. App. 2007). Substantial evidence is not a mere scintilla of evidence, but evidence which, considering the record as a whole, would allow reasonable

minds to reach the conclusion the ALC reached. *Leventis v. S.C. Dep't of Health & Env'tl. Control*, 340 S.C. 118, 130, 530 S.E.2d 643, 650 (Ct. App. 2000).

1. The Administrative Law Court properly considered the effect of the 2001 "Mixing Zone" Consent Agreement between DHEC and SCE&G on water quality in the Wateree River.

In 2001, SCE&G and DHEC entered into Consent Agreement 01-053-W. (R. pp. 843-852.) The Consent Agreement recited that arsenic in groundwater near the ash ponds had been detected at levels above South Carolina Class GB Maximum Contaminant Levels established by 25 S.C. Code Ann. Regs. 61-68 (Supp. 2009). The Consent Agreement authorized a mixing zone pursuant to 25 S.C. Code Ann. Regs. 61-68(C)(11) (Supp. 2009), established a monitoring network and required sampling frequencies, set MZCLs, and prescribed actions that SCE&G must take if a MZCL were exceeded.

At the hearing before the ALC, Appellant expressly stated that he was not seeking to have the 2001 Consent Order declared invalid. Following an objection by SCE&G and DHEC to testimony about the regulatory standards for granting a mixing zone, the following colloquy between counsel and the ALC occurred:

MS. PARTLOW: Actually until he said that Dr. Freedman was the expert in wastewater designs, I was mostly agreeing with him. To the extent that there is water from the wastewater treatment system and by that, I mean, the way water moves through the site whether it's a leachate from the new landfill, scrubber blow down, sluicing of the ash into pond one, into pond two, in the discharge, to the extent that the water system has the possibility to impact the river, I agree that that is relevant. If they wish to show that what's happening in the mixing zone is going to cause the site to violate water quality standards in the river, that's relevant. To the extent they want to say ooh, you should not have been allowed to have

that level in that monitoring well in that consent agreement, that's irrelevant.

THE COURT: And I sustain you on that.

MR. GUILD: And Your Honor, that's our solution. That's our solution. I'm asking you to assume that we don't deal with the validity of what happened in 2001. But we've got to deal with it in the context that the mixing zone is part of that system as Ms. Partlow just acknowledged.

THE COURT: And I think Ms. Partlow phrased it very well. So, as long as your questions are within the ambit of that inquiry, ...

MR. GUILD: Yes, they are, Your Honor. They are.

THE COURT: ... then it's okay.

MR. GUILD: We're not asking you to declare the 2001 order invalid. We're asking you to consider that mixing zone as it relates to the system for managing the waste today.

THE COURT: The potential for degrading water quality?

MR. GUILD: You got it.

THE COURT: As the whole ...

MR. SMITH: That's it, Your Honor.

THE COURT: ... Okay.

MR. SMITH: Yes.

(R. p. 272, line 20 - p. 274, line 10.)(Emphasis added.)

At the hearing, Appellant stated plainly that his contention was that the arsenic levels allowed by the mixing zone had an effect on arsenic levels in the Wateree River. Appellant did not argue that the 2001 order was invalid; his "whole point. . . [was how]. . . groundwater gets to surface water." (R. p. 278, lines 7 - 17.)

For the first time on appeal, Appellant argues that the mixing zone was improperly granted and discusses at length the requirements for authorizing a mixing zone. This issue was not presented to the trial court and is not preserved for appellate review. See *Linda Mc Company, Inc., v. Shore*, 375 S.C. 432, 653

S.E.2d 279 (S.C. App. 2007); *In re Michael H.*, 360 S.C. 540, 546, 602 S.E.2d 729, 732 (2004) ("An issue may not be raised for the first time on appeal. In order to preserve an issue for appeal, it must be raised to and ruled upon by the trial court.").

Further, Appellant cannot mount a collateral attack against a nine-year-old Consent Order in the guise of an appeal of recent landfill and NPDES permits. The time for requesting a contested case hearing on the 2001 Consent Order has long since passed, and SCE&G has undertaken a significant amount of work pursuant to the Consent Order. Nevertheless, if Appellant believes he has the right to challenge that Order, he may file a request for contested case hearing.

Finally, Appellant's argument conflates and confuses the level of arsenic in groundwater allowed by the MZCLs and the effect of arsenic in groundwater discharged to the Wateree River. Appellant seems to suggest that the NPDES permit, apparently in addition to the Consent Order, should have addressed the concentrations of arsenic in groundwater, a suggestion for which he provides no support in the law.² To the extent that groundwater is discharged to surface water through "seeps" or otherwise, the ALC did indeed consider whether the NPDES permit was appropriately protective of water quality.³ Any seeps of

² Appellant argues that the South Carolina Pollution Control Act, S.C. Code Ann. § 48-1-90(a), prohibits the discharge of arsenic to groundwater beneath the ash ponds. DHEC concluded exactly the same thing in the Consent Agreement, and the Consent Agreement constituted DHEC's enforcement response pursuant to the Pollution Control Act, S.C. Code Ann. § 48-1-50.

³ Inexplicably, Appellant argues that the presence of arsenic in groundwater is not authorized as an "upset" under the NPDES regulations, or that the presence of arsenic in groundwater is a "bypass." An "upset" is a defense to an alleged failure to meet effluent limits in a permit; SCE&G has not failed to meet effluent limits and has asserted no such defense. 24 S.C. Code Ann. Regs. 61-9.122.41(n) (Supp. 2009). A "bypass" is an intentional diversion of waste streams from any portion of a treatment facility. 24 S.C. Code Ann. Regs. 61-9.122.41(m) (Supp. 2009). There exists *no* evidence in the record to support a contention that waste streams were diverted from a treatment facility, much less that a diversion was intentional.

groundwater to the Wateree River are addressed through the mechanism imposed by the Consent Agreement pursuant to the Pollution Control Act. Further, the ALC correctly concluded that seeps of groundwater would not cause arsenic in the Wateree River to exceed drinking water standards. That issue is discussed more fully in Section 2 of this Brief.

2. The Administrative Law Court properly determined that seeps of groundwater from the Wateree River bank into the Wateree River would not result in a violation of water quality standards in the Wateree River.

The distance between Pond 1 and the Wateree River is approximately 150 feet. (R. p. 790.) Groundwater beneath Wateree Station, like groundwater adjacent to any river, flows toward the river. (R. p. 406, line 22 - p. 407, line 3.) When the level of the river falls below the level of groundwater, groundwater can be expected to discharge to the river. Thus, SCE&G's NPDES permit requires that SCE&G:

periodically survey all ash basin dikes and toe areas and to determine that seepage is not occurring. In the event that seepage does occur and has the potential to reach waters of the State, the permittee shall notify SCDHEC within five (5) days of becoming aware of the situation and provide a proposed course of corrective action and implementation schedule.

(R. pp. 1007 - 1037 at 1037.) Similar conditions had existed in NPDES permits at least as far back as 1993. (R. p. 778, line 19 - p. 779, line 12.)

SCE&G has performed an inspection of the dikes pursuant to its existing NPDES permit every year, generally in October or November, since at least 1993. (R. pp. 995 - 1000.) In its 1997 survey of the ash basin dike and toe areas, SCE&G noted a seep, notified DHEC, and performed a hydrogeological

investigation.⁴ (R. pp. 1094 - 1167.) Arsenic in two groundwater seeps into the Wateree River was measured at 348 and 604 parts per billion ("ppb"). (R. pp. 1094 - 1167 at 1108.)

Except for the seeps noted in 1997-98 and addressed through the hydrogeological investigation, no seeps were detected in any annual inspection through 2008. (R. p. 641, line 20 - p. 643, line 13; R. pp. 995 - 1000.)

At a visit to the Wateree Station property on September 9, 2009, representatives of both Appellant and Respondent observed and collected samples from two seeps from the bank of the Wateree River to the east of Pond 1. (R. p. 138, lines 2 - 14; p. 146, line 14 - p. 147, line 18.) One seep sampled on September 9, 2009, was upstream of Monitoring Well 11, and the other seep was downstream of Monitoring Well 11. (R. p. 138, lines 2 - 14; p. 141, line 1 - p. 142, line 2.) Arsenic in the upstream samples was measured at 476 and 770 ppb and arsenic in the downstream samples was measured at 1600 and 1900 ppb. (R. p. 356, lines 9 - 22.)

At least one of the seeps identified and sampled in September 2009 was different from one of the seeps identified and sampled in 1997. The seeps identified and sampled in 1997 were both downstream of Monitoring Well 11. (R. p. 1114; p. 769, lines 9 - 17.) In September 2009, one seep was upstream of Monitoring Well 11, and the other was downstream of Monitoring Well 11. (R. p. 769, lines 3 - 8.)

⁴ The hydrogeologic assessment report and meetings between SCE&G and DHEC culminated in the 2001 Consent Agreement establishing the mixing zone.

Seeps may appear and then disappear. (R. p. 769, line 18 - p. 770, line 2; p. 788, lines 18 - 24.) When Appellant's representative, Mr. Hare, went to SCE&G's property on September 9, 2009, he looked for, but was unable to locate, a seep on the west side of the ash pond. That seep had apparently been present in 1997. (R. p. 160, line 20 - p. 161, line 7; p. 770, lines 3 - 16.)

Pursuant to the NPDES permit, if a seep is detected, SCE&G must notify DHEC and propose a course of corrective action and implementation plan. A DHEC representative was present when the seep was detected in September 2009. Jim Landreth, SCE&G's Vice President for Fossil-Hydro Operations, testified at the hearing in October 2009 that SCE&G had already begun the investigation of the seep and that the schedule for doing the work was "as quick as we can get people scheduled in to get this done." (R. p. 665, line 7 - p. 666, line 11.) Thomas Effinger, P.E., a manager in SCANA Corporation's corporate environmental services department,⁵ likewise testified that he expected SCE&G to be following up with the seeps that had been identified in September 2009. (R. p. 779, lines 13 - 19.)

Although seeps must be addressed pursuant to SCE&G's NPDES permit, seeps are not point source discharges that require an NPDES permit. See 33 U.S.C. § 1362 (14) (defining a point source as "any discernible, confined and discrete conveyance ... from which pollutants are or may be discharged."); see also *Sierra Club v. El Paso Gold Mines, Inc.*, 421 F.3d 1133 (10th Cir. 2005), *cert. denied*, 547 U.S. 1065 (2006). Instead, the appropriate inquiry for these non-point sources is whether they cause the Wateree River to exceed the

⁵ SCE&G is one of the largest subsidiaries of SCANA Corporation. (R. p. 760, lines 9-17.)

maximum contaminant level for arsenic. The undisputed testimony in this case is that the effect of the seeps on the Wateree River is miniscule, and there is no reasonable possibility that the seeps would cause the Wateree River to exceed the drinking water MCL of 10 ppb.

Appellant's witness, Dr. David Freedman, was qualified as an expert in the areas of environmental engineering and movement of contaminants in soil.⁶ In his brief, Appellant cited Dr. Freedman's opinion "that the discharge of arsenic from the seeps violates water quality standards." Dr. Freedman admitted, however, that a discharge is not required to meet drinking water standards at the "end of the pipe"; the level of arsenic allowed at the "end of the pipe" is based on the dilution in the receiving stream. (R. p. 373, line 20 - p. 375, line 23.) Dr. Freedman further agreed that permitting contaminant levels in a discharge to exceed the drinking water standard and allowing those contaminants to "mix" with the water in the receiving stream is entirely consistent with state regulations. (*Id.*; R. p. 377, line 13 - p. 378, line 9.) Any discharge from these intermittent seeps results in an undetectable difference in arsenic in the river.⁷

Dr. Freedman testified that DHEC should have required mass limits as well as concentration limits for arsenic in the NPDES permit. (R. p. 299, line 1 - p. 300, line 3.) Dr. Freedman conceded that he did not know whether the

⁶ The ALC properly rejected Appellant's attempt to qualify Dr. Freedman more broadly. Dr. Freedman had never been involved in a project involving coal ash ponds or FGD systems; he had never designed a wastewater treatment system; he had never before reviewed the South Carolina Water Quality Standards or an NPDES permit application. (R. p. 184, line 10 - p. 185, line 14.) He had done some reading in the week immediately prior to the hearing to learn something about arsenic in coal ash. (R. p. 185, line 21 - p. 187, line 7.)

⁷ SCE&G does not argue that these seeps need not be addressed, only that their existence does not affect the permits issued in this matter. Mr. Landreth testified that SCE&G was concerned about contaminants in the water and took discovery of the seeps in September 2009 very seriously. (R. p. 652, line 1 - p. 653, line 6.)

applicable regulation required DHEC to impose limits for mass or for concentration. (R. p. 377, lines 7 - 12.) Dr. Freedman had not read the South Carolina regulation. (R. p. 376, line 23 - p. 377, line 12.) Thus, he did not know that South Carolina Regulations do not require mass limits where the applicable standard is expressed in terms of concentration. 24 S.C. Code Ann. Regs. 61-9.122.45(f)(ii) (Supp. 2009).

Dr. Freedman prepared an exhibit, admitted into evidence as Respondent's Exhibit 23, that purported to calculate the mass of arsenic entering the Wateree River from the seeps and groundwater discharges, although Dr. Freedman stated that there was considerable uncertainty about his assumptions because of the lack of data. (R. pp. 1168 - 1169; p. 413, line 16 - p. 419, line 25.) His assumptions represented a worst case scenario. He assumed that groundwater was discharging across the entire 1,800 foot eastern face of Pond 1 along the Wateree River at a concentration of 1335 micrograms per liter, which was the average of the two worst measurements from the September 2009 seeps. (R. p. 356, lines 9 - 22; p. 410, line 3 - p. 411, line 11.) This is vastly more groundwater, at exceptionally high concentrations, than has ever been observed discharging to the Wateree River from Wateree Station. Even so, Dr. Freedman's calculation indicated 0.26 pounds per day of arsenic entering the river from seeps and groundwater. (R. p. 418, line 6 - p. 419, line 7.)

On cross-examination, Dr. Freedman calculated the concentration of arsenic that would be expected, after mixing with the receiving stream, if 0.26 pounds of arsenic per day were in fact entering the river. Dr. Freedman's

calculation indicated that 0.11 micrograms of arsenic per liter of water would be present in the river from the seeps and groundwater discharges, far below the drinking water standard of 10 micrograms per liter. (Resp. Exh. 24; R. p. 425, line 1 - p. 426, line 13.) Thus, even assuming Dr. Freedman's exaggerated assumptions about both volume of water and concentration of arsenic were true, Dr. Freedman's own calculations demonstrated that the Wateree River would continue to meet water quality standards for arsenic.

Although Appellant argues repeatedly that DHEC has a duty to impose permit conditions as necessary to assure that water quality standards are protected, Appellant cannot demonstrate that any water quality standard is or will be exceeded in the Wateree River. Indeed, the reliable, probative evidence in the record establishes that DHEC has imposed conditions that will protect the Wateree River.

3. The Administrative Law Court properly upheld DHEC's issuance of an Industrial Solid Waste Landfill Permit to SCE&G.

The ISWLF Permit authorizes SCE&G to dispose of gypsum by-product, coal combustion products, and on-site waste listed in Appendix I of 25A S.C. Code Ann. Regs. 61-107.11 (Supp. 2009). The permit also requires SCE&G to install groundwater monitoring wells around the landfill, to follow an approved Groundwater Sampling and Analysis Plan, and to take specified actions if a groundwater protection standard has potentially been exceeded at any monitoring well. (R. pp. 1001 - 1006.)

The ALC made extensive Findings of Fact about the landfill's conformity to state regulations. (R. pp. 1 - 20 at 7-9.) The ALC found that the proposed landfill

exceeded regulatory requirements for permeability of the liner and separation from groundwater. SCE&G and its contractor performed more than 160 quality control/quality assurance tests on the landfill liner. (R. p. 718, line 2 - p. 719, line 13.)

Appellant presented no testimony that the landfill failed to meet the requirements of 25A S.C. Code Ann. Regs. 61-107.16.⁸ Indeed, Appellant's expert witness, Dr. Freedman, stated at the hearing that the ISWLF met the requirements of the regulation. (R. p. 402, line 11 - p. 403, line 12.)

Appellant now argues that the landfill permit is somehow deficient because it allows wastewater from the leachate collection system to be routed to Pond 1. For the reasons set forth in Section 2, the Wateree River is in no danger of exceeding the drinking water standard for arsenic because of groundwater seeps from Pond 1. Appellant produced no evidence at the hearing that the addition of wastewater from the leachate collection system to Pond 1 will threaten the Wateree River and now argues only that the amount of arsenic will be "more." Appellant offers Dr. Freedman's laundry list of ways that arsenic in the leachate might be treated, all without a scintilla of evidence that such treatment is even necessary.

Appellant failed in the Administrative Law Court to demonstrate that DHEC's issuance of the NPDES and ISWLF permit was erroneous. The ALC correctly affirmed DHEC's decisions. Likewise, Appellant has failed to meet his

⁸ SCE&G's landfill permit was issued under 25A S.C. Code Ann. Regs. 61-107.16, the regulation in effect when the permit was issued on February 11, 2008. On May 23, 2008, Regulation 61-107.16 was repealed and replaced by 25A S.C. Code Ann. Regs. 61-107.19. Jean-Claude Younan, the environmental engineer who served as SCANA's project manager for the landfill, testified without contradiction that the landfill met all the requirements of the new regulation. (R. p. 696, line 12 - p. 697, line 10.)

burden of showing that the ALC's decision is unsupported by substantial evidence or affected by an error of law. Accordingly, his appeal should be dismissed.

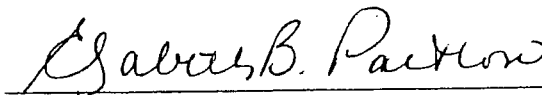
CONCLUSION

Appellant has failed to demonstrate that the Final Decision and Order of the ALC was affected by an error of law or was unsupported by the reliable, probative, and substantial evidence in the record. Accordingly, the decision of the ALC must be affirmed.

Respectfully submitted,

OGLETREE, DEAKINS, NASH,
SMOAK & STEWART, P.C.

August 11, 2010



Elizabeth B. Partlow
1320 Main Street, Suite 600
Columbia, SC 29201
Telephone: 803-252-1300
Fax: 803-254-6517
beth.partlow@ogletreedeakins.com

HAMILTON DELLENEY & HEMLEPP, P.A.

Francis G. Delleney, Jr.

Francis G. Delleney, Jr. *EBP w/ permission*
Post Office Box 808
Chester, SC 29706
803-581-2211 (Telephone)
803-581-2216 (Facsimile)
hdhattys@truvista.net

WILLOUGHBY & HOEFER, P.A.

John M. S. Hofer

John M. S. Hofer *EBP w/ permission*
Post Office Box 8416
Columbia, SC 29202-8416
803-252-3300 (Telephone)
803-771-2410 (Facsimile)
jhofer@willoughbyhofer.com

*Attorneys for Respondent South Carolina
Electric & Gas Company*

CERTIFICATE OF SERVICE

I do hereby certify that the foregoing **BRIEF OF RESPONDENT SOUTH CAROLINA ELECTRIC & GAS** has been served upon the following persons by U.S. Mail, properly addressed, and with the correct amount of postage affixed thereto:

Etta Williams, Esq.
S.C. DHEC
2600 Bull Street
Columbia, SC 29201

Stephen P. Hightower, Esq.
S.C. DHEC
2600 Bull Street
Columbia, SC 29201

Roger Hall, Esq.
S.C. DHEC
2600 Bull Street
Columbia, SC 29201

James E. Smith, Jr., Esq.
E. Scott Winburn, Esq.
1422 Laurel Street
Columbia, SC 29201

Robert Guild, Esq.
314 Pall Mall
Columbia, SC 29201

Dated this 11th day of August 2010.

Gabriel B. Paiton

THE STATE OF SOUTH CAROLINA
In The Court of Appeals

APPEAL FROM THE ADMINISTRATIVE LAW COURT
Carolyn C. Matthews, Administrative Law Judge

Case No. 08-ALC-07-0183-CC
Case No. 08-ALC-07-0534-CC

Heath Hill,

Appellant,

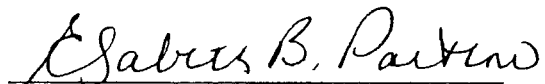
v.

South Carolina Department of
Health and Environmental
Control and South Carolina
Electric & Gas Company,

Respondents.

CERTIFICATE OF COUNSEL

The undersigned certifies that this Final Brief complies with Rule 211(b), SCACR.



Elizabeth B. Partlow
OGLETREE, DEAKINS, NASH,
SMOAK & STEWART, P.C.
1320 Main Street, Suite 600
Columbia, SC 29201
803-252-1300 (Telephone)
803-254-6517 (Facsimile)
beth.partlow@ogletreedeakins.com

John M.S. Hoefer
WILLOUGHBY & HOEFER, P.A.
Post Office Box 8416
Columbia, SC 29202-8416
803-252-3300 (Telephone)
803-771-2410 (Facsimile)
jhoefer@willoughbyhoefer.com

Francis G. Delleney, Jr.
HAMILTON DELLENEY &
HEMLEPP, P.A.
Post Office Box 808
Chester, SC 29706
803-581-2211 (Telephone)
803-581-2216 (Facsimile)
hdhattys@truvista.net