

RECEIVED

FEB 01 2018

S.C. SUPREME COURT

STATE OF SOUTH CAROLINA
IN THE SUPREME COURT

Appellate Case No. 2015-001915

Sierra Club,

Respondent,

v.

South Carolina Department of Health and Environmental Control and Chem-Nuclear Systems, LLC,

Defendants,

of whom Chem-Nuclear Systems, LLC is,

Petitioner,

and South Carolina Department of Health and Environmental Control is,

Respondent.

**BRIEF ON CERTIORARI
OF SIERRA CLUB**

Amy E. Armstrong
SOUTH CAROLINA ENVIRONMENTAL LAW
PROJECT

Mailing address: Post Office Box 1380
Pawleys Island, SC 29585

Office address: 430 Highmarket Street
Georgetown, SC 29440

Telephone (843) 527-0078

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

Attorneys for Sierra Club

January 29, 2018

TABLE OF CONTENTS

	<u>Page</u>
TABLE OF CASES, STATUTES & OTHER AUTHORITIES	iii
STATEMENT OF ISSUES ON CERTIORARI	v
STATEMENT OF THE CASE	1
ARGUMENT	3
I. Subsection 7.11.11 Mandates Chem-Nuclear to Meet Technical Requirements in its Disposal Unit Designs in Addition to Other Results-Based and Performance Criteria ...	7
A. Chem-Nuclear Did Not Appeal the 2010 Ruling that Subsection 7.11.11 Contains Technical Requirements, and Thus it is the Law of the Case and Not Preserved for Review	8
B. Technical Requirements Are In Addition to the Performance Objectives, Not Limited By Them	10
C. Subsection 7.11.11 Requires More Than a Results-Based Analysis	14
II. The Court's Compliance Conclusions on Subsection 7.11.11. Are Fully Supported by the 2005 ALC Findings and the Plain Language of 7.11.11	16
A. The Court of Appeals Does Not Interpret "Minimize" to Mean "Prevent," and Sierra Club has Never Argued for Such an Interpretation	21
B. Rainfall is Water That Migrates and 7.11.11 is Equally Applicable to Rain as it is to Surface Water and DHEC's Contrary Interpretation is Entitled to No Deference	24
C. The Court of Appeals Could Not Shift the Burden of Proof Given the Posture of this Appeal	26
III. There are no Findings to Support a Conclusion that Compliance with 7.11.11 will Increase Worker Exposure or That Both Worker Safety and Minimization of Migration of Water Cannot Be Collectively Achieved	28
IV. The 2005 Feasibility Report Is Not In the Record and Reliance Thereon is Improper ..	29

CONCLUSION 30

TABLE OF CASES, STATUTES AND OTHER AUTHORITIES CITED

Page

CASES:

Anonymous (M-156-90) v. State Bd. of Med. Examiners, 329 S.C. 371, 496 S.E.2d 17 (1998) 8

Arnold v. Carolina Power & Light Co., 168 S.C. 163, 167 S.E. 234 (1933) 1

Brown v. Bi-Lo, Inc., 354 S.C. 436, 581 S.E.2d 836 (2003) 24

Commissioners of Public Works v. DHEC, 372 S.C. 351 (Ct. App. 2007) 10

Duvall v. S.C. Budget and Control Bd., 377 S.C. 36, 42, 659 S.E.2d 125, 128 (2008) 11

Engaging & Guarding Laurens Cnty's Env't (EAGLE) v. DHEC, 407 S.C. 334, 755 S.E.2d 444 (2014) 24

Etiwan Fertilizer Co., 217 S.C. 354, 359, 60 S.E.2d 682, 684 (1950) 24

Garner v. Houck, 312 S.C. 481, 435 S.E.2d 847 (1993) 13

In re Morrison, 321 S.C. 370, 468 S.E.2d 651 (1996) 8, 21

Kiriakides v. United Artists Commc'ns. Inc., 312 S.C. 271, 440 S.E.2d 364 (1994) 11

Matheson v. McCormac, 187 S.C. 260, 196 S.E. 883 (1938) 8

McInnis v. McInnis, 348 S.C. 585, 560 S.E.2d 632 (Ct. App. 2002) 13

Peake v. SCDMV, 375 S.C. 589, 654 S.E.2d 284 (2007) 10

Ravan v. Greenville Cty., 315 S.C. 447, 434 S.E.2d 296 (Ct. App. 1993) 28, 29

Sierra Club v. DHEC & Chem-Nuclear, 387 S.C. 424, 693, S.E.2d 13 (Ct. App. 2010) 2, 8, 9, 14, 25, 26

S.C. Coastal Conservation League v. DHEC, 363 S.C. 67, 610 S.E.3d 482 (2005) 22, 24

Spruill v. Richland Cnty. Sch. Dist. 2, 363 S.C. 61, 609 S.E.2d 524 (2005) 13

State v. Sullivan, 310 S.C. 311, 426 S.E.2d 766 (1993) 8

STATUTES:

Act 387 of 2006 1

REGULATIONS:

10 C.F.R. Part 61, "Licensing Requirements for Land Disposal of Radioactive Wastes" 3

S.C. Code Ann. Regs. § 61-63, 7.1.1 25

S.C. Code Ann. Regs. § 61-63, 7.2 7

S.C. Code Ann. Regs. § 61-63, 7.6 15

S.C. Code Ann. Regs. § 61-63, 7.7 15

S.C. Code Ann. Regs. § 61-63, 7.10 2, 29

S.C. Code Ann. Regs. § 61-63, 7.11 2, 8, 9

S.C. Code Ann. Regs. § 61-63, 7.11.9 7

S.C. Code Ann. Regs. § 61-63, 7.11.11
..... 2, 5, 6, 7, 8, 9, 10, 12, 12, 14, 15, 16, 20, 21, 22, 23, 24, 25, 27, 28, 29

S.C. Code Ann. Regs. § 61-63, 7.18 10

S.C. Code Ann. Regs. § 61-63, 7.23.6 2, 5, 8

OTHER AUTHORITIES:

S.C. Appellate Court Rule 210(h) 28, 29

STATEMENT OF ISSUES ON CERTIORARI

- I. Whether Subsection 7.11.11 Mandates That Chem-Nuclear Must Comply with Technical Requirements in its Disposal Unit Designs, in Addition to Complying with Other Results-Based and Performance Criteria.
- II. Whether Chem-Nuclear is Precluded from Arguing that 7.11.11 Does not Contain Technical Requirements Because that Issue Was Not Preserved for Review and Thus the Court of Appeals Ruling in Chem-Nuclear I Is the Law of the Case.
- III. Whether the Court of Appeals' Opinion Is Supported by the Evidence in Light of the Fact that the Court's Review Was Constrained to the 2005 ALC Findings.
- IV. Whether the Court of Appeals Could Have Shifted the Burden of Proof in Light of the Posture of this Appeal.
- V. Whether the Court of Appeals' Opinion is Supported by the Plain Language of Subsection 7.11.11.
- VI. Whether DHEC's Interpretation that "Rainwater" is Not "Water" that Migrates Onto and Out Of Disposal Units Is Entitled to Any Deference.
- VII. Whether Chem-Nuclear Improperly Relied on Statements and Documents that Were Not Presented to the Lower Court and Are Not in the Record.

STATEMENT OF THE CASE¹

This matter arises on remand from a contested case hearing challenging the South Carolina Department of Health and Environmental Control's ("DHEC") issuance of a renewal license to Chem Nuclear Systems, LLC, ("Chem-Nuclear") authorizing the operation of the Low Level Radioactive Waste Disposal Facility in Barnwell County.

On March 30, 2004, Sierra Club filed its request for contested case hearing before the Administrative Law Court ("ALC"). On October 13, 2005, the Honorable John D. Geathers issued a Final Order and Decision ("2005 ALC Order") affirming the renewal license, but directing Chem-Nuclear to conduct studies concerning methods to reduce the contact between radioactive waste and rainfall and other water and the surrounding earth, and submit those studies to DHEC. Those studies were not submitted to the ALC or Sierra Club. On October 24, 2005, Sierra Club filed a motion for reconsideration. On November 1, 2005, the motion was denied.

On November 30, 2005, Sierra Club petitioned the DHEC Board for review of the decision of the ALC. The matter was expected to be heard by the DHEC Board at its July, 2006 meeting. On July 1, 2006, Act 387 of 2006 became effective, thereby amending the appeals procedures for permits and licenses issued by DHEC. The effect of the Act on this appeal was in

¹The Sierra Club requests that Chem-Nuclear's Statement of the Case be stricken or disregarded to the extent that it contains a significant discussion of contested matters in violation of SCACR Rule 208(b)(1)(c). Moreover, Chem-Nuclear's assertions regarding the "Feasibility Report" and its or DHEC's conclusions on measures to minimize contact between waste and water on p. 2 of its brief are not in the record and certainly not supported in the Appendix citation at App. 327-28, n. 2, which is the ALC's Order on Remand. Chem-Nuclear's reliance on this "Feasibility Report," which has never been presented before the ALC is improper. (See Chem-Nuclear Brief, pp. 12-13 & Section IV herein). Indeed, the ALC's Order on Remand made no findings regarding additional studies or results, as it was precluded from doing so by the Court of Appeals in Chem Nuclear I. Had Chem-Nuclear desired to have the "Feasibility Report" made part of the record and considered by the ALC or this Court, it should have sought to protect its rights to do so. It did not.

dispute, prompting Chem-Nuclear to file a petition in the original jurisdiction of the Supreme Court. On July 23, 2007, this Court issued its opinion concluding that the DHEC Board no longer had jurisdiction to hear Sierra Club's appeal, and directing that DHEC transfer the appeal to the Court of Appeals.

On March 10, 2010, the Court of Appeals issued an opinion, affirming in part and remanding in part the ALC's 2005 Order. Sierra Club v. DHEC & Chem-Nuclear, 387 S.C. 424, 693 S.E.2d 13 (Ct. App. 2010; cert. denied July 21, 2011) (hereinafter "Chem Nuclear I"). In particular, the Court of Appeals affirmed the ALC, but remanded the case to the ALC with instructions to apply its factual findings to the technical requirements of Sections 7.10.5-7.10.10, 7.11 and 7.23.6 of S.C. Code of Regulations 61-63, which were not addressed in the 2005 ALC Order. Chem-Nuclear filed a petition for certiorari, which was denied by this Court on July 21, 2011. The case was thereafter remitted to the ALC.

On remand the case was assigned to the Honorable Ralph King Anderson, III. The issues before the ALC were whether, applying the 2005 factual findings, the license complied with Sections 7.11 and 7.23.6 of Regulations 61-63. On July 20, 2012, Judge Anderson issued a Final Order and Decision on Remand ("ALC Order on Remand") concluding that the renewal license met the technical requirements of Regulation 61-63 and affirming its issuance. On August 20, 2012, Sierra Club filed its second Notice of Appeal with the Court of Appeals.

On July 30, 2014, the Court of Appeals issued an Opinion affirming in part and reversing in part the ALC's Order on Remand. Specifically, the Court of Appeals held that the license failed to comply with Sections 7.11.11.1, 7.11.11.2, 7.11.11.4 and 7.23.6. Chem Nuclear filed a petition for rehearing, resulting in a substituted Opinion filed August 12, 2015. Sierra Club v. DHEC & Chem-Nuclear, 414 S.C. 581, 779 S.E.2d 805 (Ct. App. 2015) (hereinafter "Chem-

Nuclear II”). On September 11, 2015, Chem Nuclear filed a petition for writ of certiorari, which was granted on October 26, 2017.

ARGUMENT

*Factual Background*²

In 1971 Chem-Nuclear began operating a low-level radioactive nuclear waste disposal facility located approximately five miles west of the City of Barnwell on 235 acres owned by the State of South Carolina and leased to Chem-Nuclear. It has operated continuously under License No. 097, which has been amended forty-eight times, including seven renewals.

The State of South Carolina and the Nuclear Regulatory Commission (“NRC”) have a formal agreement whereby the State has regulatory authority over radioactive materials in quantities not sufficient to form a critical mass. The NRC promulgated 10 C.F.R. Part 61, “Licensing Requirements for Land Disposal of Radioactive Wastes,” and South Carolina was required to adopt compatible regulations, which it did by amending Regulation 61-63.³

These regulations were written solely for the purpose of Chem Nuclear’s operations in South Carolina. Chem-Nuclear’s Barnwell Facility is the only site of its kind in the State and is

²The parties agree that the Court of Appeal’s 2010 Order required the ALC to base its legal conclusions solely on the findings contained in the 2005 Order. No dispute exists that the 2005 ALC findings are supported by substantial evidence, and it is those findings upon which the Court of Appeals reviewed the ALC’s legal conclusions on remand and which are discussed herein. Sierra Club asks this Court to disregard reference to or reliance on any information that was not before the ALC and not contained within its 2005 findings. See Sections III & IV, *infra*.

³Sierra Club notes that Judge Huff notified the parties prior to oral argument that he had been in the legislature during the time that the Chem Nuclear facility was being proposed, having worked on the passage of the regulations at issue.

one of only three radioactive nuclear waste disposal sites in the United States, thus the regulations necessarily apply broadly and comprehensively to its disposal activities.⁴

In 2001, during review of the renewal application, DHEC advised Chem-Nuclear to “review and revise all trench construction details, plans, specifications, and procedures . . .” (App. 373, 2005 ALC Order, FF # 50). DHEC specifically asked Chem-Nuclear to consider placing temporary covers over trenches, which are typically kept open for active receipt of waste, in order to protect the trenches and waste contained therein from direct rainfall. (App. 347, FF # 50). Chem-Nuclear provided some conceptual designs, but never completed evaluation of the designs and never submitted any final designs to DHEC for approval. (Id.)

The disposal technology used at the Barnwell Facility is described as “enhanced shallow land burial with engineered barriers.” The waste is brought to the facility and placed in concrete vaults, which are then placed in one of three below-grade trench designs. The purpose of the three trench designs is to segregate waste by dose rates. (App. 379, FF # 82). In some instances, large components are qualified as “disposal vaults,” and thus they are placed directly in the trench. (App. p. 381, FF # 98).

The regulations require Chem-Nuclear to utilize “engineered barriers,” which include disposal trenches, disposal vaults, and enhanced caps. (App. 379, FF # 81). The disposal vaults provide only for structural stability to prevent subsistence. (App. 377, FF # 70). The vaults are not sealed against water intrusion and have holes in the bottom to allow water to leave the vaults. (App. 372, FF # 47). None of the trenches at the Chem-Nuclear site have an impermeable liner or

⁴Waste is not simply stored at the Barnwell facility, but is permanently “disposed” there. Disposal is defined as “isolation of wastes from the biosphere inhabited by man and his food chains by emplacement in a land disposal facility,” Subsection 7.2.6

a leachate collection system, and are in fact designed to *allow* water to flow into the ground beneath the trenches. (App. 382, FF # 102). Further, the enhanced cap is not installed until a trench is completely filled with vaults containing waste, which takes years. (App. 373 & 382, FF # 51 & 100).

Heavy rainfall in Barnwell County is not uncommon, and highlights the potential for ground and surface water contamination caused by the collection of rainwater in the open disposal trenches and on the radioactive waste waiting to be buried at the site. (App. 384, FF # 115). Photographs taken during DHEC inspections revealed rainwater collecting in open trenches. (App. 384, FF # 116).

The DHEC permit authorizes Chem-Nuclear to continue disposing of waste by placing it in concrete vaults, which are then placed in dug disposal trenches. The renewal license issued by DHEC included a few substantive changes, but does not change the disposal units or practices.

Summary of Argument

At base, Chem-Nuclear seeks to exempt itself from meeting a technical design requirement for its disposal units, arguing that those requirements cannot be in addition to other results-based and performance standards. Chem-Nuclear suggests that since it is in compliance with other, more loosely-defined parts of the regulations, that is enough and it need not meet the specific technical design and construction requirements of Subsections 7.11.11 and 7.23.6.

In propounding these arguments, Chem Nuclear consistently and erroneously characterizes the Court of Appeals' Opinion (and the Sierra Club's arguments) throughout its brief. Nowhere does the Court of Appeals (or Sierra Club) suggest that Subpart 7.11.11 imposes an absolute prohibition on water coming into contact with waste, no matter how many times Chem Nuclear repeats this false claim in bold, italics and underlining all at the same time,

(Chem-Nuclear Brief, pp. 5, 6, 7, 13, 20), as this Court will find from reviewing the Appendix for itself (and specifically pages 305-315 cited by Chem-Nuclear). No matter how many formatting tools Chem Nuclear uses, none can overcome the fact that Subpart 7.11.11 mandates it to minimize, i.e., reduce to the maximum extent possible, the migration of water onto and out of disposal units, as held by the Court of Appeals. S.C. Code Ann. Regs. § 61-63, 7.11.11.1, 7.11.11.2 & 7.11.11.4. The Court of Appeals held that Chem-Nuclear is not in compliance with Subpart 7.11.11 because the facts in the 2005 ALC Order establish that not only has Chem-Nuclear done *nothing* to minimize rain from falling onto the disposal units, but in fact Chem-Nuclear designed the disposal units specifically to *allow* water to flow out of them. (App. 372 & 382).

The Court of Appeals did not require Chem-Nuclear to undertake any particular steps (such as sealing and grouting or sheltering the disposal units), as erroneously claimed by Chem-Nuclear in advancing its inflammatory worker safety argument. Rather, the Court of Appeals ruled that neither DHEC nor the ALC endeavored to consider what it would mean to minimize the migration of water, and specifically rainwater, onto and out of the disposal units. The Court's Order simply requires Chem-Nuclear and DHEC to conduct such an undertaking, similar to the 2005 ALC Order, which created an impractical and non-binding mechanism to address the "monumental hazardous conditions that can result from tritium and other radioactive materials leaching into the soils, and, in turn, into the groundwater, [which] cannot be ignored." (App. 374, ALC Order, FF#56).

In particular, the Court held that "[i]n considering whether Chem-Nuclear's disposal units and engineered barriers adequately reduce—'minimize'—the migration of water, we acknowledge it is the duty of DHEC, not this court, to enforce regulation 61-63. Similarly, it is

the duty of Chem-Nuclear, not DHEC, to take the necessary action to comply with the regulations.” Chem Nuclear II at 817, 605. The Court held, based on the 2005 ALC findings, that no action had been taken with respect to rainwater falling on and entering the vaults and trenches and migrating out of these disposal units into the soil and groundwater beneath them. The Court of Appeals Opinion is entirely consistent with the findings of the ALC’s 2005 Order – correcting the deficiencies in the 2005 ALC Order’s remedy and the 2012 ALC Order’s legal errors – instead requiring an evaluation and compliance with Subsections 7.11.11.1, 7.11.11.2 and 7.11.11.4.

The Court of Appeals utilized the facts found based on the substantial evidence from the 2005 ALC Order and applied those facts to the regulations in a manner that ensures compliance with all of the requirements, not just some of them.

I. Subsection 7.11.11 Mandates Chem-Nuclear to Meet Technical Requirements in its Disposal Unit Designs in Addition to Other Results-Based and Performance Criteria

Subsection 7.11.11. requires that Chem-Nuclear’s disposal units and the incorporated engineered barriers⁵ “shall be designed and constructed to meet the following objectives:

- (1.) to minimize the migration of water onto the disposal units.
- (2.) to minimize the migration of waste or waste contaminated water out of the disposal units.
- ...

⁵Section 7.11.9 requires Chem-Nuclear to “incorporate engineered barriers for all waste classifications. The engineered barriers shall be designed and constructed to complement and improve the ability of the disposal facility to meet the performance objectives in this part.” Engineered barriers as defined as “a man-made structure or device that is intended to improve the land disposal facility’s ability to meet the performance objectives of this part.” S.C. Code Ann. Reg. 61-63, Section 7.2.9. In this case, the engineered barriers are the “disposal trenches, disposal vaults, and enhanced caps.” (App. 379, FF # 81).

(4.) temporary collection and retention of water and other liquids for a time sufficient to allow for the detection and removal or other remedial measures without the contamination of groundwater or the surrounding soil.

Virtually all of the objectives in Section 7.11.11 promote the goal of reducing to the smallest possible amount any water from coming into contact with waste.

A. Chem-Nuclear Did Not Appeal the 2010 Ruling that Subsection 7.11.11 Contains Technical Requirements, and Thus it is the Law of the Case and Not Preserved for Review

In Chem-Nuclear I the Court of Appeals concluded that the technical requirements are *in addition to, not limited by*, the performance objectives. Chem-Nuclear I, 387 at 435-36, 693 at 19. Neither DHEC nor Chem Nuclear obtained appellate review of that decision.

“A decree from which no appeal is taken becomes the law of the case in all subsequent proceedings involving the same parties and the same subject matter is the well-settled law in this state, and it is therefore unnecessary to enter upon any extended discussion of this postulate.” Matheson v. McCormac, 187 S.C. 260, 196 S.E. 883, 884 (1938). See also In re Morrison, 321 S.C. 370 n. 2, 468 S.E.2d 651 n. 2 (1996) (noting that an unappealed ruling becomes the law of the case and precludes further consideration of the issue on appeal); Anonymous (M-156-90) v. State Bd. of Med. Examiners, 323 S.C. 260, 278, 473 S.E.2d 870, 879 (S.C. Ct. App. 1996) rev'd, 329 S.C. 371, 496 S.E.2d 17 (1998); State v. Sullivan, 310 S.C. 311, 426 S.E.2d 766 (1993) (to preserve an issue for appellate review, appellant must object at the first opportunity).

Chem-Nuclear is foreclosed from arguing that the technical requirements of Sections 7.11 and 7.23.6 do not apply or are superseded by the performance objectives because the Court of Appeals, in Chem-Nuclear I, rejected that argument finding that the technical requirements of

Subsections 7.11 impose “*additional* compliance requirements” beyond the performance objectives. Chem-Nuclear I, 387 S.C. at 436, 693 S.E.2d at 19. Again in 2014, the Court of Appeals reiterated that “subsections 7.11.11 and 7.23.6 require Chem-Nuclear to take action to design and construct the disposal site, disposal units, and engineered barriers to meet the specifications in those subsections.” Chem-Nuclear II, citing Chem-Nuclear I at 423, 435, 436. In Chem Nuclear I, the Court of Appeals found that “section 7.11 imposes additional compliance requirements for Chem-Nuclear such that the balancing test of ALARA [as low as reasonably achievable] would not be sufficient to address whether Chem-Nuclear is in compliance with section 7.11.” 387 S.C. at 435. The Chem-Nuclear I court ruled that ALARA and other performance objectives cannot be the basis for determining compliance with Subsection 7.11 and that ruling cannot be challenged in this appeal.

Because the law of the case is that Subsection 7.11.11 contains distinct technical requirements that Chem-Nuclear’s disposal unit design must meet in order to receive a license, Chem-Nuclear’s arguments contained in Section B—that Subsection 7.11.11 merely contains conditions to be included in the license—and in Section C—that compliance with results-based criteria is sufficient to comply with Subsection 7.11.11—are without merit. (Brief, pp. 11-21). Nevertheless, Sierra Club will explain how the Court of Appeals in Chem-Nuclear II correctly arrived at its conclusions on compliance with Subsection 7.11.11.

B. Technical Requirements Are In Addition to the Performance Objectives, Not Limited By Them

Even if the question of whether Subsection 7.11.11 contains technical requirements was preserved, the Court of Appeals correctly held that the requirements of Subsection 7.11.11 are in addition to the performance objectives, not limited by them.

Chem-Nuclear falls back on the performance objectives of 7.18 – the as low as reasonably achievable (“ALARA”) standard – for explaining why it has not met the technical requirements of Subsection 7.11.11. Chem Nuclear never explains how it cannot comply with both the ALARA standard and Subsection 7.11.11. Essentially, where the Court has found that the ALARA standard is less rigorous than the design standards in Section 7.11.11, Chem-Nuclear asks that the ALARA standard in Part III be controlling over Part VII and utilized to negate the requirements of 7.11.11. (Chem-Nuclear Brief, p. 21-22). Chem-Nuclear tells this Court that compliance with one part of the regulations is proof that it has complied with another, technical, part. The Court of Appeals’ ruling is consistent with the regulations confirming that Part VII is “in addition to, and not separate from the remaining parts of 61-63.” (Chem-Nuclear Brief, p. 23). If the Court had concluded otherwise, then there would be no need for Section 7.11.11 because it would serve no useful purpose. “[T]he primary rule of statutory construction is that the Court must ascertain the intention of the legislature . . . [, and] [t]hus, the court will reject the agency’s interpretation where it is specifically contrary to the statute or regulation.”

Commissioners of Public Works v. DHEC, 372 S.C. 351, 359 (Ct. App. 2007) (quotations omitted). Courts will reject statutory interpretations that lead to absurd results clearly unintended by the legislature or that defeat the plain legislative intent. Peake v. SCDMV, 375 S.C. 589, 599,

654 S.E.2d 284, 289; Kiriakides v. United Artists Commc'ns, Inc., 312 S.C. 271, 275, 440 S.E.2d 364, 366 (1994)). Furthermore, the appellate court must 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).

Sierra Club is not advocating that the regulatory requirements be “separated,” nor did the Court of Appeal “improperly dissociate[]” these requirements, as suggested by Chem Nuclear. (Brief, p. 23) Rather, Sierra Club advocates, and the Court of Appeals effectuates, that every single one of the regulations be implemented. On the other hand, Chem Nuclear advocates that one technical requirement can “be met or addressed by compliance with other regulations.” (Brief, p. 23). If that were so, then no need for the technical requirement would exist. Surely the legislature did not adopt technical requirements with the expectation that they need not be implemented independently because Chem Nuclear complies with other regulations. See Duvall, supra.

Chem Nuclear would have this Court disregard Subsection 7.11.11's specific requirements to “minimize the migration of water” because the ALARA requirements in a separate regulation are met. However, Chem Nuclear does not get to pick and choose which provisions control, and it must adhere to them all. The Court of Appeals fully explains how 7.11.11 requires action, i.e., the design and construction to minimize migration of water, as opposed to results-based objectives. Chem Nuclear II at 594, 779 S.E.2d at 811-12.

If evidence that the performance objectives have been met is appropriate to demonstrate compliance with other requirements of the regulation, then there would be no need for the “other

requirements,” and specifically technical requirements of 7.11.11. While the requirements of 7.11.11 are designed to meet objectives, that does not diminish the requirements of the regulations or the clear language used: to “minimize the migration of water onto disposal units” and “minimize the migration of water out of disposal units.” S.C. Code Ann. Regs. § 61-63, 7.11.11.1 & 7.11.11.2.

Contrary to Chem-Nuclear’s assertions, the Court of Appeals does not direct any particular action that would achieve compliance with Subsection 7.11.11. Instead, the Court identified findings that establish that not only is Chem Nuclear not taking steps to minimize the migration of water, it is actively implementing measures specifically designed to allow water to migrate out of the disposal units. Chem Nuclear II at 602-04, 779 S.E.2d at 815-16.

Similarly, Chem-Nuclear’s argument that the title of 7.11.11 should be determinative of compliance is unavailing. Whether Subsection 7.11.11 is referred to as “technical requirements” or “compliance requirements” or “Conditions of Licenses” is a distinction without a difference.⁶ (Chem-Nuclear Brief, p. 15-16). However they are referred, undoubtedly the mandates of 7.11.11 are **requirements** that Chem Nuclear must comply with in order to receive a renewal license. Nothing in the Opinion indicates that these requirements were “newly discovered” as suggested by Chem Nuclear. (Brief, p. 15). Simply put, neither the heading of a regulation nor a

⁶However, if it is true that the requirements of Section 7.11.11 are merely permit conditions and not stand-alone requirements for the renewal license, as argued by Chem-Nuclear, then DHEC has clearly failed to enforce those requirements. Sierra Club submits that Section 7.11.11 is a specific regulatory requirement necessary for securing a license, not just a permit condition.

permit condition are controlling in determining compliance with the regulations. (Chem-Nuclear Brief, p. 16, declaring that “7.11.11’s title is clear and unambiguous”).⁷

Although the title and headings are part of the statute, they may not be construed to limit the plain meaning of the text. Garner v. Houck, 312 S.C. 481, 486, 435 S.E.2d 847, 849 (1993) (citing Brotherhood of Railroad Trainmen v. Baltimore & O.R. Co., 331 U.S. 519, 67 S.Ct. 1387, 91 L.Ed. 1646 (1947)). For interpretative purposes, the title of a statute and heading of a section are of use only when they shed light on some ambiguous word or phrase and as tools available for resolution of doubt, but they cannot undo or limit what the text makes plain. Garner v. Houck, 312 S.C. 481, 486, 435 S.E.2d 847, 849 (1993). The title and headings of a statute may not be construed to limit the plain language of a statute, but may be used to shed light on an ambiguous word or phrase. McInnis v. McInnis, 348 S.C. 585, 592, 560 S.E.2d 632, 636 (Ct. App. 2002) (citing Garner v. Houck, 312 S.C. 481, 486, 435 S.E.2d 847, 849 (1993)). The reading of a statute or regulation to determine its meaning is done by reading the entire document as a whole, and not limited by the title. Spruill v. Richland Cnty. Sch. Dist. 2, 363 S.C. 61, 64, 609 S.E.2d 524, 526 (2005) (“We do not, however, determine the meaning of a regulation by reading its component parts in isolation, but rather construe the regulation as a whole.”)

What is important is the language of the regulation. Here, there is no doubt about what is meant by the words “shall be designed and constructed . . . to minimize the migration of water onto the disposal units [and] . . . to minimize the migration of waste or waste contaminated water

⁷Sierra Club would also point out that Chem-Nuclear’s new argument about 7.11.11 being useful only as a permit condition and not as a separate regulatory requirement was not presented to the lower court and thus cannot be raised here. Arnold v. Carolina Power & Light Co., 168 S.C. 163, 167 S.E. 234 (1933).

out of the disposal units.” S.C. Code Ann. Regs. § 61-63, 7.11.11.1 & 7.11.11.2. See Spruill, Garner v. Houck, supra. This Court did not create “newly discovered” requirements, rather it applied the plain language of the text, aided by DHEC’s definition of the word “minimize.” Chem Nuclear II at 604-05, 779 S.E.2d at 817.

C. Section 7.11.11 Requires More Than a Results-Based Analysis

Contrary to Chem Nuclear’s assertion in Section C., the Court did not impose “significant *additional* limitations on the evidentiary standard” of Chem Nuclear I. (Brief, p. 19). Instead, as Chem Nuclear acknowledges, the Court concluded that “compliance may **not** be measured solely by results” and rejected the ALC’s reliance on findings that were unrelated to the migration of water, and specifically rainwater, onto and out of the disposal units. Chem Nuclear II at 600, 779 S.E.2d at 815. (emphasis added), (Id.). Instead, the Court of Appeals looked to findings related to the design of the disposal units and how those designs allowed and encouraged the migration of water. Id. at 606-11, 779 S.E.2d at 817-19. The Court of Appeals rejected the ALC’s conclusions because the ALC did not consider the finding relevant to migration of rainwater and looked only at results-based findings.⁸ Id. at 610-11, 779 S.E.2d at 820.

Contrary to Chem-Nuclear’s arguments, Chem Nuclear II did not expand the “additional compliance requirements” identified by in Chem Nuclear I. (Brief, p. 8). As evidenced by the opinion, the Court was fully aware of the distinction between technical requirements and

⁸Even if the Court agreed that the results to be achieved are determinative of whether Chem-Nuclear’s license meets the requirements of Section 7.11.11, it still has a problem: Judge Geathers found that in some areas, tritium level increased between 1997 and 2001. Judge Geathers found that when tritium data is compared to rainfall data as gauged by water table levels, *it appears that tritium concentrations have been varying with the amount of rainfall, not necessarily as a result of new storage methods*. (App. 372, FF # 46 (emphasis added)). Thus, the “results” are not favorable for Chem Nuclear in a results-based analysis.

performance objectives, noting that the “regulations containing technical requirements require Chem-Nuclear to take specific action to comply with the regulation, while regulations containing performance objectives require Chem-Nuclear to achieve certain results sought under the regulation.” Chem-Nuclear II at 593, 779 S.E.2d at 810. The performance objectives “do not impose specific requirements as to how Chem-Nuclear must accomplish any particular result,” but the technical requirements do.⁹ Id. Thus, while the results being achieved at the site are relevant to whether Chem-Nuclear is meeting the performance objectives, Chem-Nuclear cannot rest alone on “results” and must also demonstrate that the actions are being taken to meet specific requirements, for example those actions that demonstrate that disposal units are designed to minimize the migration of water onto and out of them. To this day, Chem-Nuclear cannot identify any design criteria implemented or construction activity taken to minimize the migration of rainwater, as the lower Court clearly recognized.

No basis to conclude that groundwater pathways and travel times minimize the migration of water onto and out of disposal units exists. (Brief, p. 23). The Court of Appeals correctly concluded that a pump and removal system, ponding and water detection systems and a partially permeable trench floor do not minimize the migration of water, but rather address systems *after* water has already migrated onto disposal units. Similarly, groundwater pathways and travel times

⁹The Court of Appeals’ opinion is not contrary to Sections 7.6 and 7.7, both of which relate to the presentation of information necessary to demonstrate that other sections (the performance objectives and technical requirements) will be met. Neither section contains any standards for the manner of disposal. Section 7.6 directs the applicant to provide information to establish compliance, and specifically asks for complete “descriptions” of “design criteria” and “design features,” among other things. Sierra Club submits that this section merely requires Chem-Nuclear to describe how it will design the disposal units such that they are compliant with the applicable regulatory requirements, including Subsection 7.11.11. Section 7.7 directs the applicant to conduct analyses to establish compliance with the performance objectives. These two sections require Chem-Nuclear to produce information, but contain no technical criteria.

are only relevant *after* water has been in contact with waste and migrated out of the disposal units (vaults and trenches).

Chem-Nuclear disputes that Subsection 7.11.11 requires any action on its part. Chem Nuclear argues that it does not have to “strictly” comply with every single one of those regulatory requirements, effectively arguing that some portions of the regulations should trump or supercede the provisions in Subsection 7.11.11. (Brief, p. 25). In essence, Chem-Nuclear asserts that since it is in compliance with Part III and other results-based sections of the regulations the license does not need to meet the specific requirements of 7.11.11. Chem-Nuclear asks that the plain language of specific regulatory provisions be ignored, along with DHEC’s interpretation of the word “minimize,” in favor of more loosely-defined, results-based standard.

II. The Court’s Compliance Conclusions on Subsection 7.11.11. Are Supported by the 2005 Findings and the Plain Language of the Regulation

Chem-Nuclear claims that the Court of Appeals should have looked at results-based requirements in order to determine whether Chem-Nuclear was in compliance with the technical requirements of 7.11.11. (Brief, Sections C. & D., pp. 16-23). The Court of Appeals did not “significantly enlarge[] the original ALC restriction by [] eliminating the ALC’s reliance on any established facts to demonstrate Chem-Nuclear’s compliance with sections of Part VII apart from that of 7.11.” (Brief, p. 15). Nor did it misconstrue 7.11.11. The Court looked at the totality of the factual findings. Specifically, the Court of Appeals reviewed facts from the 2005 ALC Order related to compliance with Section 7.11.11 that were ignored or disregarded by the ALC in 2012. Those facts include: 1) DHEC’s 2001 direction to Chem-Nuclear to consider temporary roofs and other conceptual trench designs to keep water out of trenches and vaults; 2) that final designs had

not been submitted in 2005, despite the undeniable problem of rainfall in the vaults and trenches; 3) tritium is driven into the groundwater through rainfall in and on the disposal trenches; 4) tritium concentration varies with the amount of rainfall; 5) there is no cover or roof, so rain falls directly into the vaults during loading; 6) the vaults and trenches have no cover and are exposed to rainfall while they are active; 7) the vaults are not sealed against water intrusion. Sierra Club provides the following summary of the 2005 finding supported by the substantial evidence the led to the Court of Appeals' Opinion:

Chem-Nuclear made an application to construct a low-level radioactive waste disposal facility in North Carolina. (App. 366, FF #10). The design of that facility included above-grade bunker disposal and infiltration collection and detection systems in the floor. (App. 376, FF # 67). Incoming waste containers would be loaded and grouted in uniform concrete waste packages. (Id.) A monitoring gallery for inspection was provided. The engineered earthen cover included a synthetic liner and a drainage layer as a secondary monitoring system. (Id.)

There are a variety of low level radioactive wastes disposed of at the Barnwell facility, including tritium. Tritium is a radioactive isotope that is contained in and comes from waste disposed of at the Barnwell Facility. (App. 369, FF # 24 & 25). Tritium was initially discovered in trenches at the Barnwell Site in 1974. Precipitation in and on the disposal trenches drives tritium into the groundwater beneath the Site. (App. 369, FF # 26). Tritium that has migrated from the trenches is referred to as the "tritium plume." (App. 369-70, FF # 29). It will take 120 years for the tritium on the Site to decay to a negligible level. (App. 369, FF # 28).

The groundwater on the Site encounters the surface waters and forms a stream know as Mary's Branch Creek. Mary's Branch is fed by springs containing groundwater migrating from

the Barnwell site. (App. 371, FF # 40). The stream is outside the Site boundaries and has been approved by DHEC as Chem-Nuclear's "compliance point." (App. 370, FF # 32). This approval is based on the recognition that this is the first point where a hypothetical member of the public might receive a dose of radiation. (Id.). Levels of tritium at the compliance point at Mary's Branch Creek have been as high as 1.1×10^5 picoCuries per liter (pCi/L). (App. 371, FF # 39). High concentrations of tritium in the groundwater have been detected nearest the disposal trenches. (App. 374, FF #53). Groundwater travel time from beneath the disposal trenches into Mary's Branch is approximately twenty years. (Id.).

The license issued to Chem-Nuclear requires it to maintain a separation of at least five feet between the bottom of the trenches and the highest groundwater level. (App. 374, FF # 55). But there have been at least two instances when the groundwater rose up into the trenches. (Id.).

Improvements in waste forms and containers, the use of vaults, and enhanced capping appear to have succeeded in reducing the amount of tritium that is migrating to groundwater. (App. 372, FF # 46). But in some areas, tritium levels have increased between 1997 and 2001. And when tritium data is compared to rainfall data as gauged by water table levels, it appears that tritium concentrations have been varying with the amount of rainfall, not necessarily as a result of new storage methods. (Id.).

Importantly, the concrete vaults holding the radioactive waste are not sealed against water intrusion. (App. 372, FF # 47). The floors of the vaults have holes to allow water to drain from the vaults, and the lids of the vaults are not grouted or otherwise sealed to prevent water from entering the vault. (Id.). The Barnwell site receives an average of 47 inches of rain annually, and

the water table rises during wet periods. (Id.). When waste is buried underground, a particularly rainy period will moisten the soil around the buried waste, even with enhanced capping. (Id.).

The problems caused by rainfall are compounded because when Chem-Nuclear is filling a vault, the vault has no cover or roof, allowing rain to fall directly into the vault during the loading period. (App. 372, FF # 48). Similarly, the trenches have no cover or roof. Rainfall 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. (Id.).

Elevated tritium levels were first detected in monitoring wells at the Site between 1978 and 1982. In 1980, Chem-Nuclear predicted that if any radio nuclides leaked from the landfill cells, it would take more than 424 years for those radio nuclides to reach Mary's Branch Creek. (App. 373, FF # 49). The actual travel time ended up being about 20 years. (Id.).

In recognition of water entering the vaults and then leaving the vaults and trenches carrying radioactive materials into the groundwater and ultimately to surface waters of Mary's Branch Creek, the 2005 ALC Order directed Chem-Nuclear to evaluate the use of designs and procedures that "will (1) shelter the disposal trenches from rainfall and prevent rainfall from entering the trenches, (2) provide temporary dry storage facilities for the storage of wastes received during wet conditions, and (3) provide for sealing and grouting the concrete disposal vaults to prevent the intrusion of water to the maximum extent feasible." (App. 390-91).

Despite these 2005 findings, in its Order on Remand the ALC concluded that:

Furthermore, though the finding[s] clearly reflect that clay-sand trench bottoms are not designed to prevent the migration of liquids out of the bottom of trenches, but rather, are **designed to** be partially impermeable and **allow liquids to infiltrate the soil below the trenches**, there is no finding that Chem-Nuclear's

waste disposal design is faulty or fails to minimize the migration of waste or waste contaminated water out of the disposal units.

(App. 340-41, emphasis added). The Court of Appeals corrects the ALC's failure to apply the 2005 findings that the vaults were intentionally designed to *allow* water to migrate out of those units, and that the trenches were intentionally designed to *allow* water to infiltrate into the soil and groundwater beneath the trenches. (App. 372, FF# 47).

Chem-Nuclear's disposal practices and designs simply fail to minimize migration of waste or waste contamination water out of the vaults. Indeed the 2005 ALC findings show that the disposal design and practices have the opposite result, actually encouraging water movement in and out of the vaults and into the soil beneath the trenches.

Chem Nuclear narrowly focuses on the issues addressed in the 2005 Order. The problem with the 2005 Order, as indicated by the Court of Appeals Opinion in Chem Nuclear I, is that the ALC failed to address compliance with Subpart 7.11.11., resulting in the remand. The bottom line is that Sierra Club presented evidence, which the ALC found persuasive in its 2005 Order, and which form the basis for the Court of Appeals' 2012 Opinion.

Chem-Nuclear would have this Court disregard these relevant facts and place complete reliance on the fact that there are sloped trench floors, a drainage system for monitoring, backfilling of the voids between vaults, and clay caps installed *after* the trenches are filled (Brief, Section C., p. 19), and evidence of groundwater pathways and travel time *after* water comes into contact with waste (Brief, Section D., p. 25), as proof of minimizing migration of water onto the vaults and trenches.

As the Court of Appeals discussed, those design features are relevant to detecting water once it has already migrated onto the disposal units or minimizing migration of water *after* the vaults are filled and the trenches closed and capped, but do not address rain falling onto the vaults and trenches when they are active (prior to being closed and capped).

With respect to Subsection 7.11.11.4, Chem Nuclear is required to collect, retain, test, and remove or remediate water. The Court of Appeals' conclusions regarding the lack of adequate monitoring, detection, testing and remediation measures, and specifically the lack of a "leachate collection system," derive entirely from the findings of the 2005 Order. (App. 382, 2005 Order, FF # 102). The findings from the 2005 Order with respect to the monitoring, detection and removal measures were never challenged or disputed until now and thus cannot be challenged. In re Morrison, 321 S.C. 370 n. 2, 468 S.E.2d 651 n. 2 (1996) (noting that an unappealed ruling becomes the law of the case and precludes further consideration of the issue on appeal).

A. The Court of Appeals Did Not Interpret "Minimize" to Mean "Prevent," and Sierra Club has Never Argued for Such an Interpretation

Chem-Nuclear repeatedly conflates and misstates the Court of Appeals' Opinion as requiring "prevention" as opposed to "minimization" as used in Subsection 7.11.11. The Court of Appeals did not conclude that compliance with 7.11.11.1 means that Chem-Nuclear must prevent any and all rainfall from entering the trenches. Nothing in the Opinion mandates "prevention" or "elimination" of migration of water. Rather, as the Opinion notes, DHEC and Chem-Nuclear "filed a joint brief with this court in which they set forth the following definition of minimize: 'to reduce to the smallest possible amount, extent, size or degree.'" Chem-Nuclear II at 604, 779

S.E.2d at 816. Sierra Club agrees with this definition and nothing in the Opinion goes so far as to say that Chem-Nuclear must “prevent all water from entering open trenches” (Brief, p. 9).¹⁰

But the Opinion is very clear that there must be an effort to “minimize” or “reduce to the smallest possible extent” the migration of water, including rainwater,¹¹ onto and out of vaults and trenches. Chem-Nuclear II, at 604-06, 779 S.E.2d at 817. The Opinion notes that Chem-Nuclear is not doing a single thing to “minimize” or to reduce to the smallest possible amount the migration of rainfall onto or out of disposal units. Id. at 606, 779 S.E.2d at 818. To the contrary, Chem-Nuclear specifically designed the disposal units to allow water to migrate out of the disposal units. (App. 372 & 382).

Chem-Nuclear claims an “absence of specific findings” to address compliance with Subpart 7.11.11. Yet Sierra Club raised the issue of compliance with Regulation 7.11.11 before the ALC in 2005 by presenting evidence that Chem-Nuclear’s design and disposal practices do not minimize the migration of water onto and out of the disposal units (vaults and trenches). Chem-Nuclear’s argument now seems to be that a lack of any evidence that Chem-Nuclear is minimizing migration of water should be read in a light favorable to it. The absence of evidence

¹⁰The 2005 ALC Findings of an “undeniable ‘rainfall problem’” bolster and provide support for this conclusion. Id.

¹¹Chem-Nuclear argues that DHEC’s interpretation of the word “water” to exclude “rainwater” is entitled to deference. (Brief, p. 27). At oral argument, DHEC conceded that “rainwater” is “water,” and DHEC has never provided any explanation of support for a contrary interpretation that “rainwater” is not “water” as contemplated in the R. 61-63. Even if it did interpret “water” in such a manner, the Sierra Club submits that compelling reasons exist for not deferring to such an illogical interpretation in the face of the plain language. S.C. Coastal Conservation League v. S.C. Dep’t of Health & Env’tl. Control, 363 S.C. 67, 75, 610 S.E.3d 482, 486 (2005) Water is not a term of art, it has a common meaning and if the legislature intended it to mean anything other than that common meaning, then it could have defined that term to exclude rainwater. It did not. See Section II.B. below for a full discussion on deference.

that minimization of migration of water onto and out of disposal units speak for itself: minimization is not being achieved.

Moreover, the Court of Appeals' Opinion that Chem-Nuclear is not minimizing the migration of waste-contaminated water out of the disposal units is based on multiple findings, not a lack of findings. The Opinion carefully considered all of the findings from the 2005 ALC Order in arriving at its conclusion that Chem-Nuclear's renewal license did not contain measures to ensure that migration of water onto and out of disposal units was reduced to the smallest amount possible, which is required under Subsection 7.11.11. Chem Nuclear II, at 602-06, 779 S.E.2d at 816-18.

The primary "engineered barriers" utilized by Chem-Nuclear include disposal trenches, disposal vaults, and enhanced caps. (App. 379, FF # 81). The disposal vaults provide only for structural stability to prevent subsidence. (App. 377, FF # 70). The vaults are not sealed against water intrusion and have holes in the bottom to allow water to leave the vaults. (App. 372, FF # 47). None of the trenches at the Chem-Nuclear site have an impermeable liner or a leachate collection system, and are in fact designed to allow water to flow into the ground beneath the trenches. (App. 382, FF # 102).

Indeed, the ALC's 2005 findings clearly establish that the vaults were intentionally designed to *allow* water to migrate out of those units, and that the trenches were intentionally designed to *allow* water to infiltrate into the soil and groundwater beneath the trenches. (App. 372, FF# 47). The disposal units cannot simultaneously be designed to both minimize and allow migration of water onto and out of disposal units.

B. Rainfall is Water That Migrates and DHEC's Contrary Interpretation that 7.11.11 is Not Applicable to Rainwater is Entitled to No Deference

Chem-Nuclear asserts that this Court should give deference to DHEC's interpretation that rainwater is not water for purposes of Subpart 7.11.11. (Brief, Section E., p. 23). The notion that water only needs to be managed after it has fallen from the sky and landed on the ground, but not as it is falling from the sky is illogical. Water migrates in several major ways, two of which the Court of Appeals discussed: water falls from the sky in the form of rain and water moves across the surface of the land. Chem Nuclear II at 601, 779 S.E.2d at 815. The Court of Appeals recognized that "DHEC concedes the phrase ["migration of water"] encompasses not only the flow of surface water, but also rainfall, even though it need not rely on DHEC's concessions, however, because we find the subsection clearly applies to rainfall." Id. It is hard to fathom how rainfall would not be migration of water and the Court of Appeals properly held that the plain language of "migration of water" necessarily encompasses rainfall.

Our courts have rejected such absolute deference to DHEC, particularly when that deference is in direct conflict with the plain language of the regulations. Engaging & Guarding Laurens Cnty.'s Env't (EAGLE) v. S. Carolina Dep't of Health & Env'tl. Control, 407 S.C. 334, 755 S.E.2d 444 (2014), reh'g denied (May 7, 2014). Where an agency's interpretation of the regulation leads to a **direct conflict** with the plain language of the statutory mandate, it is an error to show the utmost deference to that interpretation by requiring a "compelling reason to differ." S.C. Coastal Conservation League v. S.C. Dep't of Health & Env'tl. Control, 363 S.C. 67, 75, 610 S.E.3d 482, 486 (2005). An agency's long-standing interpretation of a statute is usually entitled to deference and should not be overruled by a reviewing court in the absence of cogent

reasons, but the interpretation will not be sustained if it contradicts a statute's plain language. Etiwan Fertilizer Co., 217 S.C. 354, 359, 60 S.E.2d 682, 684 (1950). See Brown v. Bi-Lo, Inc., 354 S.C. 436, 440, 581 S.E.2d 836, 838 (2003) (“We recognize the Court generally gives deference to an administrative agency's interpretation of an applicable statute or its own regulation. Nevertheless, where, as here, the plain language of the statute is contrary to the agency's interpretation, the Court will reject the agency's interpretation.” (Internal citation omitted)). In this case, there is not even a “long-standing interpretation,” but an interpretation of a regulation that has only been applied in this instance.

During oral arguments DHEC admitted that rainwater is water as identified in 7.11.11. Chem-Nuclear II at 602-03, 779 S.E.2d at 816. Chem-Nuclear now argues that DHEC only *applies* that regulation to the movement of surface water. Chem-Nuclear provides a strained rationale for rejecting this Court’s conclusions based on 1) the misstatement that this Court required “elimination” as opposed to “minimization” and 2) its argument that 7.1.1, which provides that it is in addition to, and not a substitution for, other regulatory requirements, somehow precludes the Court’s application of 7.11.11. Chem-Nuclear fails to explain exactly how the Court of Appeals’ interpretation of 7.11.11 is inconsistent with 7.1.1 and Sierra Club has uncovered no basis for this assertion.

The findings of the 2005 ALC Order are clear that Chem-Nuclear is doing nothing to reduce rainfall from entering the trenches and vaults, and DHEC is not requiring it. Instead, Chem-Nuclear points to measures that minimize migration of *surface water* onto disposal units, or measures that move water out of the trenches once it has already migrated onto disposal units, been in contact with waste, and migrated out of those disposal units. Proper application of the

regulations to the facts requires Chem-Nuclear to take some action to reduce rainfall from entering the vaults and trenches in the first instance.

Chem-Nuclear points to no legal error in the Court's conclusion that Section 7.11.11.1 requires minimization of migration of water in the form of rain onto the vaults and trenches, it just disagrees with it.

C. The Court of Appeals Could Not Shift Any Burden of Proof Given the Posture of this Case

This case arises from an appeal of a second ALC Order after the Court of Appeals' decision in Chem-Nuclear I to remand the decision to the ALC with specific instructions to apply its legal holdings to the ALC's findings in the first instance. In Chem-Nuclear I, the Court of Appeals explicitly *constrained* the ALC from making further findings on remand, instead ordering the ALC on remand to apply the findings from the 2005 Order and make new conclusions of law based on the regulatory provisions not addressed in the 2005 Order. Chem-Nuclear I. The Court of Appeals in Chem-Nuclear II recognized this constraint: "the ALC considered on remand only the findings from the 2005 order . . . therefore, we likewise consider only the findings from the 2005 order." Chem-Nuclear II at 588, 779 S.E.2d at 807.

As a result of the posture of this case, and the issues which were before the ALC on remand, and the Court of Appeals in Chem-Nuclear II, the Court of Appeals had no opportunity to shift the burden of proof because all of the findings had been conclusively established in the 2005 ALC Order. Those 2005 findings, which undisputedly were supported by the substantial evidence, established that Chem Nuclear failed to meet the requirements of Part VII of the

regulations. Chem-Nuclear's arguments that the Court of Appeals could have or did shift any burden of proof are without merit.

First, the burdens of production and persuasion, as outlined by Chem Nuclear (Brief, p. 30), both relate to the court's fact-finding role. Here, the ALC was the fact-finder and all of the facts upon which this case has been reviewed are contained in the ALC's 2005 Order. What Sierra Club did is prove facts before the ALC, which ultimately led the Court of Appeals to apply the facts to the legal requirements to determine that Chem Nuclear's license fails to meet those requirements. The Court of Appeals only took the facts as found before the ALC and applied them to the legal requirements for obtaining a license to dispose of nuclear waste. The Sierra Club did carry its burden of proof, and simply because the Court of Appeals acknowledged that Chem Nuclear, through its license, is not complying with the requirements of Subpart 7.11.11 cannot be read to shift the burden.

The appellate standard (burden on the appellant) does not eviscerate the underlying regulatory standard (burden on Chem Nuclear). Chem Nuclear **must** meet the regulatory requirements in order to obtain a permit, and in that way Chem Nuclear does have to show compliance to obtain a license. In other words, as part of the licensing process, Chem Nuclear is required to undertake certain steps. Sierra Club presented evidence that Chem Nuclear did not take those steps, namely steps to minimize, i.e., reduce to the smallest amount possible the amount of water migrating onto and out of disposal units, specifically rainwater.

Chem Nuclear's discussion about preservation of the issue of compliance with Subsection 7.11.11 is unavailing. The Court of Appeals answered that question in favor of Sierra Club, and Chem Nuclear failed to challenge its conclusion. The issue of compliance was both raised to and

ruled on by the ALC, and all of the factual findings necessary to a determination on compliance with Subpart 7.11.11 are contained in the ALC's 2005 Order. Specifically, Sierra Club presented evidence that the disposal units were designed to *allow* water to flow into and out of them, as opposed to minimize contact with water as mandated by Subpart 7.11.11., as discussed in Section II.A. above.

III. There are no Findings to Support a Conclusion that Compliance with 7.11.11 will Increase Worker Exposure or That Both Worker Safety and Minimization of Migration of Water Cannot Be Collectively Achieved

Chem-Nuclear spends significant time talking about the possibility that minimizing the migration of water onto and out of disposal units may lead to increased worker exposure. No evidence to support this as-of-late, highly speculative concern exist in the record, much less the 2005 ALC Order. Specifically, Chem-Nuclear suggests that measures identified by the Court that would minimize migration of water “**may increase** the potential for worker exposure” or “occupational exposure.” No evidence regarding these possibilities is contained in the record, much less the findings of the 2005 ALC Order. Chem-Nuclear's failure to provide any reference to the record is the clearest indication that it is asking this Court to consider matter which does not appear in the record, which is prohibited under S.C. Appellate Court Rule 210(h), except under limited circumstances not applicable here. Matters raised on appeal which are completely outside record may not form basis for reversal. Ravan v. Greenville Cty., 315 S.C. 447, 434 S.E.2d 296 (Ct. App. 1993).

Moreover, the Court of Appeals Opinion leaves room for compliance with both ALARA and 7.11.11. Engineered barriers must be designed and constructed to not only minimize the

migration of water onto disposal units but also to meet ALARA. No basis exists for the Court to conclude that DHEC cannot require and Chem-Nuclear to achieve both. Indeed, if Chem-Nuclear's disposal practices and design minimize the migration of water onto and out of disposal units, in theory the exposure to workers, the public and the environment should decrease because overall there would be less contaminated water. No evidence of record exists that the dose would be increased to the public, the environment or to workers if Chem Nuclear reduced to the smallest amount possible the migration of water onto and out of disposal units.

Chem-Nuclear's interpretation of ALARA asks this Court to disregard the efforts to keep radiation exposures low for the general public and focuses solely on worker exposure, all without pointing to a single finding that worker exposure would be increased if there was a leachate collection system, sealed and grouted vaults, trench liners or trench covers, for example.

IV. The 2005 Feasibility Report Is Not In the Record and Reliance Thereon is Improper

Chem-Nuclear's suggestion that a 2005 "Feasibility Report," which was never made part of the record, somehow addresses its failure to comply with Subsection 7.11.11 is without merit. When this case was on remand to the ALC, Chem-Nuclear did not asked the ALC to consider the Feasibility Report, despite the topic having been specifically raised by the Administrative Law Judge on remand. Similarly, Chem-Nuclear did not preserve the Court of Appeals' denial of the motion to supplement the record with the "Feasibility Report." S.C. Appellate Court Rule 210(h), prohibits this Court's consideration of this "Feasibility Report." Matters raised on appeal which are completely outside record may not form basis for reversal. Ravan v. Greenville Cty., 315 S.C. 447, 434 S.E.2d 296 (Ct. App. 1993).

Importantly, Chem Nuclear never attempts to explain how that report could have had any impact on the issues before the Court. Even in its brief, Chem-Nuclear has not made any effort to demonstrate how a report would change the Court of Appeals' result.

Chem-Nuclear acknowledges that shelters or covers over trenches, sealing and grouting vaults and lining trenches will achieve minimization of migration of water. (Chem-Nuclear Brief, p. 24). It does not claim that these measures would be unjustified because they would result in an unacceptable dose to employees. In fact, it has not even performed an evaluation to determine whether there would be any change in dose.

Chem-Nuclear complains that Sierra Club bears the burden of proving that neither Chem-Nuclear nor DHEC have taken any actions to address the ALC's concern, implying that changes to address the compliance with 7.11.11 have occurred. (Chem-Nuclear Brief, p. 24). In its Motion for Imposition of Stay, Chem-Nuclear came forth with all of the amendments that have been made to its license since 2004 and not a single one of them addresses the rainfall problems identified by the ALC in its 2005 Order.¹² (App. 107, fn. 10). If the Feasibility Report did, in fact, address the undeniable rainfall problem, the complying with this Court's remedy of developing a Compliance Plan should not be problematic for Chem-Nuclear

CONCLUSION

As the Court of Appeals stated: "It is important that DHEC enforce its own regulations and require Chem Nuclear to take action to comply with the technical requirements. This

¹²Chem-Nuclear describes the amendments to the renewal license since 2004 in footnote 10 of its Motion and none of these amendments relate to the provisions of 7.11.11.1, 7.11.11.2, 7.11.11.4 or 7.10.7.

importance derives not simply from the need to avoid the serious consequences of non-compliance; it is important because it is the law.” Chem Nuclear II at 21. For the foregoing reasons, Sierra Club asks this Court to affirm the Court of Appeals ruling, which ensures compliance with the entirety of Regulation 61-63.

Respectfully submitted,



Amy E. Armstrong

SOUTH CAROLINA ENVIRONMENTAL LAW
PROJECT

Mailing address: Post Office Box 1380
Pawleys Island, SC 29585

Office address: 430 Highmarket Street
Georgetown, SC 29440

Telephone (843) 527-0078

Email: amy@scelp.org

Attorney for Sierra Club

Georgetown, South Carolina

January 29, 2018

STATE OF SOUTH CAROLINA
IN THE SUPREME COURT

Appellate Case No. 2015-001915

RECEIVED

FEB 01 2018

S.C. SUPREME COURT

Sierra Club,

Respondent,

v.

South Carolina Department of Health and Environmental Control and Chem-Nuclear Systems, LLC,

Defendants,

of whom Chem-Nuclear Systems, LLC is,

Petitioner,

and South Carolina Department of Health and Environmental Control is,

Respondent.

CERTIFICATE OF SERVICE

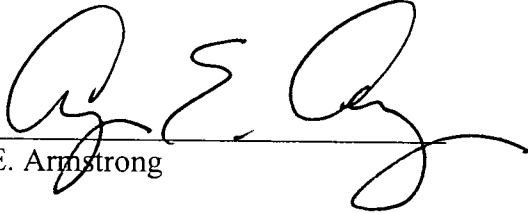
I hereby certify that on this date I served the foregoing Brief on Certiorari of Sierra Club on counsel for all parties, by placing copies of the same in the United States Mail, first-class postage prepaid, addressed to:

Mary D. Shahid, Esquire
Stephen P. Groves, Esquire
Sara S. Rogers, Esquire
Nexsen Pruet, LLC
205 King Street, Suite 400
Charleston, SC 29401

Claire H. Prince, Esquire
Jaquelyn S. Dickman, Esquire
S.C. Department of Health and
Environmental Control
2600 Bull Street, Columbia SC 29201

Georgetown, South Carolina

January 29, 2018


Amy E. Armstrong