UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
STRATA ENERGY, INC.,	)	Docket No. 40-9091-MLA
	)	
(Ross In Situ Recovery Uranium Project)	)	

(Materials License Application)

NATURAL RESOURCES DEFENSE COUNCIL'S AND POWDER RIVER BASIN RESOURCE COUNCIL'S OPPOSITION TO APPEALS BY STRATA ENERGY, INC. AND NRC STAFF OF THE ATOMIC SAFETY & LICENSING BOARD'S RULING IN LBP-12-3

INTRODUCTION

On October 27, 2011 and pursuant to 10 C.F.R. § 2.309 and the Nuclear Regulatory Commission's (NRC, or Commission) Federal Register notice published at 76 Fed. Reg. 41,308 (July 13, 2011), Petitioners Natural Resources Defense Council (NRDC) and Powder River Basin Resource Council (Powder River) submitted a Petition to Intervene and Request for a Hearing in the above-captioned matter. To safeguard their and their members' environmental, aesthetic, health-based and economic interests, Petitioners articulated five contentions in this Petition. These contentions address various deficiencies in Strata Energy, Inc.'s source materials license application for the proposed Ross *In Situ* Recovery (ISR) Uranium Project in Crook County, Wyoming.

Following full briefing on the issues of standing and the admissibility of each contention, the Atomic Safety & Licensing Board (ASLB, or the Board) conducted a day-long hearing on December 20, 2011. On the February 10, 2012, the Board issued LBP-12-3, "Memorandum and Order, Ruling on Standing and Contention Admissibility" (hereafter "LBP-12-3"). This 53-page opinion held that Petitioners had established standing and admitted two of their five contentions

in whole and the remaining three in part. *See* LBP-12-3 at 1–2, 18–25, 28, 32, 36, 37, and 39–40. On February 21, both Strata and NRC Staff (Appellants) filed appeals of LBP-12-3, to which Petitioners now respond. As explained below, Appellants' arguments lack merit, and the Commission should deny their appeals. Additionally, Strata requested that the Commission grant oral argument for this appeal. Strata App. at 1-2. Strata's request should be denied as the facts and legal arguments are adequately presented in the briefs, in LBP-12-3, and in the record, and the decisional process would not be significantly aided by oral argument. The Commission should deny Strata's request for oral argument and send the matter back to the ASLB for further proceedings consistent with LBP-12-3.

STANDARD OF REVIEW

"The Commission defers to a Board's rulings on standing and contention admissibility in the absence of clear error or abuse of discretion." *Crow Butte Res., Inc. (License Renewal for In Situ Leach Facility, Crawford, Nebraska)*, CLI-09-9, Nuclear Reg. Rep. P 31589, at *3 (2009). Abuse of discretion and clear error are both "highly deferential" standards of review. *See, e.g., Hunter v. Hamilton Cnty. Bd. of Elections*, 635 F.3d 219, 233 (6th Cir. 2011) (internal quotation omitted); *Thomas v. Allen*, 607 F.3d 749, 752 (11th Cir. 2010) (internal quotation omitted). An adjudicatory body abuses its discretion only when "its decision provides no rational explanation, inexplicably departs from established policies, is devoid of any reasoning, or contains only summary or conclusory statements." *Infanzon v. Ashcroft*, 386 F.3d 1359, 1362 (10th Cir. 2004) (internal quotation omitted). Clear error exists only when "the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed." *Anderson v. City of Bessemer City, N.C.*, 470 U.S. 564, 573 (1985) (internal quotation omitted).

I. Petitioners Have Demonstrated Standing

In LBP-12-3, the Board determined that Petitioners have met the requirements for representational standing based on the declaration of their common member, Pamela Viviano. In her declaration, which was attached to the original petition, Ms. Viviano described a number of concrete injuries that she will suffer should the NRC approve Strata's application to operate an ISR uranium facility in its current form.[1] The Board found that two categories of injuries—those resulting from dust due to increased traffic and from light pollution—suffice to establish standing. Because this holding was neither a clear error nor an abuse of discretion, the Commission should affirm the judgment below and dismiss Strata's and the Staff's appeals.

To gain standing, a petitioner must show "that (1) it has suffered or will suffer a distinct and palpable injury that constitutes injury-in-fact within the zones of interest arguably protected by the governing statutes (e.g., the AEA, the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321, et seq.); (2) the injury is fairly traceable to the challenged action; and (3) the injury is likely to be redressed by a favorable decision." LBP-12-3 at 6, citing *Yankee Atomic Elec. Co. (Yankee Nuclear Power Station)*, CLI-96-1, 43 NRC 1, 6 (1996). Membership organizations may achieve sanding as representatives of any of their affected members. *Entergy Nuclear Vermont Yankee, L.L.C. & Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station)*, LBP-04-28, 60 NRC 548, 553 (2004).

In showing that their members are affected for standing purposes, "[p]etitioners are not required to demonstrate their asserted injury with 'certainty,' nor to 'provide extensive technical

[1] Ms. Viviano could obtain relief from either a denial of the license application or orders that direct substantial revision of the applicant's Environmental Report (ER) or subsequent NEPA documents.

studies' in support of their standing argument." *Crow Butte Res., Inc. (In Situ Leach Facility, Crawford, Neb.)*, LBP-08-24, 68 NRC 691, 708 (2008) (quoting *Caroline Power & Light Co. (Shearon Harris Nuclear Power Plant)*, LBP-99-25, 50 NRC 25, 31 (1999)). In fact, petitioners need not even "show that the effect on its interest is likely," but "only that it is plausible." *Combustion Eng'g, Inc. (Hematite Fuel Fabrication Facility)*, LBP–89–23, 30 NRC 140, 147 (1989). Furthermore, in assessing whether a petitioner has demonstrated standing, a licensing board must "accept as true all material allegations of the petition, and must construe the petition in favor of the petitioner." *Ga. Inst. of Tech. (Ga. Tech. Research Reactor, Atlanta, Ga.)*, LBP-95-6, 41 NRC 281, 286 (1995) (internal quotations and alterations omitted) (citing *Warth v. Seldin*, 422 U.S. 490, 501 (1975) and *Kelley v. Selin*, 42 F.3d 1501, 1507–08 (6th Cir. 1995)), *vacated in part and remanded in part on grounds unrelated to standing*, CLI-95-10, 42 NRC 1 (1995).

The Board properly found that Ms. Viviano's allegations regarding traffic, dust and light pollution meet these legal standards. As stated in her declaration and explained in Petitioners' petition and reply brief, Ms. Viviano uses unpaved roads near Strata's proposed ISR facilities and thus will be impacted by a foreseeable increase in traffic and dust pollution. *See* Viviano Decl. ¶ 10 ("Another potential negative impact from this site would be the increase in traffic on our road during the construction of the site and the operational phase. These roads are dirt and gravel, and any traffic results in a dust problem."); Reply Br. at 5 ("[A] number of unpaved roads in the project vicinity may see substantially increased traffic, including D Road and New Haven Road (or Oshoto County Road). These roads connect Ms. Viviano's property to the nearby towns of Gillette and Moorcroft, and she uses them regularly to come to and from her property.").

Considering these allegations, the Board applied the correct legal standard and determined that they describe a plausible pathway for injury to Ms. Viviano's interests. *See* LBP-12-3 at 21 ("[W]e cannot say that it is implausible that the proposed Ross facility will generate some increase in traffic via [New Haven Road] in the form of trucks or workers' passenger vehicles."). Indeed, this stands to reason: Strata employees and contractors will almost certainly live nearby and in the surrounding towns, and there is no evidence or reason to suggest that they would not use the same local roads that Ms. Viviano uses, particularly New Haven Road. Neither Strata nor the Staff has provided any reason to believe that it is, in fact, "implausible" that traffic would increase on these roads, and that dust would increase as well.

In fact, Strata admits in its appeal that "the primary traffic route to and from the project is north-to-south on the 'D' road," Strata App. at 8, which Ms. Viviano uses regularly. *See* Pet. Reply Br. at 5. Thus, Strata and the Staff's disagreement with the Board's holding amounts to little more than an attack on the veracity of Petitioners' alleged facts. However, the Board found these allegations credible, following the governing legal standard that requires it to "accept as true all material allegations of the petition," *Ga. Inst. of Tech.*, 41 NRC at 286. Neither Appellant has offered a rationale for disturbing this judgment. Given the Commission's policy of "defer[ing] to the Board's ruling as to the standing of [petitioners]" in the absence of "a gross misapplication of the facts or applicable law," the Commission should uphold LBP-12-3 as to standing. *Crow Butte Res., Inc. (North Trend Expansion Area)*, CLI-09-12, Nuclear Reg. Rep. P 31592, at *9 (2009).

Strata's and the Staff's only remaining argument is that Ms. Viviano has only alleged "*unidentified* health hazard[s]" that could result from increased dust, rather than providing "expert analyses addressing the precise nature and potential significance of any health hazard

from dust from an unimproved dirt road in this part of Wyoming." Strata App. at 8–9 (emphasis in original). First, this misstates the law: it is well-established that petitioners need not "provide extensive technical studies" to demonstrate standing, *Crow Butte Res.*, 68 NRC at 708 (internal quotation omitted), but must only articulate plausible injuries based on factual allegations. Petitioners and Ms. Viviano have alleged concerns about health risks due to increased dust; the Board found this plausible, and Appellants have provided no contrary evidence. Second, increased dust and traffic create sufficient annoyance and aesthetic harm that even without proof of physical health problems, they constitute injury in fact.

The Board also found that Ms. Viviano articulated a plausible injury-in-fact from light pollution caused by Strata's operations. Ms. Viviano asserts in her declaration that she and her husband currently enjoy "clear views of the night skies" at their residence, but the "lights from operating on a 24 hour schedule could interfere" with these views. Viviano Decl. ¶ 11. These allegations find support in Strata's ER, which, as the Board notes, acknowledges "the possibility of lights associated with the facility creating a visual impact at night." LBP-12-3 at 22 (citing Strata's ER at 3-348, 4-106, 5-58). The Board considered the 10-mile distance separating Ms. Viviano's residence from the proposed Strata site and determined that, given "the relatively flat and unpopulated confines of eastern Wyoming," Strata's round-the-clock industrial activities could plausibly "have a visual impact that includes night illumination." LBP-12-3 at 23. Accordingly, the Board found standing based on the possibility of light pollution. *Id.* at 23–24.

Appellants have not demonstrated why the Board's judgment is either an abuse of discretion or a clear error. The first of their two arguments is that Petitioners have only shown that light pollution *could* cause injury, rather than *will* cause injury, *see* Strata App. at 9–11 (italicizing the word "*could*" in three instances), but as the case law makes clear, petitioners need

only show that an impact to the petitioner's interests is "plausible," not that it is certain or even "likely." *Combustion Eng'g*, 30 NRC at 147. Second and last, Appellants claim that the local topography will obscure the Strata facility from Ms. Viviano's viewshed at her residence. Strata App. at 11–12. The Board dispatched with this argument by explaining that even if Ms. Viviano's property is not within the exact line of sight from Strata's facilities themselves, *lights* from the facilities could still plausibly impact Ms. Viviano. LBP-12-3 at 23 ("[A]s anyone knows who has ever seen a search light sweeping the night sky, light pollution can still be observed from a source that is out of the line of sight.").[2] The Board's holding easily withstands these two objections.

In short, Petitioners have demonstrated plausible pathways for injury to Ms. Viviano from increased traffic, dust and light pollution. In a thorough and well-reasoned opinion, the Board agreed. Strata and NRC Staff have misconstrued the case law of standing and urge the Commission to adopt an unreasonably and unlawfully high burden for Petitioners; this effort must be rejected. Their arguments merely duplicate those made in the proceeding below, which the Board considered, weighed and rejected. Neither Appellant has provided any basis to conclude that the Board clearly erred or abused its discretion, and a simple disagreement with the Board's judgment does not merit reversal by the Commission. Accordingly, the Commission should reject Appellants' arguments and uphold the Board's findings on standing. [3]

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[2] Appellants take significant pains to argue that this statement by the Licensing Board constitutes clear error, construing it as a direct comparison between the light from Strata's operations and a search light. Strata App. at 10; NRC Staff App. at 10–11. The Board made no such analogy. Rather, it was merely explaining, through the use of a common example, that light can be seen from areas out of light source's line of sight, a fact undisputed by Strata and the NRC Staff.

[3] Petitioners take this opportunity to endorse the thoughtful suggestion in note 27 of the Board's opinion, which suggests that a reasonable principle would be to extend standing to any individual

II. Contentions 1 and 2 Are Admissible

The NRC Staff declined to appeal the Board's rulings on the admissibility of Petitioners' contentions. Nonetheless, Strata urges that the Board erred in admitting Contentions 1 and 2. Similar to its review of a Licensing Board's standing determinations, the Commission "employ[s] the clear error and abuse of discretion standards of review." *Entergy Nuclear Vermont Yankee, L.L.C. & Entergy Nuclear Operations, Inc.* (*Vermont Yankee Nuclear Power Station*), CLI-10-17, Nuclear Reg. Rep. P 31620, at *5 (2010) (internal quotations and alteration omitted). Strata has failed to show that the Board has in any way abused its discretion or committed clear error in admitting Contentions 1 and 2. Its appeal should therefore be denied.

A. The Board Did Not Abuse its Discretion or Commit Clear Error in Admitting Contention 1

The Board properly found that Petitioners have met all standards for admissibility with regard to Contention 1. Petitioners described the factual or legal issue to be raised—whether Strata had provided an adequate characterization of baseline water quality in its environmental report (ER)—and provided several legal authorities in support of its position: 10 C.F.R. § 51.45(b), 10 C.F.R. Part 40, Appendix A, Criteria 5B(5)(a) and 7, and NEPA, as well as section 2.7 of NUREG-1569. *See* Pet. Br. at 10–15. Petitioners further provided expert declarations from Drs. Ronald Sass, Richard Abitz and Robert Moran to support their allegations, which provided sufficient information to raise a genuine dispute of material fact or law, as the Board found. *Id.*; LBP-12-3 at 28–31. Accordingly, Petitioners have met the Commission's standards for an admissible contention. 10 C.F.R. § 2.309(f)(1)(i), (ii), (v), (vi).

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who lives within (for instance) 20 miles of a major materials facility, akin to the 50-mile rule for nuclear reactors. *See* LBP-12-3 at 24, n.27.

In arguing that Contention 1 was wrongly admitted, Strata advances the extraordinary proposition that not one, but *two* Licensing Board panels abused their discretion, and that the unanimous judgment of six administrative law judges was in clear error. The panel below analyzed an identical legal claim made by industry parties in *Powertech (USA), Inc*. (*Dewey-Burdock In Situ Uranium Recovery Facility*), Dkt. No. 40-9075-MLA at 62–64 (Aug. 5, 2010), and found that the Board there had correctly rejected those arguments. Here, Strata alleges that both the panel below and the *Dewey-Burdock* panel abused their discretion and that Petitioners have mounted a "collateral attack" on 10 C.F.R. § 40.32. Strata App. at 13. As described below, Strata fails to demonstrate any showing of clear error or abuse of discretion. The Commission should reject its appeal.

It is not surprising that the NRC Staff declined to endorse these arguments; Strata's logic fails to persuade. Strata asserts that 10 C.F.R. § 40.32(e) prohibits industry applicants from establishing the kind of pre-license characterization of baseline groundwater quality through sampling that Petitioners discuss, arguing that such a practice would necessitate the "installation of a complete wellfield package" and "a monitoring well network." Strata App. at 15 (emphasis omitted). To do so, Strata claims, would violate the pre-license strictures on construction imposed by section 40.32(e), and would require "a license applicant [to risk] be[ing] denied their requested license." *Id.* at 18.

Yet throughout its extended litany against the Board's ruling, Strata does not cite the actual *language* of section 40.32(e), which requires a pre-license evaluation of "*any* appropriate conditions to protect environmental values," which necessarily entails an analysis of baseline water quality. 10 C.F.R. § 40.32(e) (emphasis added). While this section indeed prohibits pre-license "construction," it explicitly incorporates the definition of "construction" as it appears in

10 C.F.R. § 40.4. The latter regulation makes clear that "[t]he term 'construction' does not include: . . . (2) Site exploration, including . . . preconstruction monitoring to establish background information related to the suitability of the site, the environmental impacts of construction or operation, or the protection of environmental values." 10 C.F.R. § 40.4. Both the *Dewey-Burdock* and LBP-12-3 panels referred to this regulatory language, *Dewey-Burdock* at 64, LBP-12-3 at 29–30; Strata fails even to cite it, let alone establish that the Board's reliance upon it is "clearly erroneous." Nonetheless, Strata somehow urges that Petitioners have "collaterally attacked" section 40.32(e). This is incoherent; section 40.32(e) *supports* Petitioners' claims, and Strata's appeal should be denied.

Furthermore, the Commission has already confronted this question and resolved it in a manner that disposes of Strata's position. In a September 15, 2011 Federal Register notice accompanying its amendment to the pre-construction rule, the Commission posted a comment that "the proposed regulations fail to state whether the installation of monitoring wells, a significant component of uranium recovery facilities, including in situ leach facilities, is a 'construction' activity or is exempted from the definition of 'construction.'" *Licenses, Certifications, and Approvals for Materials Licensees*, 76 Fed. Reg. 56,951, 56,956 (Sept. 15, 2011). The Commission clarified that "[i]nstallation of monitoring wells that are only intended to be used to collect background data or perform background aquifer testing would be permissible," whereas "monitoring wells that are part of an ISR wellfield monitoring network would not be permissible because such facilities are necessary to ensure the radiological health and safety of the public and that the licensed facility is operating within standards determined by the NRC." *Id.*

As the Commission notes here, it is the *purpose* of the monitoring wells that determines whether they are prohibited by 40.32(e); those that serve to provide background site characterization data are expressly permitted. The Commission further devastates Strata's argument that the "installation of a complete wellfield package" and "a monitoring well network" is necessary to provide adequate background data, as it explicitly distinguishes between wells that provide background data and those that constitute a "wellfield monitoring plan." Strata App. at 15. The Board below cites this part of the Federal Register to explain its rejection of Strata's argument. In response, Strata merely dismisses this authority as "a 'response to comment' from the recent Part 40.32(e) rulemaking," without actually addressing it in any substantive manner. Strata fails to rebut the Board's conclusions; there is no clear error or abuse of discretion.

Moreover, Strata devotes not a single word of its appeal to other key legal authorities that support Contention 1. These are 10 C.F.R. § 51.45(b), which requires applicants to include in their ER a "description of the environment affected," including groundwater in its pre-mining quality, and 10 C.F.R. Part 40, Appendix A, Criterion 7, which requires an applicant to provide "complete baseline data on a milling site and its environs." *See* Pet. Br. at 10. The Board recognized that Plaintiffs' citation of these authorities establishes a genuine dispute of material fact or law, LBP-12-3 at 30–31, but Strata ignores them. As these sources indicate, applicants must gather and evaluate baseline water quality data in their ER, which they submit when applying for a license. Strata cannot reconcile these authorities with its interpretation of the "baseline" in Criterion 5(B)(5) and NUREG-1569 as applying to post-license operations only. Strata's argument fails and its appeal should be denied.

Ironically, the only source that Strata *does* quote in detail—NUREG-1569—again supports the admissibility of Contention 1. Strata asserts that the Board misunderstands the "pre-license" and "post-license" baselines described in NUREG-1569 without actually identifying a specific error. Strata App. at 16. Rather, Strata claims—without citing relevant language—that a pre-license baseline describes only "the general boundaries and nature of the water in the proposed recovery zone." *Id.* at 15. In fact, section 2.7 of NUREG-1569 requires a "*reasonably comprehensive chemical and radiochemical analyses of water samples*, obtained within and at locations away from the mineralized zone(s) . . . to determine pre-operational baseline conditions." NUREG-1569 § 2.7.3(4) (emphasis added). An applicant must also "show that water samples were collected by acceptable sample procedures." *Id.*; s*ee also id.* § 2.7.4. Furthermore, NUREG-1569 requires that "[t]he applicant . . . identify the list of constituents to be sampled for baseline concentrations. The list of constituents in Table 2.7.3-1 is accepted by the NRC for [*in situ*] leach facilities." *Id.* § 2.7.3.

In light of these provisions, Strata's argument boils down to this: the pre-license baseline sampling data it included in its ER is sufficient to meet the standards described in NUREG-1569. Petitioners have argued, contrarily, that these data are not "reasonably comprehensive" and do not reflect "acceptable sample procedures." Strata may claim that *extent* of sampling that would be required under Petitioners' view of the regulations would actually necessitate a regulatory violation, but this is a legal dispute that goes to the merits of Contention 1, not its admissibility. Recognizing this, the Board ruled that Petitioners' arguments establish a genuine dispute of material fact or law. The record is devoid of evidence of clear error or abuse of discretion on the Board's part. Contention 1 meets the legal standards described in 10 C.F.R. § 2.309(f)(1), and

the Board's ruling is sound. The Commission should therefore dismiss Strata's appeal of Contention 1.

B. The Board Did Not Abuse its Discretion or Commit Clear Error in Admitting Contention 2

As with Contention 1, the Board properly found that Petitioners' Contention 2 is admissible, with "foundational support . . . sufficient to establish a genuine material dispute adequate to warrant further inquiry." LBP-12-3 at 32–35. Petitioners described the factual and legal issues to be raised—whether the application fails to analyze the environmental impacts that will occur if Strata cannot restore groundwater to primary or secondary limits—and provided numerous legal authorities in support of its position: 10 C.F.R. § 51.45(b), 10 C.F.R. Part 40, Appendix A, Criteria 5B(5) and (6), and NEPA. *See* Pet. Br. at 16–19. Petitioners further provided expert declarations from Drs. Richard Abitz and Robert Moran to support their allegations, which included sufficient information to raise a genuine dispute of material fact or law, as the Board found. *Id*. (referencing Moran Decl. at ¶¶ 66–67, 70–75 and Abitz Decl. at ¶¶ 28–29); *see also* LBP-12-3 at 32–35. Accordingly, the Board held that Petitioners have met the Commission's standards for an admissible contention. 10 C.F.R. § 2.309(f)(1)(i), (ii), (v), (vi).

The Board ruled in a detailed analysis of Contention 2 that NEPA and identical regulations at 10 C.F.R. § 51.45(b) require an analysis of "irreversible and irretrievable commitments of resources which would be involved in the proposed action." LBP-12-3 at 33 (internal quotation omitted). In the context of ISR uranium mining, such provisions necessarily implicate groundwater; thus; the Board rightly observed that "unless the baseline can be restored, there will be an 'irreversible and irretrievable' commitment of a resource the parameters of which must, under NEPA and agency regulations, be outlined in the applicant's ER." *Id.*

Grappling with the implications of Contention 2, the Board reasoned that any environmental analysis of the impacts resulting from an "alternative concentration limit" (ACL) would necessitate

> … some determination about what that ACL would be. But, as SEI and the staff assert, given the differences that exist among well fields, it likely cannot be known at this juncture exactly what alternative concentration will be deemed necessary to protect human health and the environment under the nineteen factors of Appendix A, Criterion 5B(6). Joint Petitioners, on the other hand, suggest that the magnitude of the endeavor could be narrowed to a range of possible ACLs based on the historical experience of other ISL/ISR sites. What this essentially calls for is a bounding analysis, something that is not unheard of in the context of NEPA analyses and does not seem untoward in this instance, given the importance of NEPA as a mechanism for providing information regarding the parameters of "irreversible and irretrievable" resource commitments. As such, we do not consider this concern a reason for precluding this contention's admission.

Id. at 34 (citations omitted). Finally, cognizant of the fact that at some distant future date Petitioners might have an opportunity to challenge the sufficiency of a specific, proposed ACL, the Board found "the ability of any interested person to obtain an AEA hearing at that point would not provide the relief Joint Petitioners *should be able to obtain now*, consistent with NEPA, *i.e*., a public explanation of the impacts of being unable to restore the mined aquifer to primary or secondary baseline and, instead, having to use an ACL, as that alternate limitation might be implemented per a reasonable bounding analysis." *Id*. at 35 (emphasis added).

In contrast to the Board's fluency in NEPA and 10 C.F.R. § 51.45 and its attention to the requirements they establish, Strata's ignores both authorities in their entirety. Instead, it spends several pages claiming that the Board "demonstrates a fundamental lack of understanding of NRC regulations associated with ISR groundwater restoration." Strata App. at 19. Strata fails to support these attacks on the Board with persuasive legal analysis and falls far short of

establishing clear error or abuse of discretion. Their appeal on Contention 2 should thus be rejected as well.

With some necessary parsing, Strata's quarrel with Contention 2 is reducible to the following claims: (1) ACLs cannot be addressed in an initial licensing application and are only relevant at the commencement of, or during, groundwater restoration (Strata App. at 20–21, ("ACLs are outside the scope of this proceeding")); (2) NRC's policies regarding groundwater corrective action (pursuant to Criterion 5(B)(5)) and pre-license construction (pursuant to 10 C.F.R. § 40.32(e)) actually *prohibit* consideration of an ACL in these proceedings, and Petitioners' arguments to the contrary constitute a collateral attack on both regulations (Strata App. at 20–21, 23–24.); and (3) requiring a bounding analysis for an ACL would be ordering an impossible, remote and speculative environmental analysis for an action that is site specific (*id.* at 21, 22). None of these arguments have merit.

First, Strata ignores NEPA and section 51.45 in claiming that the environmental impacts that will occur if Strata cannot restore groundwater to primary or secondary limits (*i.e.*, the crux of Contention 2) cannot be addressed in this initial licensing phase, but only years later at the decommissioning phase. NEPA and section 51.45 require a "hard look" at the environmental impacts of agency actions *prior* to commencement of activities, including any unknown impacts.[4] *See Nat'l Audubon Soc'y. v. Dep't of Navy*, 422 F.3d 174, 185 (4th Cir. 2005) (a "hard

[4] As expressed in their original petition, *see* Pet. Br. at 9, Petitioners acknowledge that, as a private entity, Strata is not directly bound by NEPA. However, pursuant to 10 C.F.R. § 2.309(f)(2), Petitioners styled their NEPA contentions as against the ER. *See id.* ("On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report."). Because an applicant's ER generally serves as the basis for the Commission's eventual Draft EIS, Petitioners raised their NEPA concerns at the outset in order to preserve any objections they may have if the flaws that riddle the ER also appear in the Draft EIS. In addition, if the Draft EIS deviates from Strata's ER in a manner to

look" must "encompass[] a thorough investigation into the environmental impacts of an agency's action and a candid acknowledgement of the risks that those impacts entail."). Strata's argument constitutes just the kind of backward-looking decision-making that NEPA seeks to avoid. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) ("NEPA ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast."); *see also*, *Andrus v. Sierra Club*, 442 U.S. 347, 350 (1979) ("The thrust of [NEPA] is . . . that environmental concerns be integrated into the very process of agency decision-making.").

Next, Strata's suggestion that considering an ACL in this proceeding would somehow violate NRC's policy regarding groundwater corrective action pursuant to Criterion 5(B)(5) misses the point. The Board is cognizant of the fact that the Commission may lawfully establish an ACL for hazardous contaminants under Criterion 5B(5)(C), which is less protective than either primary restoration standards (as described in Criterion 5B(5)(A)) or secondary standards (as described in Criterion 5B(5)(B)). LBP-12-3 at 32–33. At no point do Petitioners allege otherwise, nor do they suggest that Strata will fail to satisfy whatever ACL the Commission eventually establishes. Pet. Reply Br. at 19–20. What Petitioners *do* claim is that Strata must *analyze* in its ER the environmental impacts that will result if (as is reasonably likely) the NRC sets an ACL, which would necessarily be less protective than either primary or secondary standards and would cause a long-term degradation of the aquifer. This is precisely the kind of consideration that NEPA and section 51.45 require: the use of an ACL instead of primary or secondary quality standards is an "impact[] of the proposed action on the environment," an

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which Petitioners object, Petitioners plan to submit amended or new contentions addressing such deviations pursuant to 10 C.F.R. § 2.309(f)(2). In any event, 10 C.F.R. § 51.45 does apply to applicants such as Strata and imposes essentially identical obligations as NEPA.

"adverse environmental effect[]," a choice affecting "[t]he relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity," and an "irreversible and irretrievable commitment[] of resources." 10 C.F.R. § 51.45(b)(1), (2), (4) and (5).

Despite its admission that "most ISR restoration actions have required *some* ACLs or State equivalents," Strata App. at 23, n. 26, Strata suggests that a bounding analysis for an ACL would require an impossible, remote and speculative environmental assessment for an action that is site specific. Again, this assertion runs counter to well-established NEPA law and the Board's careful attention to this issue. As noted *supra* on p. 13, the Board explained that a bounding analysis "is not unheard of in the context of NEPA analyses and does not seem untoward in this instance, given the importance of NEPA as a mechanism for providing information regarding the parameters of 'irreversible and irretrievable' resource commitments." LBP-12-3 at 34 (internal citations omitted). A bounding analysis—that is, an examination of the historical record in which "most ISR restoration actions have required some ACLs or State equivalents"—falls squarely within NEPA's ambit and purpose: to force a consideration and weighing of a project's foreseeable environmental impacts, *especially* those impacts that are uncertain or difficult to quantify. *See, e.g.*, *Robertson*, 490 U.S. at 355 (NEPA requires agencies "to describe environmental impacts [of a proposed action] even in the face of substantial uncertainty"); *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 155 (D.C. Cir. 1985) ("[O]ne of the specific criteria for determining whether an EIS is necessary is '[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.'") (*quoting* 40 C.F.R. § 1508.27(b)(5)). The uncertainties and associated environmental impacts must be the *subject* of an analysis within an EIS, not an excuse for avoiding discussion of the matter entirely.

The Board's recognition of the plain NEPA-related obligations inherent in 10 C.F.R. § 51.45 should be upheld.

Strata next recasts its argument from Contention 1 and avers that 10 C.F.R. §40.32(e) bars the applicant from considering ACLs at this time. For the reasons detailed *supra* at pp. 9–10, this argument has no merit. Section 40.32(e)'s pre-construction bar has no bearing on activities that are designed to facilitate a pre-license environmental assessment required under NEPA and section 51.45. On the contrary, that section explicitly mandates a pre-license evaluation of "any appropriate conditions to protect environmental values." The Commission should reject Strata's interpretation of this regulation in the context of Contention 2 as well as Contention 1.

Finally, in a variation of its claim that Petitioners collaterally attack Criterion 5(B)(5), Strata alleges that because it has the right to seek an ACL, somehow admission of Contention 2 is improper. Strata App. 23, 24. This argument is without basis; far from attacking Criterion 5(B)(5), Petitioners have *relied* upon it as authority in support of Contention 2. Aware of the parties' differing interpretations of this regulation, the Board identified a genuine dispute of material fact or law. Why the Board's judgment on this point is at all incorrect, much less a clear error or abuse of discretion, Strata does not and cannot explain.

Contention 2 meets the legal standards described in 10 C.F.R. § 2.309(f)(1). The Commission should therefore dismiss Strata's appeal and affirm the Board's finding that Petitioners may argue the merits of their claim that Strata's ER requires a bounding analysis and explanation of the environmental impacts that may result from the eventual adoption of an ACL in lieu of primary or secondary groundwater standards.

CONCLUSION

The Board held in LBP 12-3 that Petitioners have demonstrated standing, that Contentions 1 and 2 are admissible in whole and that Contentions 3 through 5 are admissible in part. Neither Strata nor the NRC Staff have shown that any of the Board's decisions were an "abuse of discretion" or in "clear error." Therefore, the Commission should deny these appeals, reject Strata's request for oral argument and return this matter to the Board for proceedings consistent with its ruling.

Respectfully submitted,

/s/ Geoffrey H. Fettus

/s/ Andres J. Restrepo

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Date: March 2, 2012

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Reply and accompanying attachments in the above-captioned proceeding were served via the Electronic Information Exchange (EIE) on the 2nd day of March 2012, which to the best of my knowledge resulted in transmittal of same to those on the EIE Service List for the captioned proceeding.

/s/ Andres J. Restrepo
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Date: March 2, 2012