No. 10-\_\_\_\_

IN THE Supreme Court of the United States

MARILYN MORRIS, ET AL.,

Petitioners,

v.

U.S. NUCLEAR REGULATORY COMMISSION, ET AL.,

Respondents.

On Petition for A Writ of Certiorari to the United States Court of Appeals for the Tenth Circuit

#### PETITION FOR A WRIT OF CERTIORARI

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#### **QUESTIONS PRESENTED**

1. In determining whether public radiation doses from a proposed new uranium mine would exceed regulatory limits, could the U.S. Nuclear Regulatory Commission ("NRC") interpret 10 C.F.R. § 20.1301(a)(1) to allow it to ignore radioactive emissions from existing uranium mine waste on the mine site?

2. Where, in establishing a groundwater restoration surety for a proposed uranium mine, the NRC failed to follow its own criteria for protecting the drinking water on the site, did the NRC violate the Atomic Energy Act's prohibition against licensing operations that are inimical to public health and safety?

#### PARTIES TO THE PROCEEDING AND CORPORATE DISCLOSURE STATEMENT

The following parties were petitioners below and are petitioners here: Grace Sam, Marilyn Morris, Eastern Navajo Diné Against Uranium Mining ("ENDAUM"), and the Southwest Research and Information Center ("SRIC"). The United States and the United States Nuclear Regulatory Commission ("NRC" or "Commission") were the respondents below and are respondents here. Hydro Resources, Inc. ("HRI") was a respondent-intervenor below and is also a respondent-intervenor here.

ENDAUM is a nonprofit organization incorporated under the laws of the Navajo Nation and is exempt from taxation under Section 501(c)(3) of the Internal Revenue Code. ENDAUM does not issue stock and no parent corporation or publicly held corporation has ten percent or more ownership interest. ENDAUM's membership consists of concerned community members in Church Rock and Crownpoint, who are predominantly members of the Navajo Nation. ENDAUM's mission is to protect public health and the water of the communities of Church Rock and Crownpoint.

SRIC is a nonprofit organization incorporated under the laws of New Mexico and is exempt from taxation under Section 501(c)(3) of the Internal Revenue Code. SRIC does not issue stock and no parent corporation or publicly held corporation has ten percent or more ownership interest. SRIC's mission is to promote the health of people and communities, protect natural resources, ensure citizen participation in government decisions that affect their welfare, and secure environmental and social justice for present and future generations.

Marilyn Morris and Grace Sam are individual members of the Navajo Nation who reside and graze livestock near the proposed Church Rock mine sites.

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#### PETITION FOR A WRIT OF CERTIORARI

Petitioners respectfully petition for a writ of certiorari to review the judgment of the United States Court of Appeals for the Tenth Circuit in this case.

#### **OPINIONS BELOW**

The opinion of the panel of the court of appeals is reported at 598 F.3d 677, and is reprinted in the Appendix to the Petition ("Pet. App.") 1-67. The order denying rehearing or *en banc* review of the panel decision is reprinted at Pet. App. 261-62. The NRC orders reviewed by the court of appeals are reported at 64 N.R.C. 417, 63 N.R.C 510, 63 N.R.C. 1, 53 N.R.C. 31, and 52 N.R.C. 1, and are reprinted at Pet. App. 68-260.

#### JURISDICTION

The judgment of the court of appeals was entered on March 8, 2010. A request for rehearing or *en banc* review was denied on May 18, 2010. On July 23, 2010, Associate Justice Sotomayor extended the time in which to file this Petition up to and including September 15, 2010. The jurisdiction of this Court is invoked under 28 U.S.C. § 1254(1).

#### STATUTES AND REGULATIONS INVOLVED

The relevant provisions of the Atomic Energy Act, the National Environmental Policy Act, the Uranium Mill Tailings Radiation Control Act, and NRC's implementing regulations are reprinted at Pet. App. 263-270.

#### STATEMENT OF THE CASE

#### A. Procedural History

This case began in 1988, when HRI applied to the

NRC for a license to conduct *in situ* leach ("ISL") mining of uranium on four sites in the towns of Church Rock (Sections 8 and 17) and Crownpoint (Crownpoint and Unit 1) in northwestern New Mexico. Church Rock and Crownpoint both lie within the boundaries of the Navajo Nation and are located in the Eastern Navajo Agency. Pet. App. 3. The NRC issued a notice of opportunity for hearing in 1994, when it published the Draft Environmental Impact Statement for the proposed mine. In re Hydro Res., Inc., LBP-98-9, 47 N.R.C. 261, 264 (1998), rev'd in part on other grounds, 48 N.R.C. 119 (1998). Petitioners requested a hearing in 1995, but the proceeding was held in abevance pending the issuance of the Final Environmental Impact Statement ("FEIS") in 1997. Id., 48 N.R.C. at 265-66.

In 1998, before hearings had begun, the NRC issued a license to HRI. Pet. App. 5. The NRC then conducted informal adjudicatory hearings on HRI's applications in two phases. In Phase I, the NRC addressed issues pertaining only to HRI's proposed mine on Section 8 at Church Rock. *Id.* at 7. In Phase II, the NRC adjudicated the lawfulness of the other three mine sites: Church Rock Section 17, Unit 1 and Crownpoint. *Id.* This petition and the case in the court of appeals concern only Church Rock Sections 8 and 17.

#### B. Radioactive Air Emissions at Section 17

HRI's Section 17 licensed area at Church Rock is located on land held in trust by the U.S. Government for the Navajo Nation and leased by the Bureau of Indian Affairs to local residents who live and graze their livestock there. Three families live on Section 17 *inside* the licensed area, and approximately 850 people live within five miles of the Section 8 and Section 17 mining sites. Pet. App. 7-8.

HRI's licensed area on Section 17 includes the site of the abandoned Old Church Rock Mine, an underground uranium mine that operated in the early 1960s and from 1977 to 1983 before it was purchased by HRI in the early 1990s. The surface remains contaminated by dust and rocks from the prior uranium mining operations. Those wastes continue to emit radiation in excess of the NRC's regulatory limits. *Id.* 

In the 1997 FEIS, the NRC acknowledged that some parts of the Section 17 site already are radioactively contaminated, but asserted that "these areas may be cleaned up as part of the well field decontamination." Pet. App. 30 n.15. The NRC concluded that licensing the proposed uranium mine "may be result in a positive health effect at the Church Rock site." *Id.* 

Nine years later, in the adjudicatory proceeding on the issue of whether HRI's license application for Section 17 satisfied 10 C.F.R. § 20.1301(a)(1)'s public radiation dose limits, the NRC changed course, holding that it has no authority to require HRI to clean up the mine site if it is licensed by the NRC. Pet. App. 98. As a result, HRI would now receive a license to operate Section 17 without ever having to clean up existing radioactive contamination that is nine to fifteen times the regulatory limit. *Id.* at 60 (Lucero, J. dissenting). Nevertheless, the NRC did not correct the now-disproven representation in the 1997 FEIS that the issuance of a license to HRI would likely benefit the public by leading to NRCordered cleanup of the existing contamination.

#### C. Groundwater Quality at Church Rock Section 8

#### 1. Groundwater quality and ISL mining

In its undisturbed state, uranium is immobile in an aquifer. The mineralized zone of the aquifer contains high concentrations of chemicals such as uranium and radium, while surrounding groundwater may have low concentrations of these chemicals. J.A. 331, *Morris v. U.S. Nuclear Regulatory Comm'n*, 598 F.3d 677 (10th Cir. 2010) (No. 07-9505) ("C.A. J.A."). Thus, an aquifer with a mineralized ore zone may also have drinking water nearby. *See In re Hydro Resources, Inc.*, LBP-99-30, 50 N.R.C. 77, 105 (1999), affirmed, CLI-00-12, 52 N.R.C. 1 (2000).

By its nature, the ISL process of mining uranium in an aquifer "tend[s] to contaminate groundwater." Pet. App. 33. ISL mining involves establishing a series of injection and production wells that are laid out in a series of geometric patterns known as "well fields." Pet. App. 4. Mining is conducted by injecting a solution of water, dissolved oxygen, and sodium bicarbonate (known as "lixiviant") through injection wells and into the discrete areas of uranium mineralization, called "ore zones." The lixiviant dissolves the uranium in the ore zone and causes it to become mobile in the aquifer. Production wells then pump the uranium-laden solution (known as "pregnant lixiviant") to the surface for processing. At a processing plant, the uranium is chemically stripped from the groundwater, which is then returned to the aquifer to extract more uranium. Id. at 3-4. During the mining process, monitoring wells around the perimeter of the well field are used to detect excursion of lixiviant. Id. at 4.

In a given well field, pre-mining groundwater quality within the ore zone is generally poor due to the mineralization of the aquifer. C.A. J.A. 331. Premining quality of groundwater that lies outside the ore zone but still within the well field, however, may be good. *Id.* Such is the case at Section 8 where uranium concentrations vary from as high as 10.9 milligrams per liter ("mg/l") in the ore zone to as low as 0.002 mg/l in other parts of the Section 8 mine site. C.A. J.A. 253. The uranium concentration of 0.002 mg/l is more than an order of magnitude below the Environmental Protection Agency's ("EPA's") drinking water standard of 0.03 mg/l.

# 2. NRC requirements for restoration and financial surety

HRI's license contains two related requirements with respect to restoration of groundwater at the termination of HRI's mining operation. First, after licensing but before mining may begin, HRI must establish "groundwater restoration goals" within the well field for an array of chemicals and radionuclides. Pet. App. 5, 40-42. Second, at the time of licensing HRI must establish a financial surety based on the estimated cost of restoring the groundwater at the conclusion of HRI's mining operation. *Id.* at 5.

#### a. Restoration goals

HRI's license requires it to establish a "primary restoration goal" of returning all contaminants to "average pre-lixiviant injection conditions," also known as "baseline" conditions. *Id.* at 40-42. These restoration goals are consistent with the Uranium Mill Tailings Restoration and Control Act, which requires the EPA to establish standards for protection of public health from hazards posed by inactive uranium milling sites. Pet. App. 263. Because groundwater quality may vary so widely within a mine site, primary restoration goals must be separately established for the groundwater within and outside the ore zone and HRI may not average those values. LBP-99-30, 50 N.R.C. at 99-100; *In re: Hydro Resources, Inc.*, LBP-05-17, 62 N.R.C. 77, 96-97 (2005), review denied, CLI-06-1, 63 N.R.C. 1 (2006).

The license allows HRI to postpone setting primary restoration goals until just prior to the commencement of mining activities, after HRI has installed its injection, production and monitoring wells. C.A. J.A. 320.<sup>1</sup> Thus, HRI has yet to establish the pre-mining baseline conditions for Section 8. Pet. App. 243.

#### b. Financial surety

NRC regulations require HRI to set aside a financial surety that is sufficient to cover the estimated cost of decommissioning its mine sites, including restoring groundwater. Pet. App. 44-45, 267-70. Groundwater restoration accounts for the majority of decommissioning costs and therefore the majority of

<sup>&</sup>lt;sup>1</sup> If baseline concentrations of contaminants are lower than the maximum concentration limits ("MCLs") specified in the EPA's drinking water regulations, the license establishes a "secondary goal" of returning groundwater to those EPA MCLs. Pet. App. 41-42. When HRI received its license in 1998, however, EPA did not have an MCL for uranium, and therefore the NRC imposed a secondary restoration goal for uranium of 0.44 mg/l. LBP-05-17, 62 N.R.C. at 89. After the EPA determined that chronic ingestion of even low levels of uranium can cause kidney damage and promulgated a drinking water MCL for uranium of 0.03 mg/l, the NRC agreed to reduce the limit in HRI's license in order to be consistent with EPA. *Id.* at 89-92.

the surety estimate. In re Hydro Resources, Inc., LBP-04-3, 59 N.R.C. 84, 90 (2004).

The amount of money that must be set aside for a groundwater restoration surety is based on the estimated cost of flushing enough water through a mined aquifer to return the groundwater quality to the primary or secondary restoration goals that will be established by HRI prior to mining, *i.e.*, baseline conditions or EPA drinking water standards. Pet. App. 112-113; C.A. J.A. 256.

While HRI must establish a surety at the time of licensing, its license does not require it to establish restoration goals until after licensing. Therefore, by necessity, HRI based its groundwater restoration cost estimate on only a limited amount of data about groundwater conditions on Section 8. Those data, presented in the FEIS, show that water quality at Section 8 varied from highly contaminated in the ore zone to drinking water quality outside the ore zone. C.A. J.A. 253. Even though HRI's license prohibits it from averaging ore zone and non-ore zone groundwater quality values in establishing primary restoration goals, the NRC allowed HRI to average those widely divergent water quality values for purposes of establishing a surety for Section 8. Pet. App. 243. The NRC concluded that it would be necessary to flush the Section 8 mine with nine "pore volumes" of water in order to restore the quality of the water to these average values. Id. at 47.

#### **D.** Decisions Below

#### 1. Radioactive air emissions at Section 17

NRC regulation 10 C.F.R. § 20.1301(a)(1) limits the public radiation dose (*i.e.*, the total effective dose equivalent ("TEDE")) to 0.1 rem per year. Pet. App. 8. In the administrative adjudication of HRI's license, Petitioners contended that HRI could not satisfy § 20.1301(a)(1) at Section 17 because radiation doses from existing contamination on the site far exceeded the TEDE of 0.1 rem per year. *Id.* at 15, 95. But the Commission rejected Petitioners' argument on the ground that the radioactive debris on Section 17 is not part of HRI's "licensed operation." *Id.* at 98 The Commission also concluded that radioactive emissions from the debris constitute "background radiation" which is not subject to the dose limits in 10 C.F.R. § 20.1301(a)(1). *Id.* at 107.

On review, a majority of the court of appeals conthe NRC's interpretation cluded that of § 20.1301(a)(1) was entitled to deference because it was not "plainly erroneous" or inconsistent with the NRC's statements of intent in promulgating the regulations at the time it promulgated the regulations. *Id.* at 16-22. Because the majority relied on the Commission's interpretation of the term "licensed operation," it never reached the question of whether the NRC had applied a proper interpretation of the term "background radiation." Id. at 22. See also Pet. App. 91-108.

Judge Lucero dissented from the majority's interpretation of 10 C.F.R. § 20.1301(a)(1), concluding that it is "inconsistent with the regulation' and thus warrants no deference." *Id.* at 62 (quoting *Thomas Jefferson Univ. v. Shalala*, 512 U.S. 504, 512 (1994)). Observing that the NRC's interpretation rendered specific exclusions from the rule "unnecessary," Judge Lucero concluded that the NRC's interpretation "violates a fundamental rule of construction." *Id.* at 64. Further, he concluded that "the majority's decision . . . will unnecessarily and unjustifiably compromise the health and safety of the people who currently live within and immediately downwind of Section 17..." *Id.* at 61.

# 2. Groundwater restoration goals and surety for Section 8

In the adjudicatory proceeding before the NRC, Petitioners charged that in its Environmental Report for the proposed mine, HRI had already established baseline groundwater conditions that were based on averages of uranium concentrations in the ore zone and the surrounding area of much lower uranium concentration. C.A. J.A. 384-85. Petitioners asserted that HRI "may use this same tactic in setting restoration goals for the project sites." *Id.* 

The Presiding Officer rejected Petitioners' claim, however, concluding that HRI had not yet established baseline conditions, and would not do so until after the license was issued. LBP-99-30, 50 N.R.C. at 99-100. He also noted that "baseline should be determined in both the production area and the mine area separately." *Id.* at 100. This prohibition against averaging ore zone and non-ore-zone water quality was also affirmed in a subsequent decision, LBP-05-17, 62 N.R.C. at 96-97.

Despite the NRC's clear instruction that HRI may not average ore zone and non-ore-zone water quality values to set restoration goals, the NRC did just that in concluding that HRI's surety was adequate and that it had a reasonable assurance that HRI could clean up the Section 8 aquifer at the conclusion of its mining operation. This assumption is made clear in CLI-00-12, in which the Commission stated its expectation that HRI would not have to restore uranium concentrations in Section 8 groundwater to "a cleaner, more stringent level" than 1.8 mg/l, the "average level already existing in Section 8." Pet. App. 243 (citing FEIS at 3-36, C.A. J.A. 253) (emphasis added). The FEIS itself reports 1.8 mg/l as the "mean' between uranium concentrations of 10.9 mg/l in the ore zone and 0.002 mg/l in the non-ore-zone. C.A. J.A. 253. The Commission did not change its conclusion when it revisited the surety issue in CLI-04-33, Pet. App. 131.

The court of appeals affirmed the NRC's decision, deferring to the agency's determination that HRI's proposed groundwater restoration efforts and attendant surety estimates are adequate. *Id.* at 51-52. Additionally, the court affirmed the NRC's conclusion that it would be reasonable to use Section 8 to demonstrate that HRI could restore groundwater before permitting it to mine at its other sites. *Id.* at 51. However, the court did not address the validity of NRC's assumption that it could use average values for ore zone and non-ore zone water quality to assess the adequacy of HRI's surety and the feasibility of groundwater restoration.

#### **REASONS FOR GRANTING THE WRIT**

The Court should take review of this case because, as Judge Lucero noted in his dissent, the majority's decision "violates a fundamental rule of construction" by accepting an interpretation of  $\S$ 20.1301(a)(1) that renders other terms of the rule superfluous. Pet. App. 64 (Lucero, J. dissenting). The NRC's interpretation of the rule is also inconsistent with other statements of intent by the NRC, not only in the § 20.1301(a)(1) rulemaking context but also throughout the course of the administrative proceeding. While the NRC used the 1997 FEIS to assure members of the public that licensing of the mine would benefit them by resulting in an NRC-ordered cleanup of highly contaminated areas of the Section 17 mine site, the majority has now affirmed the NRC's subsequent disclaimer of any authority to order such a cleanup. Thus, the majority has allowed the government to renege on its promise to the members of the public living near the HRI mine, who must now live indefinitely with radioactive contamination that will "unnecessarily and unjustifiably compromise the health and safety of the people who currently live within and immediately down wind from Section 17." Id. at 60 (Lucero, J. dissenting).

Moreover, by approving a financial surety for groundwater restoration that was based on the impermissible assumption that high quality groundwater values could be averaged with values for the polluted ore zone, the court countenanced the NRC's violation of the Atomic Energy Act's prohibition against licensing operations that are inimical to public health and safety. Pet. App. 264. Because the court's decision is inconsistent with the law and puts public health at risk, it should be reviewed.

#### ARGUMENT

- I. The NRC's Interpretation of 10 C.F.R. § 20.1301, as Upheld by the Court of Appeals, Violates Fundamental Principles of Statutory Interpretation as Outlined by this Court.
  - A. The Plain Language of 10 C.F.R. § 20.1301(a)(1) Does not Support the NRC's Interpretation of the Regulation.

NRC regulation 10 C.F.R. § 20.1301(a)(1) requires that:

(a) Each licensee shall conduct operations so that –

(1) The total effective dose equivalent to individual members of the public from the licensed operation does not exceed 0.1 rem (1 mSv) in a year, exclusive of the dose contributions from background radiation, from any administration the individual has received, from exposure to individuals administered radioactive material and released under § 35.75, from voluntary participation in medical research programs, and from the licensee's disposal of radioactive material into sanitary sewerage in accordance with § 20.2003.

Pet. App. 265. The majority opinion defers to the NRC's interpretation that the term "licensed operation" means only HRI's activities in removing uranium from the ground and chemically processing it, and therefore § 20.1301(a)(1) does not apply to the significant radioactive emissions from pre-existing, human-caused mine waste on HRI's site. Pet. App. 16-18. The majority found that an alternative reading was not compelled by the regulation's plain language. Id. at 17.

As Judge Lucero noted in his dissent, however, the NRC's interpretation of the term "licensed operation" as used in 10 C.F.R. § 20.1301(a)(1) renders other terms of the regulation superfluous. For instance, language in § 20.1301(a)(1) excluding sanitary sewers and medical operations from the regulation's scope would not be necessary because those activities are not part of the specific activity to be conducted under the license. While the majority asserts that the language in the regulation excluding sanitary sewers and medical administration "clarifies" that the NRC has other regulations that govern those matters (Pet. App. 17), in fact "[t]here is no reason to expressly exclude radiation from medical research programs if 'licensed operation,' by definition, refers only to activity of the licensee." Id. at 64.

Further, the majority completely fails to explain its circular statement that the exclusion of background radiation "makes sense in its own right" under the NRC's interpretation of the regulations. Pet. App. 17. In fact, the exclusion of background radiation does not make sense under any reasoning, because this interpretation renders the exclusion "superfluous," in violation of the "well-established principle of statutory and regulatory interpretation that a provision should be read such that no term is rendered nugatory." *Id.* at 63. *See also Thomas Jefferson Univ.*, 512 U.S. at 513.<sup>2</sup>

#### B. The Majority's Opinion is Inconsistent with Other Part 20 Regulations and the Regulations' History.

The majority also misreads the history of the 1991 rulemaking in which the NRC strengthened radiation doses limits for members of the public. Pet. App. 18-21. According to the majority, the rulemaking history supports the NRC's interpretation of 10 C.F.R. § 20.1301(a)(1) because it "specifically linked the relevant measured dose to the 'licensed operation' by changing regulatory language that had referred to "both licensed and unlicensed sources" to the "licensed operation." *Id.* at 18.

But the court's analysis begs the question of what the NRC meant by the term "licensed operation," which is not defined in the regulations. The majority apparently assumes that "licensed operation" means essentially the same thing as "licensed sources," and therefore the exclusion of the term "unlicensed sources" from the 1991 rule shows that the NRC did not intend the rule to cover unlicensed sources in the licensee's possession. That reading of the regula-

<sup>&</sup>lt;sup>2</sup> Because the majority opinion defers to the NRC's interpretation of "licensed operation," it does not address the issue of whether the NRC's interpretation of "background radiation" is entitled to deference. Judge Lucero's dissent addresses that issue, however, and concludes that the NRC's interpretation of "background radiation" violates canons of regulatory construction. Pet. App. 64-65. Because the NRC's interpretation of its regulatory language renders significant portions of those regulations superfluous, the majority should not have afforded that interpretation any deference.

tions is not supported by the context of the rulemaking, however, because the statement of regulatory purpose that accompanies 10 C.F.R. § 20.1301(a)(1)expresses the Commission's intent to regulate radiation doses from both "licensed and unlicensed radioactive material."<sup>3</sup>

Similarly, a colloquy in the 1991 rulemaking expresses the Commission's intent to regulate "doses from radiation and radioactive material under the licensee's control." 56 Fed. Reg. 23,360, 23,374 (May 21, 1991). See also 51 Fed. Reg.1032, 1133 (Jan. 9, 1986) (NRC's statement in the proposed rule regarding the impracticality of regulating radiation doses from several sources, "not all of which are controlled by the licensee.")

For the same reason, the fact that the NRC reduced the maximum permissible radiation dose from 0.5 rem/year in the proposed rule to 0.1 rem/year in the final rule does not, as the majority suggests, show that the NRC intended to exclude from the scope of the rule any radiation source in the licensee's control that is not also used in the licensee's ac-

(emphasis added).

<sup>&</sup>lt;sup>3</sup> Section 20.1001(b) provides that:

It is the purpose of the regulations in this part to control the receipt, possession, use, transfer, and disposal of licensed material by any licensee in such a manner that the total dose to an individual (including doses resulting from *licensed and unlicensed radioactive material* and from radiation sources other than background radiation) does not exceed the standards for protection against radiation prescribed in this part.

tivities. Pet. App. 21. It simply demonstrates that in contrast to the proposed rule, which covered radiation sources both within and beyond the licensee's control, the final rule covers only radiation sources within the licensee's control.

The majority also states that the NRC's reading of § 20.1301(a)(1) is consistent with the Commission's stated interest in establishing standards that are "practical from the standpoint of the licensees" and that meet the Atomic Energy Act's policy of developing nuclear energy. Pet. App. 19 (quoting 25 Fed. Reg. 8595 (1960)). But no practical consideration or general statement of policy could be fairly read to permit the NRC to subvert the specific command of 42 U.S.C. § 2099 that it may not issue a source materials license that would be "inimical to . . . the health and safety of the public." As Judge Lucero states in his dissent, that is exactly what the NRC has done here with the approval of the majority. Pet. App. 60.

Finally, the majority does not address the fact that the NRC's interpretation of 10 C.F.R. § 20.1301(a)(1) renders false the 1997 FEIS' statement that high levels of existing contamination on the Church Rock Section 17 site "may be cleaned up as part of the well field decontamination." Pet. App. 30 n.15. The court leaves unexplained the question of how, if the NRC has no authority over HRI's existing mine waste for purposes of enforcing 10 C.F.R. § 20.1301(a)(1), it could claim in the FEIS that it has the authority to order HRI to clean up the existing contamination at the conclusion of HRI's mining operation. Nor has the NRC attempted to correct what now constitutes a misstatement in the FEIS that licensing of the HRI mine is likely to benefit the community by resulting in an NRC-ordered cleanup of existing contamination. *See* discussion above at 3-4. The NRC simply allowed the 1997 FEIS to stand uncorrected, despite its obligation under the National Environmental Policy Act to provide "carefully consider[ed] and "detailed" information to the public regarding the environmental consequences of its decisions. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349-350 (1989).

#### II. The NRC-Approved Groundwater Surety for Groundwater Restoration at Section 8 Violates the Atomic Energy Act's Public Health Protection Mandate.

Consistent with the Atomic Energy Act's requirement that the issuance of an NRC source materials license may not be "inimical to public health and safety," 42 U.S.C. § 2099 (Pet. App. 264), NRC decommissioning funding requirements are designed to ensure that at the end of operations, a licensee will possess "sufficient funds to eventually decontaminate and decommission the site to a level at which public health and safety is assured." Shieldalloy Metallurgical Corp. (Newfield, NJ); Director's Decision Under 10 C.F.R. 2.206, 45 N.R.C. 338, 342 (1997). The NRC runs afoul of this mandate by arbitrarily basing HRI's initial groundwater restoration effort and surety estimate on the assumption that HRI needs to restore groundwater at Section 8 only to the average of ore zone and non-ore zone groundwater quality, not the drinking water quality currently found in some areas of Section 8. Pet. App.

243. Contrary to its own conclusion that baseline restoration goals cannot be established by averaging ore zone and non-ore zone water quality, the NRC has founded HRI's restoration surety on a preliminary restoration goal estimated by averaging extremely low contamination values for potable nonore-zone water with extremely high values for polluted ore zone water.

Thus, even though baseline conditions have yet to be definitively established, the NRC has impermissibly assumed that average groundwater conditions are poor and approved a surety that is correspondingly low. As a result, HRI's financial surety for groundwater restoration at Section 8 is unlikely to be sufficient to restore good quality groundwater outside the ore zone to pre-mining conditions in the event that HRI is financially unable to do so. By effectively allowing HRI to degrade local residents' potable water source, the NRC has violated the Atomic Energy Act's public health protection mandate in 42 U.S.C. § 2099 and the NRC's own interpretation of the purpose of surety estimates as set forth in *Shieldalloy*.

In affirming the NRC, the court reasoned that the surety for Section 8 applies only to the "outset" of HRI's mining project and that the surety was subject to future revisions for the other three mining sites. Pet. App. 52-53. Setting aside the very high standard for obtaining a hearing on future revisions to the surety (Pet. App. 55), it is no consolation to the neighbors of the Section 8 mine that the aquifer on which they depend for drinking water will have been sacrificed as an initial experiment in setting groundwater restoration surety amounts. As the court has acknowledged, groundwater restoration to baseline conditions at ISL projects is exceedingly difficult, if not impossible and at best, only one ISL operation may have successfully restored groundwater. Pet. App.35-36.<sup>4</sup> Like the NRC, the court of appeals failed to account for the real possibility that HRI may not be able to complete the demonstration experiment and leave Section 8 contaminated because of an inadequate groundwater restoration surety. This kind of experiment is not contemplated by the Atomic Energy Act's requirement for protection of public health and therefore warrants review.

<sup>&</sup>lt;sup>4</sup> In note 19 of its opinion, the panel states that there is evidence in the record that groundwater quality was successfully restored at the Bison Basin project, without providing a record citation. Pet. App. 36. However, that assertion was not supported in the administrative case with any evidence, and the court does not cite any. To Petitioners' knowledge, no ISL mining operation has ever restored groundwater to pre-mining conditions.

#### CONCLUSION

The petition for certiorari should be granted.

Respectfully submitted,

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September 2010