DOCKET No. 13-1259

UNITED STATES COURT OF APPEALS

FOR THE DISTRICT OF COLUMBIA CIRCUIT

SHIELDALLOY METALLURGICAL CORPORATION,

Petitioner,

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION AND THE UNITED STATES OF AMERICA,

Respondents.

ON PETITION FOR REVIEW OF A FINAL ORDER BY
THE UNITED STATES NUCLEAR REGULATORY COMMISSION

PETITION FOR PANEL REHEARING OF SHIELDALLOY METALLURGICAL CORPORATION

Jay E. Silberg
Matias F. Travieso-Diaz
Stephen L. Markus
Alison M. Crane

PILLSBURY WINTHROP SHAW PITTMAN LLP
2300 N Street, NW
Washington, DC 20037
(202) 663-8000
COUNSEL FOR SHIELDALLOY
METALLURGICAL CORPORATION

December 1, 2014

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases **Page**

Authorities upon which Petitioner chiefly relies are marked with asterisks.

Statutes, Regulations & Other Documents

GLOSSARY OF TERMS AND ABBREVIATIONS

ALARA	As Low As Reasonably Achievable
Facility	The industrial facility owned by Shieldalloy Metallurgical Corporation located in Newfield, New Jersey
Form	NJRAD Form-314
LTR	License Termination Rule, Subpart E to 10 C.F.R. Part 20 (10 C.F.R. §§ 20.1401-06)
NJDEP	New Jersey Department of Environmental Protection
New Jersey Program	*See* Program
NRC	United States Nuclear Regulatory Commission
Program	New Jersey's Radiation Protection Program
Shieldalloy	Shieldalloy Metallurgical Corporation
SMC	Shieldalloy Metallurgical Corporation
State	State of New Jersey

I. INTRODUCTION

Pursuant to Fed. R. App. P. 40 and Circuit Rule 35, Petitioner Shieldalloy Metallurgical Corporation ("Shieldalloy" or "SMC") hereby requests panel rehearing of this Court's decision in *Shieldalloy Metallurgical Corp. v. NRC*, 768 F.3d 1205 (D.C. Cir. 2014) (the "Opinion"). Rehearing by the panel is warranted because the panel's Opinion – which upholds the reinstated transfer by the U.S. Nuclear Regulatory Commission ("NRC") of regulatory authority over Shieldalloy's Newfield, New Jersey facility ("Facility") to the State of New Jersey ("New Jersey" or the "State") – reflects fundamental omissions and misapprehensions of several key points of fact and law. In particular, the Opinion misconstrues key elements of New Jersey's radiation protection program (the "New Jersey Program"), as well as Shieldalloy's arguments, in concluding that the New Jersey Program is compatible with the NRC's regulations. Moreover, the Opinion omits any mention or analysis of the inconsistency between the NRC's current interpretation of 10 C.F.R. § 20.1403(a) – the key provision at issue – and its application of this provision over a decade-long process of reviewing the decommissioning plan for the Facility and communicating with Shieldalloy regarding that plan. Therefore, the Court should grant panel rehearing to enable proper consideration of these matters.

II. ARGUMENT

A. The Opinion Improperly Construes Fundamental Aspects of New Jersey's Radiation Protection Program Relating to Decommissioning and License Termination

At issue in this proceeding is "an important question of public safety that demands great clarity and precision, neither of which the [NRC] has supplied: What rules govern the means by which the owner of a licensed nuclear facility may decommission that facility and dispose of its radioactive materials?" *Shieldalloy Metallurgical Corp. v. NRC*, 707 F.3d 371, 373 (D.C. Cir. 2013) ("*Shieldalloy II*"). It is undisputed that a central aspect of the NRC's License Termination Rule ("LTR") is the requirement that radiation doses resulting from the decommissioning process are as low as reasonably achievable ("ALARA"). An additional important element of the LTR is the availability of decommissioning and license termination under "restricted use" conditions for sites where health and the environment may be best protected by on-site stabilization and disposal of radioactive materials, rather than removal, transport and off-site disposal of such materials associated with the "unrestricted use" approach.

As Shieldalloy has explained, the New Jersey Program is inconsistent and incompatible with the NRC's license termination scheme in failing (1) to incorporate the ALARA principle in its license termination regime, or (2) to allow restricted use decommissioning under any circumstance – even when such an

approach would minimize radiation doses to the public. Reply Br. at 26-27. However, the panel's Opinion reaches the opposite conclusion on both fronts. *See* 768 F.3d at 1209-10. This result appears to stem from the panel's acceptance of misconceptions advanced by the NRC and New Jersey regarding the content of the New Jersey Program.

First, the Opinion erroneously concludes that "New Jersey's regulatory regime applies the ALARA principle to decommissioning activity" (768 F.3d at 1209). The New Jersey Program does incorporate the NRC's general ALARA standard for radiation protection programs, as specified at 10 C.F.R. § 20.1101(b). However, New Jersey has long conceded that it does not incorporate an ALARA requirement in the specific area of license termination. Rather, New Jersey wholly excludes the license termination provisions of Subpart E of 10 C.F.R. Part 20 and their specific ALARA requirements from its regulatory regime. *See* N.J. Admin. Code § 7:28-6.1(c) (listing provisions, including 10 C.F.R. §§ 20.1401-05, which are not incorporated by reference into the New Jersey regulations). The remaining general ALARA requirement, unlike the specific ALARA standards included in the NRC's LTR, fails to require selection of decommissioning approaches that minimize total doses to the public.

Thus, Shieldalloy believes that it is inaccurate for the panel to conclude that the New Jersey Program "protects public health and safety through ALARA just like the NRC's regulatory regime." 768 F.3d at 1209. In reality, New Jersey's regulations are incompatible with the NRC's license termination regime with respect to the ALARA principle because the New Jersey regulations exclude consideration of doses resulting from off-site disposal, thereby permitting the State to reject any on-site decommissioning option, even if it would result in lower reasonably achievable doses to the public.

Second, Shieldalloy believes that the Opinion's finding that "New Jersey's regulations also permit license termination with restricted future use" (*id.*) is based on a misreading of applicable New Jersey regulations and gives undue weight to New Jersey's disposition certificate, which New Jersey modified without notice during the course of this litigation. The New Jersey regulations cited by the panel concerning remediation standards for "limited restricted use" and "restricted use" (N.J. Admin. Code § 7:28-12.9(a)(1)) and alternative standards (*id.* § 7:28-12.11(a)) (768 F.3d at 1210) only state the numerical values that must be met to satisfy the remediation standards under N.J. Admin. Code § 7:28-12.8. However, none of these provisions permit *license termination* by the licensee following remediation to the specified restricted use or alternative criteria. Rather, under the New Jersey Program, license termination is possible only if the licensee remediates

the site to meet the unrestricted use criteria. *See* R9 (Shieldalloy's Response to the Commission's January 3, 2011 Order) (Feb. 4, 2011), at 16, JA459.

In an apparent attempt to gloss over this essential shortcoming, New Jersey revised its disposition certificate, NJRAD Form-314 (the "Form"), on May 23, 2014 – the same day on which Shieldalloy's Reply Brief was filed.[1] At oral argument, counsel for New Jersey acknowledged that the State changed the Form to include a new reference to a "restricted use" license termination option in response to the omission identified by Shieldalloy. Oral Argument[2] 27:32-49, Sept. 12, 2014. However, the Form's new reference to restricted use not only lacks a basis in the New Jersey regulations, but also reflects a direct reversal from the State's longstanding position that the New Jersey Program precludes license termination by restricted use conditions *under any circumstances*. *See* NJDEP

---

[1] New Jersey did not notify the other parties or the Court of this revision. Had it done so, the Joint Appendix would have been updated to reflect the current revised version of the form. Given the absence from the New Jersey Program of a restricted use option for license termination, New Jersey's revision to this form constituted a new legal standard "not otherwise expressly provided by or clearly and obviously inferable from" New Jersey's existing regulations, and "constitutes a material and significant change from a clear, past agency position on the identical subject matter." *Metromedia, Inc. v. Director, Division of Taxation*, 97 N.J. 313, 331-32 (1984). Accordingly, this revision should have at least warranted notice in the New Jersey Register. *See id.*

[2] *Available at:* http://www.cadc.uscourts.gov/recordings/recordings2015.nsf/DA445AEBF350F50085257D51005BC9FA/$file/13-1259.mp3.

Letter to Dennis Krumholz re: Exemption Request (Dec. 11, 2009), at 1, JA393 (noting that Shieldalloy's proposed decommissioning plan "relies on engineering controls and requires a long term control license (something that our regulations do not allow)"). This position is further evidenced by the State's consistent refusal to permit any form of restricted use decommissioning at Shieldalloy's Facility. Therefore, contrary to the panel's analysis, New Jersey's *post hoc* and unannounced amendment of its NJRAD Form-314 does not cure the Program's failure to permit license termination under restricted use criteria.

B. The Opinion Mischaracterizes Shieldalloy's Arguments Concerning the Incompatibility between the NRC and New Jersey Programs

The Opinion reflects a basic misunderstanding of Shieldalloy's assertions regarding the nature of the New Jersey Program's incompatibility with the NRC's license termination regime, as well as of the significance of the New Jersey Program's incorporation of stricter license termination standards than those of the NRC. The panel emphasizes that, "[c]ontrary to Shieldalloy's arguments, the NRC's transfer of authority is not arbitrary and capricious simply because New Jersey's regulations impose more stringent requirements." 768 F.3d at 1210. In fact, Shieldalloy never disputed New Jersey's ability to impose more stringent decommissioning criteria than does the NRC. Nor did Shieldalloy question the NRC's or New Jersey's general preference for unrestricted use license termination

approaches. Instead, Shieldalloy's objection has been to the categorical exclusion from the New Jersey Program of restricted use license termination options that, in instances such as that of the Facility, will achieve ALARA doses and best protect public safety.

In this respect, the New Jersey Program's inconsistency with the NRC's regulations lies not in its imposition of stricter dose criteria, but in its failure to consider the radiation doses associated with removal, transport and off-site disposal of radioactive material. This is a critical defect if the New Jersey Program is to "embody the essential objective"[3] of the NRC's LTR, which sets forth standards "to ensure that decommissioning will be carried out without undue impact on public health and safety and the environment." R2 (*Final Rule, Radiological Criteria for License Termination*), 62 Fed. Reg. 39,058, 39,058 (July 21, 1997), JA66.

Moreover, the Opinion incorrectly states that Shieldalloy's counsel conceded at oral argument that "New Jersey's program is compatible with NRC regulations if we accept NRC's reading of § 20.1403" (768 F.3d at 1211). Counsel for Shieldalloy made no such concession. To the contrary, he stated, in response to

[3] *Shieldalloy Metallurgical Corp. v. NRC*, 624 F.3d. 489, 492 (D.C. Cir. 2010) ("*Shieldalloy I*").

questions from the panel, that the NRC's interpretation is a *post hoc* rationalization that is intended to bring the NRC's own regulations in line with New Jersey's in light of this litigation, and that to accept it would permit a misreading of the NRC's regulations and regulatory history, as well as make a mockery of more than a decade of Shieldalloy's work with the NRC to develop a viable decommissioning approach for the Facility. Oral Argument 8:02-9:32.

C. The Opinion Overlooks the Inconsistency of the NRC's Present Arguments with Its Longstanding Regulatory Approach to the Facility

The Opinion concludes that "the NRC rationally explained how its current position is consistent with prior interpretations of [10 C.F.R.] § 20.1403(a)." 768 F.3d at 1213. In reaching this conclusion, the panel summarily discusses and dismisses two of the myriad examples of inconsistency cited by Shieldalloy – the NRC's guidance in NUREG-1757 and the NRC's July 5, 2007 letter to Shieldalloy. Even more significantly, the Opinion ignores other relevant history reflecting the NRC's acceptance of Shieldalloy's essential comparative dose approach to the ALARA analysis over a decade of regulatory submissions and correspondence between the NRC and Shieldalloy. *See* Br. at 55-60. Accounting for such history is essential to placing in perspective the NRC's current strained and litigation-driven interpretation of Section 20.1403(a).

As discussed in Shieldalloy's Brief, the NRC's present interpretation of Section 20.1403(a) is belied by a decade of previous interactions with Shieldalloy regarding the Facility decommissioning process. In each of four revisions to its decommissioning plan for the Facility, Shieldalloy applied comparative analyses showing that restricted use decommissioning was the preferable option both from the cost and ALARA standpoints. *See* Br. at 55-60. Over the course of its decade-long communications with Shieldalloy regarding these submissions, the NRC had ample opportunity to correct what the NRC now asserts is a misunderstanding of the ALARA approach under Section 20.1403(a). Never once did the NRC challenge the overall comparative ALARA approach employed by Shieldalloy. In fact, as pointed out in Shieldalloy's Brief, the NRC specifically referenced Shieldalloy's ALARA comparisons while asking for further specificity. *See id.* To only now, following transfer of regulatory jurisdiction, dismiss as invalid Shieldalloy's consistently applied interpretation of Section 20.1043(a), is disingenuous and "unduly intrude[s] upon reasonable reliance interests" that should be accounted for in justifying such a policy reversal. *Heckler v. Cmty. Health Servs. of Crawford Cnty., Inc.*, 467 U.S. 51, 60 n.12 (1984). The Opinion reflects no consideration of this issue.

III. CONCLUSION

For all of the foregoing reasons, the Petition should be granted.

Respectfully submitted,

/S/ Jay E. Silberg
Jay E. Silberg
Matias F. Travieso-Diaz
Stephen L. Markus
Alison M. Crane

PILLSBURY WINTHROP
SHAW PITTMAN LLP
2300 N Street, NW
Washington, DC 20037
(202) 663-8000
Counsel for Shieldalloy Metallurgical
Corporation
E-mail: jay.silberg@pillsburylaw.com

Dated: December 1, 2014

CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 32(a), Petitioner's Counsel hereby certifies that the foregoing "Petition for Panel Rehearing of Shieldalloy Metallurgical Corporation" has been prepared in proportionally spaced, 14 point Times New Roman font text.

Petitioner's Counsel further certifies that the foregoing "Petition for Panel Rehearing of Shieldalloy Metallurgical Corporation" complies with Fed. R. App. P. 40(b) and Circuit Rule 35(b) because it does not exceed 15 pages in length, excluding material not counted under Fed. R. App. P. 32.

Respectfully submitted,

/S/ Jay E. Silberg
Jay E. Silberg
Matias F. Travieso-Diaz
Stephen L. Markus
Alison M. Crane

PILLSBURY WINTHROP
SHAW PITTMAN LLP
2300 N Street, NW
Washington, DC 20037
(202) 663-8000
Counsel for Shieldalloy Metallurgical Corporation
E-mail: jay.silberg@pillsburylaw.com

Dated: December 1, 2014

CERTIFICATE OF SERVICE

I hereby certify, in accordance with Circuit Rule 35(b), that the electronic original and four paper copies of the foregoing "Petition for Panel Rehearing of Shieldalloy Metallurgical Corporation" (the "Petition") were filed with the Clerk of the Court this 1st day of December 2014. In addition, on this 1st day of December 2014, paper copies of the Petition were served on the following participants in the case by United States first class mail, postage prepaid:

Andrew P. Averbach, Esq., Solicitor
Grace H. Kim, Senior Attorney
Office of the General Counsel
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Robert Geoffrey Dreher, Esq.
Lane N. McFadden, Esq.
U.S. Department of Justice
(DOJ) Environment & Natural Resources Division
P.O. Box 23986, L'Enfant Plaza Station
Washington, DC 20026-3986

John Jay Hoffman, Esq.
Acting Attorney General of New Jersey
Andrew W. Reese, Esq.
Deputy Attorney General
New Jersey Office of the Attorney General
25 Market Street
P.O. Box 093
Trenton, NJ 08625-0093

/S/ Jay E. Silberg
Jay E. Silberg
E-mail: jay.silberg@pillsburylaw.com

ADDENDUM

768 F.3d 1205
(Cite as: 768 F.3d 1205)

H

United States Court of Appeals,
District of Columbia Circuit.
SHIELDALLOY METALLURGICAL CORPORATION, Petitioner
v.
NUCLEAR REGULATORY COMMISSION and United States of America, Respondents.
State of New Jersey, Intervenor.

No. 13–1259.
Argued Sept. 12, 2014.
Decided Oct. 14, 2014.

Background: Licensed manufacturing facility that generated radioactive byproducts filed petition for review of Nuclear Regulatory Commission (NRC) order transferring regulatory authority to state while owner's decommissioning application was pending with NRC. The Court of Appeals, Williams, Senior Circuit Judge, 624 F.3d 489, granted petition, vacated order, and remanded. On remand, NRC, 2011 WL 4896493, rejected owner's objections and reinstated transfer. Owner petitioned for review. The Court of Appeals, 707 F.3d 371, granted petition, vacated order, and remanded. On remand, NRC 2013 WL 4041133, reinstated transfer of regulatory authority to state. Owner petitioned for review.

Holding: The Court of Appeals, Sentelle, Senior Circuit Judge, held that NRC's transfer of regulatory authority over in-state nuclear materials to state was not arbitrary and capricious.

Petition denied.

West Headnotes

[1] Electricity 145 8.7(1)

145 Electricity
145k8.7 Nuclear Power
145k8.7(1) k. In general. Most Cited Cases

Court of Appeals reviews Nuclear Regulatory Commission (NRC) final orders under Administrative Procedure Act's arbitrary and capricious standard. 5 U.S.C.A. § 706(2)(A).

[2] Administrative Law and Procedure 15A 413

15A Administrative Law and Procedure
15AIV Powers and Proceedings of Administrative Agencies, Officers and Agents
15AIV(C) Rules, Regulations, and Other Policymaking
15Ak412 Construction
15Ak413 k. Administrative construction. Most Cited Cases

Agency's interpretation of its own regulations is entitled to substantial deference, and is given controlling weight unless it is plainly erroneous or inconsistent with regulation.

[3] Administrative Law and Procedure 15A 413

15A Administrative Law and Procedure
15AIV Powers and Proceedings of Administrative Agencies, Officers and Agents
15AIV(C) Rules, Regulations, and Other Policymaking
15Ak412 Construction
15Ak413 k. Administrative construction. Most Cited Cases

768 F.3d 1205
(Cite as: 768 F.3d 1205)

Deference to agency's interpretation of its own regulations is appropriate even if agency's interpretation first appears during litigation, unless interpretation conflicts with prior interpretations or amounts to nothing more than convenient litigating position.

[4] Environmental Law 149E 485

149E Environmental Law
149EX Radiation and Nuclear Materials
149Ek485 k. Nuclear power plant wastes and effluents; storage and disposal. Most Cited Cases

Nuclear Regulatory Commission's (NRC) transfer of regulatory authority over in-state nuclear materials to state was not arbitrary and capricious, even though state's program for decommissioning licensed facilities did not provide restricted use options that would best reduce public's exposure to doses of radiation, where state expressly required application of NRC's already as low as reasonably achievable (ALARA) principle for license termination and decommissioning, and expressed preference for unrestricted release that was more protective of public health than NRC's regulations, and NRC adequately explained how state's regulations were compatible with its own regulations, its preference for unrestricted release, and its other regulatory statements. Atomic Energy Act of 1954, § 274, 42 U.S.C.A. § 2021; 10 C.F.R. §§ 20.1101(b), 20.1403(a); N.J.A.C. 7:28–6.1(a), 7:28–12.9(a), 7:28–12.11(a).

***1206** On Petition for Review of an Order of the U.S. Nuclear Regulatory Commission.Jay E. Silberg argued the cause for petitioner. With him on the briefs were Matias F. Travieso–Diaz, Stephen L. Markus, and Alison M. Crane.

Andrew P. Averbach, Solicitor, U.S. Nuclear Regulatory Commission, argued the cause for respondents. With him on the brief were Robert G. Dreher, Acting Assistant Attorney General, U.S. Department of Justice, Lane N. McFadden, Attorney, and Grace H. Kim, Senior Attorney, U.S. Nuclear Regulatory Commission.

Andrew D. Reese argued the cause and filed the brief for intervenor State of New Jersey.

Before: GARLAND, Chief Judge, SRINIVASAN, Circuit Judge, and SENTELLE, Senior Circuit Judge.

Opinion for the Court filed by Senior Circuit Judge SENTELLE.

SENTELLE, Senior Circuit Judge:

Shieldalloy Metallurgical Corporation petitions for review of a Nuclear Regulatory Commission ("NRC" or "Commission") order reinstating the transfer of regulatory authority to the State of New Jersey under the Atomic Energy Act, 42 U.S.C. § 2021. The NRC issued the order under review, *Shieldalloy Metallurgical Corp.,* CLI–13–06, 78 NRC —— (Aug. 5, 2013) ("Order"), to address concerns raised by this Court in *Shieldalloy Metallurgical Corp. v. NRC,* 707 F.3d 371 (D.C.Cir.2013) ("*Shieldalloy II* "). We conclude that the NRC has rationally addressed these concerns when it provided a textual analysis of 10 C.F.R. § 20.1403 and explained how New Jersey's regulatory regime is adequate and compatible with the NRC's regulatory program. Contrary to Shieldalloy's arguments, the NRC's Order does not conflict with its prior interpretations or amount to a convenient, post hoc litigating position. We therefore deny Shieldalloy's petition for review.

I.

Shieldalloy manufactured metal alloys in Newfield, New Jersey for approximately fifty years. While processing the raw materials and ores necessary to produce the metal alloys, Shieldalloy generated radioactive byproducts. Shieldalloy had an NRC license to store these byproducts on site. When it ceased opera-

tions at the Newfield site in 1998, Shieldalloy had accumulated approximately 65,800 cubic meters of radioactive materials containing uranium (U–238) and thorium (Th–232). Intervenor New Jersey reminds us that the average household refrigerator has approximately one cubic meter of storage. The half-life for uranium and thorium exceeds four billion years, and Shieldalloy stores these byproducts in uncovered waste piles on the site, which is located near residences and businesses.

The present petition is the third to reach this Court in a longstanding dispute over the rules governing what Shieldalloy must do with the radioactive waste at its Newfield site. Around the time that Shieldalloy first sought to decommission the site, the NRC developed and published rules for decommissioning licensed facilities, referred to as the license termination rule or "LTR." *See* 10 C.F.R. §§ 20.1401–06. The LTR provisions "provide specific radiological criteria for the decommissioning of lands and structures ... to ensure that decommissioning will be carried out without undue impact on public health and safety and the environment." Final Rule, Radiological Criteria for License Termination, 62 Fed.Reg. 39,058, 39,058 (July 21, 1997). The rules generally express the ***1207** NRC's preference to decommission a site in a way that allows for the unrestricted future use of the property. *Id.* at 39,069. As its name suggests, unrestricted use contemplates that there will be no limit to public use of the land in the future, and access will be "neither limited nor controlled by the licensee." 10 C.F.R. § 20.1003. In its final rulemaking, the NRC explained that "termination of a license for unrestricted use is preferable because it requires no additional precautions or limitations on use of the site after licensing control ceases, in particular for those sites with long-lived nuclides." 62 Fed.Reg. at 39,069. To qualify for unrestricted release, the licensee must physically remove or decontaminate radioactive material to ensure that the residual levels of radioactivity remaining on site result in doses of radiation no higher than 25 millirem per year. *See* 10 C.F.R. § 20.1402. By way of context, a chest xray typically gives a dose of 10 millirem. Doses in Our Daily Lives, http:// www. nrc. gov/ about- nrc/ radiation/ around- us/ doses- daily- lives. html (last visited Oct. 14, 2014).

Under limited circumstances, the LTR provisions also allow licensees to dispose of radioactive waste on site with restricted future use. 62 Fed.Reg. at 39,069; *see also* 10 C.F.R. § 20.1403. Restricted use means that access to the area "is limited by the licensee for the purpose of protecting individuals against undue risks from exposure to radiation and radioactive materials." 10 C.F.R. § 20.1003. In contrast to unrestricted release, a licensee seeking restricted release is allowed to achieve the 25 millirem per year dose limit by installing controls to limit access to radioactive material left on site. *See id.* § 20.1403(b).

Shieldalloy has consistently sought to dispose of its radioactive waste on site through restricted future use. *See, e.g.,* Decommissioning of Shieldalloy Metallurgical Corporation's Facility in Newfield, NJ, 58 Fed.Reg. 62,387, 62,388–89 (Nov. 26, 1993). Between 2002 and 2009, Shieldalloy submitted four versions of its on-site decommissioning plan, but the NRC never accepted any of the plans. The NRC Commissioner urged Shieldalloy to explore options other than on-site decommissioning.

Independent of the NRC's discussions with Shieldalloy, the governor of New Jersey requested that the Commission transfer its nuclear regulatory authority to the State of New Jersey as authorized by the Atomic Energy Act. *See* Notice of Proposed Agreement, 74 Fed.Reg. 25,283, 25,283–87 (May 27, 2009). Under the statute, the NRC "shall enter into an agreement" to transfer its authority to a state if it finds the state's regulatory regime is "adequate to protect the public health and safety" and "compatible with the Commission's program." 42 U.S.C. § 2021(d). The Commission called for comments regarding the transfer, and Shieldalloy argued that New Jersey's regulatory regime was not compatible with federal

regulations. The NRC rejected these arguments and issued an order denying Shieldalloy's motion to stay the transfer of authority to New Jersey. When the transfer occurred, the Commission forwarded Shieldalloy's pending decommissioning plan to New Jersey. About two weeks later, New Jersey informed Shieldalloy that the plan was unacceptable and asked Shieldalloy to submit a new decommissioning plan that complied with state regulations. Shieldalloy has yet to submit a revised plan to New Jersey.

Fearing that it would have to abandon its restricted release decommissioning plan and be forced to adopt a more expensive unrestricted release plan, Shieldalloy petitioned this Court for review of the NRC's transfer of authority. ***1208***Shieldalloy Metallurgical Corp. v. NRC,* 624 F.3d 489 (D.C.Cir.2010) ("*Shieldalloy I* "). We held in *Shieldalloy I* that the transfer of authority was arbitrary and capricious because the NRC did not provide a sufficient explanation for its actions. *Id.* at 495. After remand, the NRC gave Shieldalloy and New Jersey a fresh opportunity to comment on the transfer. The NRC conducted a full review, examined all issues anew, and reinstated the transfer of its regulatory authority to New Jersey.

For a second time, Shieldalloy petitioned this Court for review, arguing that the NRC followed neither its own regulations nor the requirements of the Atomic Energy Act. *Shieldalloy II,* 707 F.3d at 376–77. Again, this Court vacated the transfer of authority. *Id.* at 383. The Court was unpersuaded by the Commission's explanation of its interpretation of 10 C.F.R. § 20.1403(a), which permits a licensee to terminate its license under restricted conditions if it can demonstrate that further reductions in residual radioactivity would result in net public or environmental harm, or if further reductions are not being made because levels of residual radioactivity are already as low as reasonably achievable ("ALARA"). *Id.* at 379. Because the NRC's interpretation of this rule "lacked an apparent textual basis," the Court remanded for "the Commission [to] explain itself." *Id.* at 382.

On remand, the NRC issued CLI–13–06, the Order now under review. The Commission reinstated the transfer of authority to New Jersey and "provide[d] additional explanation to clarify that § 20.1403(a) is consistent with (and, in fact, codifies) our preference that licensees satisfy our radiation dose criteria for license termination through unrestricted-release decommissioning if it is cost-beneficial to do so." Order at 3–4. The NRC explained that the ALARA principle in § 20.1403(a) provides an initial eligibility test for restricted release, and reaffirmed its prior conclusion that New Jersey's regulatory regime is adequate and compatible with NRC's regulations. Order at 23. The NRC also clarified how its interpretation is consistent with prior practices and interpretations. Order at 18–23.

Shieldalloy again petitions this Court to vacate the NRC's Order transferring regulatory authority to New Jersey.

II.

[1] We review NRC final orders under the arbitrary and capricious standard of the Administrative Procedure Act, 5 U.S.C. § 706(2)(A). Under the arbitrary and capricious standard of review, an agency must "set forth its reasons for decision," *Tourus Records, Inc. v. DEA,* 259 F.3d 731, 737 (D.C.Cir.2001) (internal quotation marks omitted) (quoting *Roelofs v. Secretary of the Air Force,* 628 F.2d 594, 599 (D.C.Cir.1980)), and " 'respond meaningfully' to objections raised by a party," *PPL Wallingford Energy LLC v. FERC,* 419 F.3d 1194, 1198 (D.C.Cir.2005) (quoting *Canadian Ass'n of Petroleum Producers v. FERC,* 254 F.3d 289, 299 (D.C.Cir.2001)). When the agency "has considered the relevant factors and articulated a rational connection between the facts found and the choice made," we will uphold its decision. *Transcontinental Gas Pipe Line Corp. v. FERC,* 518 F.3d 916, 919 (D.C.Cir.2008) (quoting *Nat'l Ass'n of Clean Air Agencies v. EPA,* 489 F.3d 1221, 1228

(D.C.Cir.2007)).

[2][3] An agency's interpretation of its own regulations is entitled to "substantial deference" and is given "controlling weight unless it is plainly erroneous or inconsistent with the regulation." *Thomas Jefferson Univ. v. Shalala,* 512 U.S. 504, 512, 114 S.Ct. 2381, 129 L.Ed.2d 405 (1994). Deference is appropriate even if the agency's interpretation first appears during litigation,***1209** *see Auer v. Robbins,* 519 U.S. 452, 462–63, 117 S.Ct. 905, 137 L.Ed.2d 79 (1997), unless the interpretation conflicts with prior interpretations or amounts to "nothing more than a convenient litigating position," *Christopher v. SmithKline Beecham Corp.,* —— U.S. ——, 132 S.Ct. 2156, 2166, 183 L.Ed.2d 153 (2012) (internal quotation marks and citation omitted).

[4] Shieldalloy argues that the NRC's transfer of regulatory authority to New Jersey was arbitrary and capricious because the NRC did not rationally explain how New Jersey's regulatory regime is "adequate to protect the public health and safety" or "compatible with the Commission's program" under 42 U.S.C. § 2021(d)(2). We disagree. As we explain below, we discern no reason to invalidate the NRC's transfer of regulatory authority. Accordingly, we conclude that the NRC addressed the concerns raised in *Shieldalloy II* and rationally explained how New Jersey's regulatory regime is adequate and compatible with the NRC's regulations.

A.

Shieldalloy contends that New Jersey's regulations are inadequate to protect public health and safety because New Jersey's program does not provide restricted use options that will best reduce the public's exposure to doses of radiation. NRC regulations provide licensees like Shieldalloy a restricted use option as a "reasonable means for terminating licenses at certain facilities" so long as the decommissioning is "properly designed" and there are "proper controls" in place. 62 Fed.Reg. at 39,069. Shieldalloy argues that New Jersey's program, however, is not as safe as the NRC's regime because New Jersey's regulations do not incorporate the ALARA principle and essentially bar a licensee from decommissioning a site with restricted future use. Shieldalloy complains that it is virtually impossible for it to decommission the Newfield facility for restricted release under New Jersey's regulations. Pet. Br. 64. To support its argument, Shieldalloy points to NJRAD Form–314, the disposition certificate that licensees must file to decommission a site, because it only allows the licensee to request "release for unrestricted use" and not restricted use. *See* Pet. Reply Br. 26 (discussing the October 3, 2012 version of the form).

This Court previously rejected Shieldalloy's argument "that the New Jersey rules were more stringent but less safe" than the NRC standards. *Shieldalloy II,* 707 F.3d at 375. Addressing the statutory requirement that a state program must be adequate to protect the public health and safety, we concluded that the NRC, "on its second attempt, ... adequately addressed Shieldalloy's claims arising out of ... the parties' conflicting interpretations of § 2021." *Id.* We need not revisit that conclusion.

Contrary to Shieldalloy's argument, New Jersey's regulatory regime applies the ALARA principle to decommissioning activity because state regulations incorporate by reference several provisions of 10 C.F.R. Part 20, including § 20.1101(b) (requiring licensees to use protection principles to achieve doses to the public that are ALARA for all licensed activity). N.J. Admin. Code § 7:28–6.1(a). By incorporating § 20.1101(b), New Jersey expressly requires the application of the ALARA principle for license termination and decommissioning. New Jersey's program therefore protects public health and safety through ALARA just like the NRC's regulatory regime.

New Jersey's regulations also permit license termination with restricted future use. New Jersey's regulations include options for licensees to decommission

a site ***1210** with "limited restricted use" as well as "restricted use." *See* N.J. Admin. Code § 7:28–12.9(a)(1) (listing remediation standards for radionuclides in soil). And New Jersey regulations even provide a restricted use decommissioning option with alternative standards. N.J. Admin. Code § 7:28–12.11(a). Under the alternative standards option, the licensee is not required to meet the soil concentration levels under N.J. Admin. Code § 7:28–12.9 but is instead required to perform computer dose modeling to ensure that the radioactivity from the site will not cause a future on-site resident or worker to receive more than a 15 millirem dose of radiation in a given year. N.J. Admin. Code § 7:28–12.11(a)(1), (f)(2). At oral argument, New Jersey made clear that it changed its certification form to conform to its regulatory program, which permits the restricted release of sites. When filing the updated NJRAD Form–314, a licensee can now request that New Jersey releases the site for restricted use in accordance with state regulations. *See* NJRAD Form–314 (Revised May 23, 2014), *available at* www. state. nj. us/ dep/ rpp/ rms/ agreedown/ Termination. pdf.

Like the NRC's regulations, New Jersey's regulations also incorporate a preference for the removal of radioactive materials to meet unrestricted conditions. Most importantly, New Jersey's regulations express a preference for unrestricted release that is more protective of the public health than the NRC's regulations. To qualify for "limited restricted use" or "restricted use" under N.J. Admin. Code § 7:28–12.9, the licensee must remove sufficient radioactive materials to ensure a future on-site resident or worker receives no more than a 15 millirem dose of radiation in a given year. The alternative standards similarly require the removal of waste so that a person would only be exposed to a 15 millirem dose on site. N.J. Admin. Code § 7:28–12.11(a)(1), (f)(2). And if all controls failed, the dose to the public cannot exceed 100 millirem per year. *See* § 7:28–12.11(e). New Jersey's alternative standards are more stringent than the NRC's restricted release option. The NRC allows a maximum exposure of 25 millirem per year for a person, 10 C.F.R. §§ 20.1402, 20.1403(b), and an overall dose to the public of up to 500 millirem per year if controls failed, § 20.1403(e).

Contrary to Shieldalloy's arguments, the NRC's transfer of authority is not arbitrary and capricious simply because New Jersey's regulations impose more stringent requirements. Indeed, the NRC has always contemplated transferring authority to states under the agreement state program so long as "[t]he overall level of protection of public health and safety provided by a State program [is] equivalent to, *or greater than,* the level provided by the NRC program." Statement of Principles and Policy for the Agreement State Program, 62 Fed.Reg. 46,517, 46,524 (Sept. 3, 1997) (emphasis added); *id.* at 46,520 ("[T]he more stringent requirements do not preclude or effectively preclude a practice in the national interest without an adequate public health and safety or environmental basis related to radiation protection."); *see also Shieldalloy II,* 707 F.3d at 375. We therefore conclude under the first statutory requirement that the NRC rationally explained how New Jersey's "program is adequate to protect the public health and safety." 42 U.S.C. § 2021(d)(2).

B.

Under the second statutory requirement of § 2021(d)(2), Shieldalloy argues that the NRC's transfer of regulatory authority to New Jersey was arbitrary and capricious because the NRC did not adequately explain***1211** how New Jersey's regulatory regime is compatible with the Commission's program. Shieldalloy suggests that New Jersey's regulations are incompatible with the NRC's regulations because they do not conform to the NRC's restricted release rule, 10 C.F.R. § 20.1403. Under Shieldalloy's reading of the rule, the NRC permits a licensee to terminate its license under restricted conditions whenever the licensee can show that restricted release will cost-beneficially ensure lower radiation doses than the radiation doses associated with unrestricted use,

which requires the costly removal of radioactive waste. In other words, Shieldalloy contends that § 20.1403(a) requires the licensee to compare the costs and benefits (including the potential radiation doses to the public) of restricted as well as unrestricted release, and then select the option that will cost-beneficially result in the lowest exposure of radiation doses to the public.

Shieldalloy points to the text of § 20.1403(a) and the definition of ALARA, which refers to dose levels—ALARA "means making every reasonable effort to maintain exposures to radiation as far below the *dose limits* ... as is practical." 10 C.F.R. § 20.1003 (emphasis added). Because § 20.1403(a) incorporates the ALARA standard, Shieldalloy contends that this requires a cost-benefit comparison of dose levels associated with leaving the materials on site (restricted release) versus removing the materials from the site (unrestricted release). Shieldalloy argues that the NRC's interpretation to the contrary amounts to a post hoc litigation position that is inconsistent with the NRC's prior practices and interpretations.

We reject Shieldalloy's arguments and conclude that the NRC adequately explained, based on "the authorities on which it purports to draw," how New Jersey's regulations are compatible with its own regulations. *Shieldalloy II,* 707 F.3d at 375. Shieldalloy's counsel acknowledged at oral argument that New Jersey's program is compatible with NRC regulations if we accept NRC's reading of § 20.1403(a), which we do. The NRC's reasonable interpretation of § 20.1403, which is owed substantial deference, neither conflicts with prior interpretations, nor amounts to a convenient litigating position. *See SmithKline Beecham Corp.,* 132 S.Ct. at 2166.

1.

Contrary to Shieldalloy's argument, 10 C.F.R. § 20.1403(a) does not require the licensee to compare radiation doses to the public under restricted release and unrestricted release decommissioning plans. Instead, the NRC reasonably reads § 20.1403(a) as an eligibility test for the licensee to explain why, based on a cost-benefit analysis, it should be relieved of its burden to take further remedial measures required for unrestricted release. To qualify for restricted release, the licensee must first explain why it is not further reducing the proposed level of residual radioactivity. Order at 13. The licensee establishes its eligibility for restricted-use decommissioning only if further reductions in residual radioactivity necessary to comply with the provisions of § 20.1402(1) "would result in net public or environmental harm," or (2) "were not being made because the residual levels associated with restricted conditions are ALARA." *Id.* (quoting § 20.1403(a)). This "inquiry has nothing whatever to do with accomplishing or assessing dose reductions using restricted release or comparing restricted-release and unrestricted-release dose" levels. *Id.* at 15.

The NRC explained how its reading gives full effect to the language of the regulation, which focuses solely on "further***1212** reductions in residual radioactivity" necessary to accomplish unrestricted release under the provisions of § 20.1402. Order at 12. NRC regulations define "residual radioactivity" as the "radioactivity in structures, materials, soils, groundwater, and other media at a site resulting from activities under the licensee's control." 10 C.F.R. § 20.1003. While it is possible to reduce the doses of radioactivity to the public from residual radioactivity using controls or engineering associated with restricted use, the NRC explained that "it is not possible to *reduce* 'residual radioactivity' itself simply by taking these steps." Order at 12–13 (emphasis in original). Instead, a licensee can only reduce residual radioactivity by physically removing radioactive material from the site, which is associated with unrestricted release decommissioning under § 20.1402. *Id.* at 15. Section 20.1403 therefore requires the licensee to explain why it is not cost beneficial to remove additional radioactive waste from the site before it can qualify for restricted release.

This Court previously recognized that "[t]he

language of § 20.1403(a) is silent as to why an ALARA analysis of restricted release would cause a licensee not to pursue unrestricted release." *Shieldalloy II,* 707 F.3d at 379. The NRC acknowledges that the language of the rule "might, at first glance, appear to focus on some defining property of restricted release, such as the dose that could be cost-beneficially achieved under a licensee's restricted-release plan." Order at 16. But when the reference to ALARA in § 20.1403(a) is read in connection with the other language of the sentence—specifically, why "further reductions in residual activity" are not being made—it undermines Shieldalloy's dose-comparison reading. Moreover, even Shieldalloy concedes (as it must) that the definition of ALARA incorporates more than just dose limits because the ALARA principle encompasses the reasonable effort for radiological protection based on "practical" considerations and "quantitative cost-benefit analysis." Pet. Br. at 34–35.

Under this broader conception of ALARA as encompassing cost-benefit analysis, the NRC rationally explained that the ALARA analysis from § 20.1403(a) asks whether the *proposed* residual levels of radioactivity sought to be left in place under the restricted use plan are already as low as reasonably achievable, "such that 'further' removal or decontamination would not be cost-beneficial." Order at 17. The licensee thus applies ALARA to analyze the quantitative costs and benefits for achieving further reductions in the residual levels of radioactivity. And a licensee becomes eligible for restricted release if the proposed level of residual radioactivity results in doses that exceed the levels allowable for unrestricted release (25 millirem) under § 20.1402 but is nevertheless cost beneficial because it is not possible to further reduce the residual radioactivity in a cost-effective way. *Id.*

The second sentence of § 20.1403(a) buttresses the NRC's broader reading of ALARA as requiring more than just a dose-level comparison. The licensee must consider "detriments, such as traffic accidents, expected to potentially result from decontamination and waste disposal" in the ALARA analysis. 10 C.F.R. § 20.1403(a). The inclusion of this requirement further confirms and supports NRC's reading that the ALARA analysis in § 20.1403(a) focuses on reducing residual radioactivity because traffic accidents resulting from decontamination and waste disposal can only occur in connection with the removal and transportation of materials away from the site. Order at 16; *see also Shieldalloy II,* 707 F.3d at 380 ("Traffic accidents related to waste disposal would seem to have little ***1213** to do with restricted release, which involves on-site disposal of radioactive materials."). On the other hand, Shieldalloy's reading of the first sentence of § 20.1403(a) is "in tension" with the second sentence of the regulation because Shieldalloy's reading would "permit restricted release irrespective of the merits of unrestricted release." *Shieldalloy II,* 707 F.3d at 380. We reject Shieldalloy's reading because it turns the NRC's well-established preference for unrestricted release on its head. *See id.* (citing instances where the NRC has "repeatedly stated it holds that preference").

2.

The NRC's interpretation of § 20.1403(a) not only incorporates its preference for unrestricted release, but is also consistent with the NRC's other regulatory statements. Order at 18–23. The NRC enacted § 20.1403(a) "to prevent licensees from choosing restricted release," not to encourage it. Resp. Br. 59–60 (emphasis removed). The NRC prefers that a licensee decommission its site under § 20.1402 with unrestricted release, and that is why there is an eligibility test to qualify for restricted release under § 20.1403(a). *Id.* at 48. Shieldalloy's interpretation would "eviscerate NRC's preference for unrestricted release" because a licensee would almost always be able to choose restricted release by showing that the removal of waste for unrestricted release is more costly than erecting barriers to limit access to the site. *Id.* at 59. We therefore reject Shieldalloy's reading of the regulation.

Shieldalloy mischaracterizes the NRC's position as a convenient, post hoc litigating position that conflicts with the NRC's prior interpretations of § 20.1403(a). Even assuming the NRC is advancing its position for the first time in litigation (an assumption we do not hold), we still owe deference to the NRC's interpretation under *Auer,* 519 U.S. at 462–63, 117 S.Ct. 905. With or without deference, we conclude that the NRC rationally explained how its current position is consistent with prior interpretations of § 20.1403(a). For example, the NRC explained that NUREG–1757 references "comparisons between restricted and unrestricted release," but it does not refer to a comparison of radiation doses as Shieldalloy suggests. Order at 18–19. The comparison relates to "regulatory costs avoided"—i.e., the costs avoided under a restricted plan can be included as benefits of an unrestricted decommissioning plan. Order at 20; *see Shieldalloy II,* 707 F.3d at 381 (discussing the cross-reference to Appendix N). "In other words, one of the benefits of reducing residual levels of radioactivity to levels that do not exceed 25 mrem [as required for unrestricted release under 10 C.F.R. § 20.1402] is the avoidance of costs that would otherwise be incurred were the licensee to pursue restricted release." Order at 20. Nothing in NUREG–1757 requires a comparison of dose levels to the public under restricted and unrestricted release. *See id.* at 21.

Similarly, the NRC explained that its July 5, 2007 letter to Shieldalloy does not call for a comparative dose-analysis. The letter simply suggested that Shieldalloy may have overestimated the work necessary to achieve unrestricted release, which could erroneously bias the ALARA analysis in favor of restricted release. *Id.* at 22–23. We agree with the NRC.

* * *

Because New Jersey's regulations are compatible with the NRC's regulations and its reading of § 20.1403(a), we conclude that the NRC's transfer of regulatory authority***1214** to New Jersey under 42 U.S.C. § 2021 was not arbitrary or capricious.

III.

For the reasons stated, we deny Shieldalloy's petition for review of the NRC's order reinstating the transfer of its regulatory authority to the State of New Jersey.

So ordered.

C.A.D.C.,2014.
Shieldalloy Metallurgical Corp. v. Nuclear Regulatory Com'n
768 F.3d 1205

END OF DOCUMENT

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

In accordance with Circuit Rule 28(a)(1) and 35(c), Petitioner Shieldalloy Metallurgical Corporation ("Shieldalloy") certifies as follows:

A. Parties: In addition to Petitioner, parties to this action are Respondents U.S. Nuclear Regulatory Commission ("NRC" or "Commission") and the United States of America and Intervenor State of New Jersey ("New Jersey").

B. Rulings Under Review: The agency action under review is the NRC's decision reinstating the transfer of its authority over Shieldalloy's facility in Newfield, New Jersey ("the Facility") to New Jersey, as set forth in its Memorandum and Order, R10 (*Shieldalloy Metallurgical Corp.* (Decommissioning of Newfield, New Jersey Site), CLI-13-06, 78 NRC __) (Aug. 5, 2013)) ("Memorandum and Order" or "CLI-13-06"), JA1. The NRC had previously transferred jurisdiction over the Facility to New Jersey under an agreement between the NRC and New Jersey pursuant to Section 274 of the Atomic Energy Act of 1954, 42 U.S.C. § 2021. This Court, in *Shieldalloy Metallurgical Corp. v. NRC,* 624 F.3d 489 (D.C. Cir. 2010) ("*Shieldalloy I*") vacated the transfer and remanded the matter to the NRC for further proceedings.

On remand, the NRC reinstated the transfer of its regulatory authority over the Facility to New Jersey. *Shieldalloy Metallurgical Corp.* (License Amendment for Decommissioning of the Newfield, New Jersey Site), CLI-11-12, 74 NRC 460 (2011). Shieldalloy filed a petition for review with this Court challenging the NRC's reinstatement of its transfer of regulatory authority and, on February 19, 2013, the Court again vacated the transfer and remanded the case to the NRC for further proceedings consistent with the Court's opinion. *Shieldalloy Metallurgical Corp. v. NRC*, 707 F.3d 371 (D.C. Cir. 2013) ("*Shieldalloy II*").

Following the Court's second remand, the NRC issued its Memorandum and Order on August 5, 2013.

C. <u>Related Cases</u>: Previous proceedings in this matter are discussed in *Shieldalloy I* and *Shieldalloy II.* Counsel is not aware of any cases in this Court or any other court involving the validity of the transfer of regulatory authority over the Facility from the NRC to New Jersey. Several actions are pending relating to New Jersey's exercise of authority over the Facility after the Agreement went into effect. *Shieldalloy Metallurgical Corp. v. State of New Jersey Dep't of Envtl. Prot. and Mark N. Mauriello in his Capacity as Acting Comm'r of the Dep't of*

Envtl. Prot. of the State of New Jersey, No. 10-4319 (3d Cir., filed Nov. 10, 2010); *In re N.J.A.C. 7:28,* No. A-278-09 (N.J. Super. Ct. App. Div., filed Sept. 14, 2009), *consolidated with Shieldalloy Metallurgical Corp. v. New Jersey Dep't of Envtl. Prot.,* No. A-1481-09 (N.J. Super. Ct. App. Div., filed Nov. 25, 2009); *Shieldalloy Metallurgical Corp. v. New Jersey Dep't of Envtl. Prot.*, No. EER-12529-2010-S (N.J. Office of Admin. Law, filed Nov. 10, 2010); *Shieldalloy Metallurgical Corp. v. New Jersey Dep't of Envtl. Prot.,* No. EER-12532-2010-S (N.J. Office of Admin. Law, filed Nov. 10, 2010); *Shieldalloy Metallurgical Corp. v. New Jersey Dep't of Envtl. Prot.*, No. _____ (N.J. Office of Admin. Law, filing date pending).

Respectfully submitted,

/s/ Jay E. Silberg

Jay E. Silberg
Matias F. Travieso-Diaz
Stephen L. Markus
Alison M. Crane

PILLSBURY WINTHROP
SHAW PITTMAN LLP
2300 N Street, NW
Washington, DC 20037
(202) 663-8000
Counsel for Shieldalloy Metallurgical Corporation

E-mail: jay.silberg@pillsburylaw.com

Dated: December 1, 2014

SHIELDALLOY METALLURGICAL CORPORATION'S CORPORATE DISCLOSURE STATEMENT

Pursuant to Rule 26.1 of the Federal Rules of Appellate Procedure and Circuit Rule 26.1, Shieldalloy Metallurgical Corporation ("Shieldalloy"), by and through its undersigned counsel, hereby certifies that:

Shieldalloy is a Delaware corporation and is a direct, wholly-owned subsidiary of Metallurg, Inc., a Delaware corporation, and an indirect subsidiary of Metallurg Holdings, Inc., a Delaware corporation. It is also an indirect subsidiary of Metallurg Delaware Holdings Corporation, a privately-owned holding company, and of AMG Advanced Metallurgical Group N.V., a publicly-owned company.

Shieldalloy is an industrial company that, at its facility in Newfield, New Jersey, for a number of years manufactured metal alloys from ores containing small amounts of uranium and thorium. Shieldalloy has held for many years materials license No. SMB-743 issued by the NRC authorizing it to possess the uranium and thorium at the facility. Such license has been transferred to New Jersey by order of the NRC.

Respectfully submitted,

/s/ Jay E. Silberg

Jay E. Silberg
Matias F. Travieso-Diaz
Stephen L. Markus
Alison M. Crane

PILLSBURY WINTHROP
SHAW PITTMAN LLP
2300 N Street, NW
Washington, DC 20037
(202) 663-8000
Counsel for Shieldalloy Metallurgical Corporation

E-mail: jay.silberg@pillsburylaw.com

Dated: December 1, 2014