

RAS L-11



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OFFICE OF THE ATTORNEY GENERAL  
DEPARTMENT OF LAW AND PUBLIC SAFETY  
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ANNE MILGRAM  
Attorney General

TAYSEN VAN ITALLIE  
Director

October 26, 2009

Re: In re Shieldalloy  
Docket No. Docket No. 40-7102-MLA  
ASLBP No. 07-852-01-MLA

Enclosed please find a copy of the State of New Jersey's Response to Shieldalloys Motion for a Stay. A copy has been filed electronically.

Thank you for your consideration in this matter.

Respectfully submitted,

ANNE MILGRAM  
ATTORNEY GENERAL OF NEW JERSEY

By: Andrew Reese  
Andrew D. Reese  
Deputy Attorney General

Encl.  
c: Service list

DOCKETED  
USNRC

October 27, 2009 (8:30am)

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF



TEMPLATE JER 035

DS 03



## 1. Shieldalloy will Not be Irreparably Harmed

Shieldalloy claims that it will sustain irreparable harm if regulatory authority over the Newfield site is transferred to New Jersey because New Jersey will require it to pay \$70 million to dispose its radioactive waste offsite and the company will be forced into bankruptcy. SMC Motion page 5-7. However, money damages "do not constitute irreparable harm as a matter of law. 'Mere injuries, however substantial, in terms of money, time and energy necessarily expended in the absence of a stay, are not enough.'" Kos Pharms., Inc. v. Andrx Corp., 369 F.3d 700, 728 (3d Cir. 2004) (citing Sampson v. Murray, 415 U.S. 61, 90, 94 S. Ct. 937, 39 L. Ed. 2d 166 (1974); Virginia Petroleum Jobbers Ass'n v. FPC, 259 F.2d 921, 925 (D.C. Cir. 1958)); see also Long Island Lighting Co., (Shoreham Nuclear Power Station, Unit 1), CLI-92-04, 35 N.R.C. 69 (1992) ("mere economic loss does not constitute irreparable injury."). Shieldalloy speculatively alleges that it would "potentially liquidate." SMC Motion page 7. This mere potential does not raise to the level of an actual issuance of a permanent restraining order by a U.S. District Court from operating as a business company, which was the case in Washington Metro. Area Transit Com. v. Holiday Tours, Inc., 559 F.2d 841, 843 (D.C. Cir. 1977).

Furthermore, Shieldalloy's only support for its assertion

that the offsite removal and disposal at Energy Solution's Utah facility will cost \$70 million is the conclusory assertion of its President, Hoy Frakes. SMC Exhibit A ¶10. In fact, Energy Solutions has offered to process, ship, and dispose of the materials for shipment in 2010 for \$45 million (depending on actual tonnage). Exhibit B.

Shieldalloy concedes that its liability for this amount would be contingent upon the Department's final decision on a decommissioning plan. Shieldalloy states: "Were Shieldalloy required to implement the removal alternative, as New Jersey has announced it intends to require, Shieldalloy would be forced to seek protection under the bankruptcy laws, as it had done once before, and potentially liquidate." Id. page 7 (emphasis added). Shieldalloy also states: "The removal of radioactive materials from the Newfield site, if ordered by New Jersey, would also result in other forms of injury." Id. (emphasis added).

The NRC has already transferred its authority over Shieldalloy's facility to New Jersey. The Department has directed Shieldalloy to submit a decommissioning plan that complies with the Department's regulations by January 10, 2010. SMC Exhibit B. Shieldalloy will not be required to conduct any decommissioning activities until the Department approves a plan. See Citizens Awareness Network, Inc. v. NRC, 59 F.3d 284, 291-92 (1st Cir. 1995) (holding that the NRC must review and approve a decommissioning

plan before the facility may start the decommissioning activities). Because no acceptable plan has been submitted or approved, Shieldalloy's contention of irreparable harm is contingent and speculative.

Shieldalloy claims that harm to Shieldalloy employees, contractors, and members of the public would result through direct radiation exposure and inhalation of airborne radioactivity if New Jersey orders offsite disposal. SMC Motion page 7. Again, a stay is not required since New Jersey is requiring the submission of an acceptable decommissioning plan at this time. SMC Exhibit B. Also, no technical support is provided as evidence for Shieldalloy's assertion. Shieldalloy's president simply makes a conclusory assertion. SMC Exhibit A ¶11.

Furthermore, it is premature to argue that additional exposures will be caused by offsite disposal before Shieldalloy proposes offsite disposal in a decommissioning plan. Shieldalloy would be required to propose measures to ensure protection of workers and the environment against radiation hazards during decommissioning. N.J.A.C. 7:28-58.1 (incorporating 10 C.F.R. § 40.42(g)(4)(iii)). New Jersey would review the plan to ensure that it meets all regulatory standards.

Even if offsite disposal causes additional exposures, Shieldalloy admits that such exposures would be within NRC regulatory limits. SMC Motion page 7. Exposures within regulatory

limits cannot constitute irreparable harm. Compare Int'l Union, United Auto. v. Amerace Corp., 740 F. Supp. 1072, 1086-87 (D.N.J. 1990) (continued violations of pollutant discharge standards establishes a likelihood of irreparable harm); California ex rel. State Air Res. Bd. v. Dep't of Navy, 431 F. Supp. 1271, 1294 (N.D. Cal. 1977) (pollution which violates EPA standards presumptively constitutes irreparably harmful).

## 2. Granting the Stay Will Harm New Jersey and its Citizens

Although Shieldalloy will be within the NRC's regulatory oversight if the stay is granted, the stay will further delay the ultimate decommissioning. New Jersey's decommissioning regulations provide for different standards than those provided by the NRC. Granting the stay will allow Shieldalloy to continue avoiding the New Jersey standards.

Shieldalloy ceased licensed operations at the Newfield facility in 1998. 71 Fed. Reg. 66986 (Nov. 17, 2006). The ASLB found that the delay of more than ten years without any final decommissioning plan is "unacceptable." Exhibit A pages 1-2. The ASLB held that "once a licensed activity has come to an end, the decommissioning of the site should proceed with dispatch to ensure that all measures required to ensure the public health and safety

and to protect the environment are seasonably taken." Id. page 11. Nevertheless, "ten years after the licensed activity ceased, there remains on Shieldalloy's Newfield site a large slag pile containing radioactive material." Id. page 13. The ASLB concluded, "it beyond cavil that the residents of the Newfield area who might possibly be affected by contaminated groundwater were entitled to greater consideration." Id. Thus, the Commission should not exacerbate the undue burdens already imposed on the citizens of Newfield by granting the stay.

As the letter from Energy Solutions indicates, every year that clean up is delayed adds additional financial costs. Exhibit B.

### 3. The Stay is Not Within the Public Interest

As discussed above, granting the stay will only cause further delay of the ultimate decommissioning of the site.

Also, Shieldalloy has not adequately supported its assertion that adverse consequences would result from the offsite disposal.

A stay is not required to prevent the offsite disposal since New Jersey has directed Shieldalloy to submit a decommissioning plan that complies with New Jersey regulations by January 31, 2010. SMC Exhibit B.

4. Shieldalloy will Not Prevail Before the Courts

The NRC has engaged in a long review process of New Jersey's Agreement State application. The NRC properly found that New Jersey's program is compatible with the NRC's program. New Jersey agrees with the NRC Staff's Response that Shieldalloy will not prevail in its judicial appeal.

Shieldalloy has failed to comply with the 10-page limit for stay motions. See 10 C.F.R. § 2.342(b). Therefore, the Commission should disregard the pages beyond the page limit.

CONCLUSION

For the reasons set forth above, the State of New Jersey respectfully requests the NRC to deny Shieldalloy's request to stay New Jersey's Agreement State status.

Respectfully submitted,

ANNE MILGRAM  
ATTORNEY GENERAL OF NEW JERSEY

Dated: October 26, 2009

By: /s/ Andrew Reese  
Andrew D. Reese  
Deputy Attorney General

CERTIFICATE OF SERVICE

I hereby certify that copies of the "STATE OF NEW JERSEY'S OPPOSITION TO SHIELDALLOY'S MOTION FOR A STAY" in the above captioned proceeding have been served on the following persons by deposit in the United States Mail and by electronic mail as indicated by a double asterisk (\*\*) on this 26th day of October, 2009.

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*1st Andrew D. Reese*  
Andrew D. Reese  
Deputy Attorney General

# Exhibit A

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

Alan S. Rosenthal, Chairman  
Dr. Richard E. Wardwell  
Dr. William Reed

In the Matter of

SHIELDALLOY METALLURGICAL CORP.

(Licensing Amendment Request for  
Decommissioning of the Newfield, New Jersey  
Facility)

Docket No. 40-7102-MLA

ASLBP No. 07-852-01-MLA-BD01

June 2, 2008

MEMORANDUM

(Bringing Matter of Concern to Commission's Attention)

I. INTRODUCTION

Before this Licensing Board is a proceeding involving the decommissioning of an industrial site on which radioactive material is present in sufficient quantities to be of concern to the State in which that site is located. It now is a full decade since the termination in 1998 of the activity generating that material under the auspices of an NRC license. Despite that lengthy period, it appears that this proceeding will remain in a state of suspension for at least another 14 months to await the completion of the NRC Staff's review of the safety and environmental aspects of the licensee's most recently submitted decommissioning plan—a review that commenced more than one and a half years ago. In short, it likely will be at least late 2009 or early 2010 before the concerned State will obtain a hearing on its Board-admitted contention that the submitted plan does not provide adequate protection to its citizenry. In the meantime, not even a portion of the protective measures contemplated by the challenged plan are in place.

Although the Board deems this state of affairs to be unacceptable, it is not empowered to involve itself to any extent in the manner in which the Staff conducts its review of decommissioning plans, including the matter of the degree of urgency that the Staff might attach to conducting and completing the technical review of such plans once in its hands. Moreover, it does not appear that there is much that can be done at this juncture to accelerate the date upon which the concerned State will get its hearing on the challenged decommissioning plan. Nonetheless, the Board believes that it has the responsibility to direct the current situation to the attention of the Commission, which does exercise oversight authority over the manner in which the Staff carries out its functions.

In this regard, we have reason to conclude that what has transpired to date in this case is not susceptible of being brushed aside as simply an aberration that is not reflective of what might be expected in the Staff's treatment of other site decommissioning matters. As will also be discussed below, there is a second case that has received the now-and-again attention of first a presiding officer and then a licensing board ever since early 2000. Although the licensed activity there-involved terminated in 1994, it currently is a virtual certainty that there will not be a viable decommissioning plan submitted to the Staff any earlier than 2011—some 17 years thereafter. It can be said that the lion's share of this extreme delay might appropriately be placed at the doorstep of the licensee. The inescapable fact remains, however, that, at the very least, the Staff has countenanced in that matter a situation that will leave the citizens in the area surrounding the activity site in doubt for close to two decades regarding what measures will ultimately be taken for their protection. In common with the existing situation in the proceeding now before this Board, that hardly seems consistent with the intent underlying the Commission regulation (10 C.F.R. § 40.42) concerned with the decommissioning of sites on which licensed activities have terminated.

## II. HISTORY

A. Shieldalloy Decommissioning Proceeding. The site at issue here is owned and operated by Shieldalloy Metallurgical Corporation ("Shieldalloy") located in the Borough of Newfield, Gloucester County, New Jersey. During an extended period beginning in 1940 and ending in June 1998, the facility among other things processed pyrochlore, a concentrated ore containing columbium (niogium), to produce ferrocolumbium, an additive used in the production of specialty steel and super alloy materials. Containing more than 0.05 percent by weight uranium and thorium, pyrochlore is subject to NRC regulation as a radioactive source material.<sup>1</sup> Accordingly, Shieldalloy sought and obtained license No. SMB-743 that entitled it to ship, to receive, to possess, and to store such material.

The decommissioning plan at issue is addressed to a substantial pile of slag and baghouse dust that contains a quantity of radioactive material and is currently present at Shieldalloy's Newfield site.<sup>2</sup> It proposes to retain the pile on an eight-acre parcel within the storage yard at the Newfield site. The primary decommissioning activity contemplated by the plan includes the grading and shaping of the pile, which would then be covered with an engineered barrier consisting principally of native soil and rocks. Long term maintenance and monitoring of this restricted area would then be conducted under NRC Staff supervision.

This proceeding was initiated by the publication of a notice in the Federal Register to the effect that the Commission was considering the issuance of an amendment to Shieldalloy's

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<sup>1</sup> See 10 C.F.R. § 40.4.

<sup>2</sup> The revised decommissioning plan now under NRC Staff review addresses principally an accumulation on the Newfield site of 18,000 cubic meters of slag and 15,000 cubic meters of baghouse dust, all of which contains uranium and thorium. Shieldalloy Metallurgical Corp. (Licensing Amendment Request for Decommissioning of the Newfield, New Jersey Facility), LBP-07-05, 65 NRC 341, 344 (2007).

Source Material License.<sup>3</sup> In response to the notice, hearing requests were filed by, or on behalf of, a number of individuals and entities, among them, the New Jersey Department of Environmental Protection (New Jersey). Determining it fulfilled the requirements needed to meet the standards imposed by 10 C.F.R. § 2.309(f), this Board granted New Jersey's hearing request in March 2007.<sup>4</sup> That grant was based upon the Board's determination that New Jersey had standing and had advanced at least one admissible contention to the effect that the proposed decommissioning would not sufficiently protect the area surrounding the Newfield site from unacceptable environmental harm.<sup>5</sup>

According to the November 2006 Federal Register notice, Shieldalloy had advised the Commission in August 2001 that it ceased using radioactive source material and intended to decommission the Newfield facility.<sup>6</sup> Consequently, the Commission had amended the license in November 2002 to authorize only decommissioning activities. Again, according to the notice, Shieldalloy submitted its initial decommissioning plan on October 21, 2005, which proposed the use of a possession-only license for long-term control of the site. This plan was subsequently rejected by the NRC Staff by letter dated January 26, 2006. A revised decommissioning plan,

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<sup>3</sup> Notice of Consideration of Amendment Request for Decommissioning for Shieldalloy Metallurgical Corporation, Newfield, NJ and Opportunity to Request a Hearing, 71 Fed. Reg. 66,986 (Nov. 17, 2006).

<sup>4</sup> See LBP-07-05, 65 NRC at 341.

<sup>5</sup> Id. at 357-58. Having found acceptable one of New Jersey's contentions, the Board went on to consider whether it should determine at that time the viability of its other contentions. It decided against doing so. Its reason was that there appeared to be a substantial possibility, if not probability, that, as a result of the NRC Staff's technical review, the decommissioning plan would undergo significant alterations that might render many, if not most, of New Jersey's current contentions either academic or in need of major revision. Shieldalloy, LBP-07-05, 65 NRC at 360-61. The Board additionally determined that further proceedings on the adequacy of the decommissioning plan should await the completion of the NRC Staff's technical review. Id. at 359-60. The Commission declined to disturb the Board's decision. See CLI-07-20, 65 NRC 499, 501-02 (2007).

<sup>6</sup> 71 Fed. Reg. at 66,986. The Federal Register notice also stated, however, that ferroalloy production at the Newfield site ceased in June 1998. Id.

submitted on June 30, 2006, was found acceptable by the NRC Staff for the purpose of initiating technical review of the plan that would eventually produce both a safety evaluation report (SER) and an environmental impact statement (EIS).<sup>7</sup>

As a follow-up to its contention admissibility determination, the Board issued an order directing the NRC Staff to file bimonthly status reports, with the first due on June 8, 2007. The reports were to contain both "(1) a brief statement regarding the then status of the technical review; and (2) the Staff's then best estimate as to the completion date of the review and the release of the documents associated with it."<sup>8</sup> For its part, the Commission thereafter issued an order on its own in which it further directed that additional filings be made with the Board by the same date. Specifically, Shieldalloy was to disclose in its filing the status of its decommissioning plan, as well as "any relevant developments such as fundamental shifts in [its] approach to decommissioning the site."<sup>9</sup>

On June 7, 2007, the Board received filings from the Staff and Shieldalloy in compliance with the Commission's directive. On the matter of when the technical review might be completed and the associated documents issued, the Staff indicated that its best estimates were the following: issuance of a final SER in January 2008; publication of a draft EIS in March 2008; and issuance of a final EIS in October 2008.<sup>10</sup>

The Staff has since filed a total of six status reports, with three of them noting slippage in the forecasted schedule. On the basis of the last report, filed this April, it now appears that the final EIS will not surface any earlier than August 2009, if then.<sup>11</sup> In that report, the Staff

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<sup>7</sup> Id.

<sup>8</sup> See Licensing Board Order (Directing the Filing of Status Reports) at 2 (May 8, 2007) (unpublished).

<sup>9</sup> See Shieldalloy, CLI-07-20, 65 NRC at 501-02.

<sup>10</sup> See NRC Staff's First Status Report at 1-2 (June 8, 2007).

<sup>11</sup> See NRC Staff's Sixth Status Report at 2 (Apr. 11, 2008).

indicated that, to provide a full response to the Requests for Additional Information, or "RAIs", Shieldalloy "intends to conduct additional leachability tests on slag and baghouse dust from the Newfield site."<sup>12</sup>

Taking into account the required response times for the current decommissioning plan revision, the schedule now reflects a slippage of nearly one year from that projected in the Staff's initial status report to the Commission and the Board. It thus appeared that it would be more than eleven years after the 1998 termination of the licensed activity before there might be a consideration on the merits of New Jersey's already-admitted contention that the decommissioning plan is not adequate to prevent unacceptable environmental harm. This prompted the Board to hold an April 28 telephone conference with the parties to obtain an explanation as to the nature of Shieldalloy's latest proposed revision to its decommissioning plan, and to be informed as to the reasons why the revision will require more than a year to factor into the technical review. The Board additionally desired to explore with counsel the current measures designed to avoid or at least ameliorate any environmental impacts of the amassed slag and baghouse dust at the Newfield site.

Still further, the Board was concerned that the substantial delay in both the submittal and approval of the decommissioning plan might involve a violation of the NRC regulation, 10 C.F.R. § 40.42, addressing the obligations of a licensee once a licensed activity has terminated.<sup>13</sup> This concern stemmed from the fact that, according to the Federal Register notice, Shieldalloy's initial decommissioning plan had been submitted to Staff in 2005—nearly seven years after its ferroalloy production ceased in 1998.<sup>14</sup>

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<sup>12</sup> Id. at 1-2.

<sup>13</sup> See discussion infra p. 11.

<sup>14</sup> 71 Fed. Reg. at 66,986.

During the April 28 telephone conference, two things became apparent. First, contrary to the background statement in the Federal Register notice, a decommissioning plan had been submitted to the Staff considerably earlier than 2005.<sup>15</sup> Further, interaction between Shieldalloy and the Staff had taken place in the years leading up to and following submittal of its initial decommissioning plan.<sup>16</sup> This revelation led the Board to request detailed written accounts from the Staff and Shieldalloy of precisely what had transpired between 1998 and the submittal of the supposedly revised decommissioning plan in 2005.<sup>17</sup>

Second, it became clear to this Board that no interim protective measures have been put in place at the Newfield site. The pile of slag and baghouse dust remains as it was when Shieldalloy notified the NRC that its production activities had ceased.<sup>18</sup> The central issue in this proceeding is the adequacy of the proposed engineering barrier. During the telephone conference, New Jersey reiterated its concern regarding the inadequacy of Shieldalloy's proposed cap, also stating that "interim measures should be taken" before the decommissioning plan is approved "to prevent the contamination that [is] occurring right now" to the surrounding environment.<sup>19</sup>

On May 8, 2008, in response to the Board's directive, the Staff filed a summary of actions, and Shieldalloy filed a chronology of events, both relevant to the decommissioning of

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<sup>15</sup> Official Transcript [Tr.] at 9-10, 12.

<sup>16</sup> Id. at 16.

<sup>17</sup> Id. at 33-34.

<sup>18</sup> Id. at 19 (Mr. Travieso-Diaz: "One of the features of the decommissioning plan is to provide a very hefty layer of rock cover, and an impervious membrane . . . on top of [the slag and baghouse dust] once the decommissioning plan gets approved. Right now, there is no cover."). See also id. at 21.

<sup>19</sup> Id. at 45.

the Newfield facility.<sup>20</sup> These documents provide a detailed account of events as portrayed by each party and are readily available to the Commission and the public alike through the NRC's Agencywide Documents Access and Management System (ADAMS).<sup>21</sup>

In sum, the parties' submittals portray that Shieldalloy's operations ceased in 1998 with the decommissioning of the facility except for the continuing presence of the slag and baghouse dust at issue here.<sup>22</sup> Shieldalloy thereafter sought to find a market for these waste materials, meanwhile notifying the Staff of its efforts.<sup>23</sup> From 1998 to 2001, the Staff permitted Shieldalloy to delay development of a decommissioning plan and to continue the pursuit of a slag and baghouse dust market. When, after two years that endeavor proved unavailing, Shieldalloy requested, and was granted, an additional year by the Staff to locate a buyer for the slag and baghouse dust.<sup>24</sup> In 2001, Shieldalloy expressed to the Staff its intention to terminate its license and was granted another year to prepare a decommissioning plan; this decommissioning plan (denominated Rev. 0) was submitted in August 2002—more than four years after operations had ceased at the Newfield facility.<sup>25</sup> The August 2002 decommissioning plan was then rejected for its presumption that the State of New Jersey would assume an oversight role for the decommissioning of the site.<sup>26</sup>

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<sup>20</sup> NRC Staff's Summary of Actions Relevant to Decommissioning Shieldalloy's Newfield Facility (May 8, 2008) [hereinafter Staff's Submittal]; Shieldalloy's Submittal Regarding Chronology of Events Related to the Decommissioning of the Newfield, NJ Facility (May 8, 2008) [hereinafter Shieldalloy's Submittal].

<sup>21</sup> Staff's Submittal (ADAMS Accession No. ML081360527); Shieldalloy's Submittal (ADAMS Accession No. ML081350612). Documents available in ADAMS may be accessed on NRC's public website at <http://www.nrc.gov/reading-rm/adams/web-based.html>.

<sup>22</sup> Staff's Submittal at 4.

<sup>23</sup> Shieldalloy's Submittal at 5; Staff's Submittal at 4.

<sup>24</sup> Staff's Submittal at 4-5.

<sup>25</sup> *Id.* at 6.

<sup>26</sup> Shieldalloy's Submittal at 6.

From 2002 to 2005, Shieldalloy and the Staff pursued multiple approaches for a restricted license termination with enforceable institutional controls. In October 2005, Shieldalloy submitted a new decommissioning plan (denominated Rev. 1). As with the 2002 plan, it was summarily rejected; this time for deficiencies in dose modeling, surface water hydrology, and erosion protection.<sup>27</sup> These deficiencies were purportedly corrected with the submittal of the decommissioning plan (Rev. 1a) on June 30, 2006.<sup>28</sup> The Board now understands that further delays are occurring as Shieldalloy addresses deficiencies in this latest revision that was docketed by the Staff in late 2006.<sup>29</sup>

B. U.S. Army Decommissioning Proceeding. In recent years, there has been only one other adjudicatory proceeding involving the decommissioning of a facility at which the terminated activity carried out under an NRC materials license had left on site a quantity of radioactive material. The proceeding's history up to the present time is fully chronicled in a recent Licensing Board decision.<sup>30</sup> It is not necessary to rehearse here the detailed account contained in that decision. For present purposes, the following summary should suffice.

For a period of ten years commencing in 1984, under the auspices of a NRC materials license the Department of the Army conducted accuracy testing of depleted uranium (DU) tank

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<sup>27</sup> Staff's Submittal at 8.

<sup>28</sup> Id. at 9.

<sup>29</sup> The Staff in its submittal also indicates that while reviewing Shieldalloy's decommissioning plan, it has taken into account public comments on Rev. 1a, most notably New Jersey's 228 comments and the United States Environmental Protection Agency's 283 distinct comments. Staff's submittal at 11.

In its latest submittal to the Board, Shieldalloy suggested that a substantial portion of the delay was attributed to New Jersey. New Jersey filed a response in defense of these allegations, which is also available publicly in ADAMS. New Jersey Department of Environmental Protection's Reply to the NRC Staff and Shieldalloy Submissions Regarding the Chronology of Decommissioning Events (May 15, 2006) (ADAMS Accession No. ML081440776).

<sup>30</sup> U.S. Army (Jefferson Proving Ground Site), LBP-08-04, 67 NRC \_\_\_\_ (Feb. 28, 2008) (slip op. at 1-11).

penetration rounds at its Jefferson Proving Ground (JPG) site in Indiana. In 1999, some five years after the testing came to a permanent halt, the Army submitted a decommissioning plan to the NRC Staff that purportedly addressed the accumulation of DU munitions that remained on the JPG site. In response to the customary Federal Register notice of opportunity for hearing, a local organization filed a hearing request challenging the plan.<sup>31</sup> In 2000, that request was granted.<sup>32</sup>

More than eight years have now elapsed since the initiation of that proceeding. Yet, not only has there been no resolution of the issues raised by the intervening organization, there is not even a decommissioning plan currently on the table for consideration by either the NRC Staff or a licensing board.

To begin with, both the 1999 decommissioning plan and a revised one submitted in 2001 were withdrawn by the Army, the second in favor of an application in 2003 for a five-year renewable possession-only license (POLA). Then, before the NRC Staff had completed its evaluation of that submission, the POLA application itself was withdrawn and replaced by an Army request in mid-2005 for an alternate schedule amendment to the materials license that would give it an additional five years to complete a site characterization of the JPG site. Thereupon, a new decommissioning plan, incorporating the site characterization, would be submitted to the Staff and presumably be subject to challenge before a licensing board.

The alternate schedule proposal was accepted by the Staff and last February approved by the licensing board over the objections of the intervenor to some features of the methodology the Army intends to employ in carrying out the site characterization.<sup>33</sup> The proposal calls for the submission of a decommissioning plan by 2011. Thus, it will likely be some 17 years after the

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<sup>31</sup> Notice of Consideration of Amendment Request for U.S. Army Jefferson Proving Ground Site in Madison, Indiana, and Opportunity for a Hearing, 64 Fed. Reg. 70,294 (Dec. 16, 1999).

<sup>32</sup> U.S. Army (Jefferson Proving Ground Site), LBP-00-9, 51 NRC 159 (2000).

<sup>33</sup> See Army, LBP-08-04, 67 NRC at \_\_\_ (slip op. at 57).

testing activity was permanently terminated before the decommissioning plan for the JPG site will next undergo Staff scrutiny.

Moreover, even if the then plan meets with Staff approval, it well might be contested as insufficient by the local organization that has been involved in this matter over the course of more than eight years. In the event of such a contest, it could be another year or two before there is a final determination regarding the measures, if any, that must be taken to ensure that the public health and safety and the environment are not adversely affected by the DU munitions remaining on the JPG site.

### III. DISCUSSION

A. The Commission's regulations are most specific with regard to the obligations of the holder of an NRC materials license once either (1) a decision has been reached to cease permanently the principal activities conducted under the aegis of the license; or (2) no such activities have been conducted for a period of 24 months. In such circumstances, the licensee must provide written notification to the NRC Staff within 60 days and, additionally, either (1) begin decommissioning of the site so that the building or outside area is suitable for release in accordance with NRC requirements; or (2) submit a decommissioning plan to the Staff within 12 months of the notification.<sup>34</sup>

Implicit in those requirements would appear to be a recognition that, once a licensed activity has come to an end, the decommissioning of the site should proceed with dispatch to ensure that all measures required to ensure the public health and safety and to protect the environment are seasonably taken.<sup>35</sup> Granted, section 40.42(d) does not establish a time

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<sup>34</sup> See 10 C.F.R. § 40.42(d).

<sup>35</sup> See Timeliness in Decommissioning of Materials Facilities, 59 Fed. Reg. 36,026, 36,026 (July 15, 1994) (the timeliness in decommissioning rule incorporated into section 40.42 "is intended to reduce the potential risk to public health and the environment from radioactive material remaining for long periods of time at such facilities after licensed activities have ceased.").

period within which the Staff must make its ultimate determination regarding what decommissioning activities might be necessary in order to provide such assurance and protection. Obviously, what the Staff review will entail in a particular case will be largely dependent upon the complexity of the safety and environmental issues presented in that case. That said, however, it is reasonable to read into the section a contemplation that, upon being apprised of the termination of a licensed activity, the Staff will deem its duty to include seeing to it that all decommissioning issues are approached and resolved as expeditiously as possible. Indeed, is not that the justifiable expectation of those persons who are located in close enough proximity to the site to have legitimate concerns regarding the radioactive materials that remain on site?

In that regard, it often will be in the economic interest of a licensee to put off as long as possible implementing expensive remediation measures, whether determined necessary by the NRC Staff or by a licensing board, in its consideration of an intervenor's challenge to a submitted decommissioning plan.<sup>36</sup> Given that financial reality, it seems to us that there might be a particular obligation on the part of the Staff to insist that the licensee not merely comply strictly with the provisions of section 40.42(d) but, as well, do whatever is thereafter required of it in a sufficiently timely fashion to ensure no unnecessary delay in the accomplishment of site decommissioning.

B. 1. As previously summarized in this memorandum, in submittals provided at our direction, Shieldalloy and the NRC Staff provided full accounts of what has transpired on the decommissioning front since 1998. In addition, New Jersey responded in writing to the Shieldalloy charge that the State bears most of the responsibility for the current state of affairs.<sup>37</sup>

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<sup>36</sup> Although we are not prepared to conclude that such a consideration played a part in Shieldalloy's conduct since it terminated the licensed activity a decade ago, the fact remains that it is faced with at least the possibility of being ordered at day's end to do much more by way of site remediation than it now proposes.

<sup>37</sup> See supra note 29.

We do not intend to freight this memorandum with a close analysis of the content of the several submissions.<sup>38</sup> It is enough to note that we have failed to discern in the submissions of either Shieldalloy or the Staff a sense of anything even remotely approaching urgency with regard to the resolution of the decommissioning issues on the table.

As a consequence, ten years after the licensed activity ceased, there remains on Shieldalloy's Newfield site a large slag pile containing radioactive material. Acting on behalf of its citizens, New Jersey maintains, among other things, that the passage of rainwater through the pile will produce unacceptable groundwater contamination. In that connection, it disputes the adequacy of Shieldalloy's proposal to cap the pile with nothing more than native soil and rock. The validity of that proposal apparently will now not receive a Staff determination for over another year (if not still longer). In the meanwhile, as has been the case for the past decade, the pile will not even have the assertedly inadequate cover called for in the challenged decommissioning plan, or some type of alternate cover, to reduce ongoing impacts.

We think it beyond cavil that the residents of the Newfield area who might possibly be affected by contaminated groundwater were entitled to greater consideration. And, while acknowledging the importance of the Staff taking the time necessary to ensure that the conclusion reached on the issues raised by New Jersey (and any others that occur to it on its own) are fully informed ones, it is worth noting that what is involved here is nothing more than a slag pile. As such, we would think that the Staff inquiry here rates relatively low in comparative complexity among the numerous site decommissioning proposals it confronts.

B. 2. With respect to the JPG decommissioning situation is, it is now some 14 years since the Army terminated the munitions testing on the site. Yet, no decision has been reached regarding what measures are to be taken to ensure that the DU munitions amassed on site do not present an undue radiological safety or environmental threat. Still more to the point, there is

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<sup>38</sup> As previously noted, supra note 21, the submissions are available for inspection on ADAMS.

not even a decommissioning plan currently on the table. Instead, as matters now stand, it likely will be at least 2011—some 17 years after the licensed activity came to an end—before the Staff will have in hand a decommissioning plan that might possibly meet with its approval (and that of a licensing board if challenged).

As we have seen, this state of affairs is the product of the Army having waited five years to file its initial decommissioning plan (in seeming violation of Section 40.42(d)) and then, over a period of several years, having changed directions several times. If the Staff had any concern with the erratic course that the Army pursued up to and including its application for an additional five years to come up with yet another decommissioning plan, that concern certainly was not made known. To the contrary, for all appearances, the Staff has seen no problem with the residents of the JPG site area being kept in the dark for conceivably as long as two decades with regard to what (if anything) the Army will be required to do to remediate the site.

#### IV. CONCLUSION

As this Board sees it, the history of these two decommissioning proceedings speaks for itself. It remains at least possible, of course, that it is not the universally held and applied belief of the NRC Staff that it is appropriate to have decommissioning issues remain unresolved for well over a decade. Nonetheless, there seems to be a substantial possibility that these proceedings do not stand alone as representatives of a more than casual attitude on the Staff's part with regard to the decommissioning of sites on which radioactive materials remain as a potential threat to public health and safety and to the environment.

Given that licensing boards lack the authority themselves to oversee the Staff's performance of its regulatory responsibilities (apart from compliance with the dictates of the National Environmental Policy Act), we are not empowered to inquire further into the matter, let alone to order some corrective measures. Thus, as noted in the introduction to this Memorandum, the sole course available to us is a referral of the matter to the Commission for its consideration.

To avoid any possible misunderstanding, we wish to make it clear that nothing that has been said above should be taken as a criticism of anything that the NRC Staff has substantively done in the course of its technical review in either case. Our concern is exclusively with the pace, and therefore not at all with the content, of the Staff's review. Additionally, we are not suggesting that there are steps that might be taken at this point to accelerate materially decommissioning in the specific proceedings discussed herein. In the totality of the present circumstances, that might well be beyond achievement. (The Commission might, however, wish to make clear to the Staff that it will look with disfavor upon any further slippage in either the August 2009 completion of the Shieldalloy technical review or the Army's submission by 2011 of a new decommissioning plan for the JPG site.) Our primary interest is, instead, in the avoidance of like-protracted delay in the resolution of issues arising in future decommissioning endeavors. Once again, those living in the vicinity of the sites being decommissioned are owed no less.

THE ATOMIC SAFETY  
AND LICENSING BOARD

*/RA/*

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Alan S. Rosenthal, Chairman  
ADMINISTRATIVE JUDGE

*/RA/*

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Dr. Richard E. Wardwell  
ADMINISTRATIVE JUDGE

*/RA/*

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Dr. William Reed  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
June 2, 2008

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\* Copies of this Memorandum were sent by e-mail transmission on this date to counsel for (1) Licensee Shieldalloy Metallurgical Corp.; (2) Intervenor New Jersey Dept. of Environmental Protection; and (3) the NRC Staff. In addition, as a courtesy, copies will be informally provided to the service list in the Army proceeding.

# Exhibit B



October 26, 2009

BD09-0016

Andrew Reese, Deputy Attorney General  
New Jersey Division of Law  
25 Market Street  
P.O. Box 112  
Trenton, NJ 08625-0112

Subject: Confirmation of Proposal for Site Cleanup and Off-Site Disposal at the Shieldalloy  
Metallurgical Corporation Site in Newfield, New Jersey

Dear Mr. Reese:

Pursuant to your request, attached is EnergySolutions previous written offer to remove the radioactive waste from the slag piles at the Shieldalloy Metallurgical Corporation (SMC) Site (Site) in Newfield, New Jersey. The offer specifically included all services to perform removal, transportation, and disposition of the waste on a turnkey basis. The waste will be directly loaded into covered railcars on the project site.

EnergySolutions price included a mobilization fee to cover fixed startup costs associated with refurbishing the railway and installation of required infrastructure. The price to remove, transport, and dispose of the waste was provided on per railcar basis due to the varying estimates on waste volume that result from a lower cleanup criteria. EnergySolutions price offered in the September 24, 2008 letter is valid with an annual escalation of five percent. For example, assuming 100,000 tons of waste are removed from the site and shipped for disposal in 2010, EnergySolutions price to perform the scope of work is approximately \$45 million. This estimate is based on 1,000 railcar shipments plus the one time mobilization fee to cover startup costs and railway refurbishment. The estimate does not include final site decommissioning and any contingency required by regulatory agencies.

After learning more about the site, EnergySolutions believes in an alternative approach that assures public health and safety while significantly reducing the cleanup costs. We believe our alternative approach merits immediate consideration from New Jersey Department of Environmental Protection as our observations suggest differing viewpoints on cost, safety, and long term environmental considerations at the Site have prevented reclamation thus far.

The Shieldalloy Site slag contains over 95 percent of the radioactivity and therefore removal of the slag will result in a significant risk reduction at the Site. Other materials at the Site are much lower in concentration and do not pose health or safety concerns given the future industrial use of the Site. By removing 95 percent of the radioactivity, EnergySolutions estimates that the project costs could be less than \$28 million. EnergySolutions would then release the site for future industrial use using proven regulatory and technical guidance that secures future industrial benefit at the Site. This approach would be subject to discussions and regulatory approval by the State of New Jersey.

We appreciate the opportunity to assist the State of New Jersey in the cleanup of the Shieldalloy Site. Please contact me at (303) 882-1901 if you have any questions or require further clarification.

Sincerely,

A handwritten signature in black ink, appearing to read "CJ Massey", written over a horizontal line.

Christopher J. Massey  
Sr. Vice President, Commercial BD

423 West 300 South, Suite #200 • Salt Lake City, Utah 84101  
801.649.2000 • Fax 801.413.5649 • [www.energysolutions.com](http://www.energysolutions.com)

**ATTACHMENT**

**September 24, 2008 Pricing Letter from EnergySolutions to  
Ecology and Environment, Inc./U.S. Nuclear Regulatory Commission**



September 24, 2008

Ms. Jacquelyn C. Gillings  
Ecology and Environment, Inc.  
368 Pleasant View Drive  
Lancaster, NY 14086

**Re: Update to Proposal for Site Cleanup and Off-Site Disposal – SMC**

*Ref: Proposal for Site Cleanup and Off-Site Disposal, Rafati to Smith, Oct 9, 2006*

Dear Ms. Gillings,

Pursuant to Ecology and Environment Inc. (E&E) recent request on behalf of the Nuclear Regulatory Commission (NRC) for an updated and publicly available price letter for the radioactive slag, dirt, and ash (Subject Material) at the Shieldalloy Metallurgical Corporation (SMC) Site in Newfield, New Jersey, we are providing the following information for your consideration.

EnergySolutions has reviewed SMC's Decommissioning Plan (Revision 1a, dated June 30, 2006) and has determined the Subject Material is acceptable at EnergySolutions licensed low level radioactive waste disposal facility. Further, EnergySolutions possesses the infrastructure and experience necessary to complete remediation of the Subject Material in a safe, efficient, and economical manner on a turnkey basis.

EnergySolutions price and scope exhaustively includes all services necessary to perform the remediation, transportation, and disposition the Subject Material including but not limited to, establishing site security, use of EnergySolutions approved radioactive material handling procedures, NRC mobile license, any and all permits and fees including consultation with New Jersey officials and the public, all excavation, labor and health physics oversight, upgrading rail infrastructure, rail equipment, transportation, and disposal. That means the piles as they sit right now will be gone without any additional cost or third party contractor involvement.

Our safety and environmental stewardship record is second to none. EnergySolutions safely and efficiently manages over 500,000 tons of radioactive waste annually. Recently, EnergySolutions surpassed three million man hours without a lost time work incident. In order to protect the Newfield community, EnergySolutions will utilize an

EnergySolutions Inc.  
423 West 300 South, Suite 200  
Salt Lake City, Utah 84101  
(801) 649-2000



environmental barrier at the site, will not crush or otherwise pulverize any of the Subject Material prior to transport, and will utilize lidded IP-1 gondola railcars for transportation purposes. A photo of the lidded railcars is attached hereto. Our environmental protection barrier will be constructed for temporary use during the project consistent with standard industrial practices in order to protect against airborne particle migration. After use, the barrier will be loaded into the railcars and shipped for disposal in the same manner as the Subject Material.

The current transportation route of choice takes the railcars from Newfield on a direct course West through Pennsylvania, to Chicago, and finally on to Clive, Utah. A map is attached for your easy reference. EnergySolutions average load out rate will be ten railcars per working day, five days per week, and ten hours per day with an average twenty-two full time employees. Railcars will depart SMC ten at a time and would likely travel all the way to Clive in the same manner. In the event the project proceeds uninterrupted with support from the various regulatory agencies our current operational plan indicates a start to finish duration of six to seven months. This plan includes installation of weigh scales, rail upgrades, mobilization, and demobilization. Unanticipated regulatory delays and/or force majeure events generally extend a project's duration by an amount of time equal to the event.

Based from information supplied to EnergySolutions by E&E, we understand two scenarios exist for calculating the total tonnage of Subject Material. Total tonnage ranges from 89,000 tons on the low end, to 130,000 tons on the high end. EnergySolutions price is offered such that once our mobilization fee is paid, the fixed costs are covered, and SMC may direct EnergySolutions to remediate any quantity of tonnage it deems appropriate.

- |    |   |                         |
|----|---|-------------------------|
| A. | One time mobilization fee   | \$2,800,000.00          |
|    | <ul style="list-style-type: none"><li>• The mobilization fee covers startup costs including refurbishing railway and installation of required infrastructure.</li></ul> |                         |
| B. | Subject Material cleanup, transportation, and disposal  | \$39,605.00 per railcar |
|    | <ul style="list-style-type: none"><li>• Includes all aforementioned services necessary to achieve disposal</li></ul>  |                         |

Note: Based from actual density measurements as performed by SMC at the request of EnergySolutions, the "as is" density of slag material is 110 pounds per cubic foot. The "as is" density of soil is assumed to be consistent because soil is largely commingled with slag. These considerations yield an in place mass of 79,000 tons on the low end and 99,000 tons on the high end which creates a material difference in the quantity of required railcars. The "as is" mass is the relevant measurement methodology because it



ultimately determines the required quantity of railcars. In this case, railcars will be weight limited rather than volume limited at 105 tons net waste weight per railcar.

In submitting pricing EnergySolutions assumes there have been no material changes to the infrastructure at the site since our letter dated October 9, 2006. Additionally, that the project would commence within one year from the date of this letter and the price of oil does not exceed \$110.00 per barrel. As you are aware, the cost of remedial activities never goes down, it only goes up, as such we are willing to update our price as needed.

As mentioned above, our proposal exhaustively includes all activities necessary to achieve the end state criteria inclusive of our rigorous safety and environmental protection programs. We employ a robust interactive open book policy when dealing with the various regulatory agencies and the public. As always, our customer, in this case SMC, is a welcome source of input and generally acts in an oversight role. Customer oversight generally consists of a single project manager whom intermittently surveys operational progress and reviews a weekly project status report.

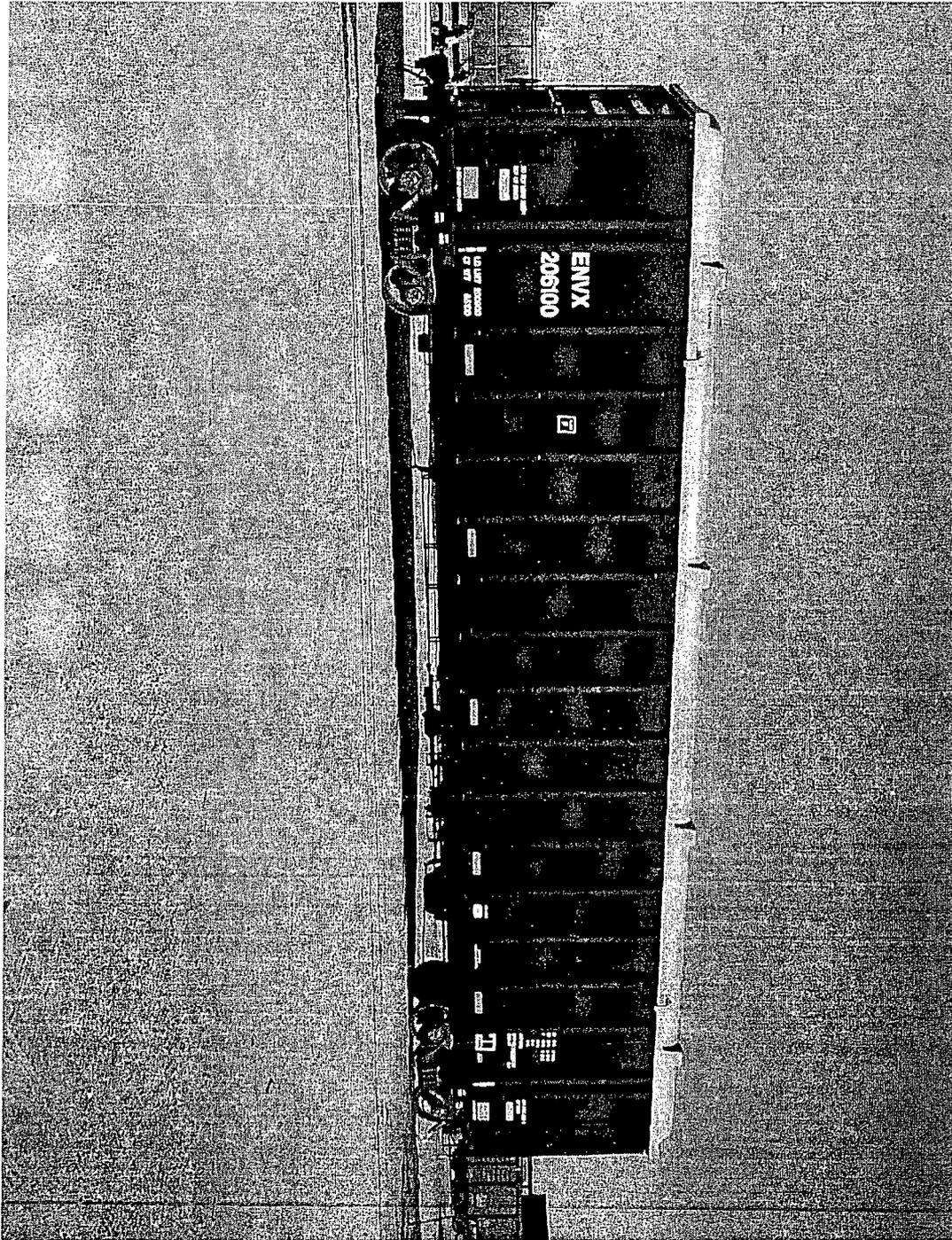
This letter may be provided to interested parties requesting a clear understanding of the cost. We appreciate the opportunity to be of service to SMC, E&E, and the NRC. In the event you have any questions or require further clarification please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryan Melchior". The signature is fluid and cursive, with a prominent initial "B".

Bryan Melchior  
Vice President  
EnergySolutions, Inc.

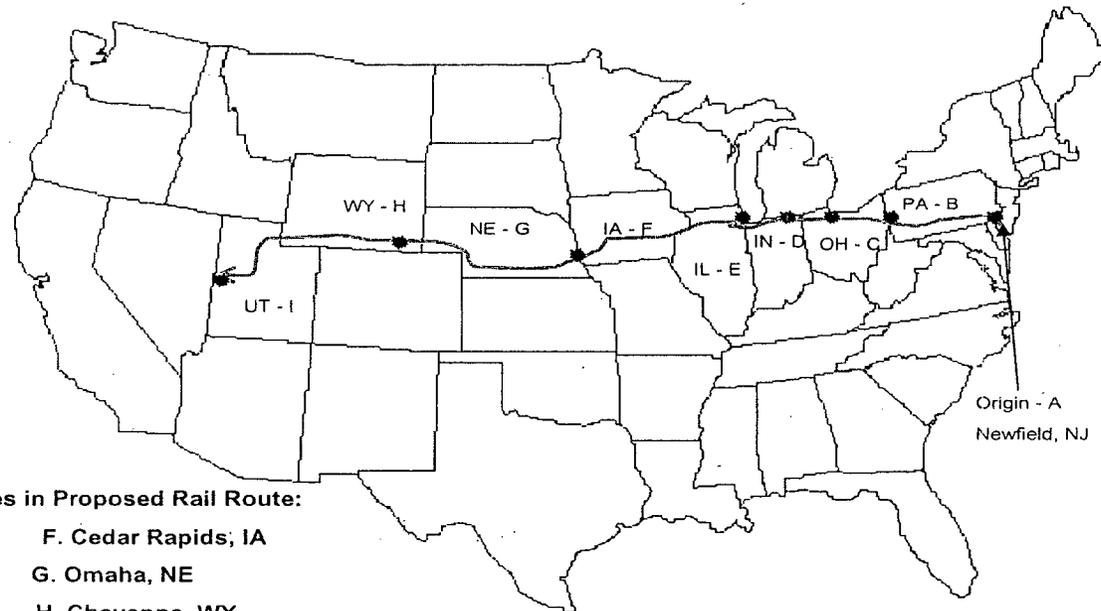
*ENERGYSOLUTIONS*  
LIDDED GONDOLA RAILCAR



EnergySolutions Inc.  
423 West 300 South, Suite 200  
Salt Lake City, Utah 84101  
(801) 649-2000

## SHIELD ALLOY – NEWFIELD, NJ

Gondola Railcar Shipments  
Typical Rail Route



**Major Communities in Proposed Rail Route:**

- |                 |                     |
|-----------------|---------------------|
| A. Newfield, NJ | F. Cedar Rapids, IA |
| B. Conway, PA   | G. Omaha, NE        |
| C. Willard, OH  | H. Cheyenne, WY     |
| D. Elkhart, IN  | I. Clive, UT        |
| E. Chicago, IL  |                     |