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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 40-8838-MLA
U.S. ARMY	)	
	)	
(Jefferson Proving Ground Site)	)	

ARMY RESPONSE TO
AMENDED MOTION OF SAVE THE VALLEY, INC. TO ADMIT FOR HEARING ADDITIONAL CONTENTION B-2 AND SUPPORTING BASES A THROUGH G.

INTRODUCTION

Pursuant to the Atomic Safety and Licensing Board's Order Scheduling Further Proceedings entered January 29, 2007, the U.S. Army ("Licensee" or "Army") hereby files its response to the Amended Motion of Save The Valley, Inc. to Admit for Hearing Additional Contention B-2 and Supporting Bases A Through G (February 23, 2007). As discussed below, the Motion should be denied.

BACKGROUND

On May 25, 2005, the U.S. Army submitted a license amendment application requesting an alternate schedule for submitting a decommissioning plan for its facility at Jefferson Proving Ground ("JPG") in Madison, Indiana, pursuant to 10 C.F.R. § 40.42(g)(2). *See Letter and Attachments from Alan G. Wilson to Dr. Tom McLaughlin, dated May 25, 2005, ADAMS No. ML051520319.* On February 2, 2006, the Atomic Safety and Licensing Board granted STV's request for a hearing with respect to the Army's application, but deferred the hearing pending completion of the

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SECY-02

Staff's technical review of the alternate schedule proposal. *U.S. Army (Jefferson Proving Ground Site), LBP-06-06, 63 NRC 167, 185 (2006).* On March 15, 2006, the Staff published in the *Federal Register* "Notice of Availability of Environmental Assessment and Finding of No Significant Impact for License Amendment for the Department of the Army's Facility at Jefferson Proving Ground," 71 Fed. Reg. 13435 (2006). This was followed with the completion of the Safety Evaluation Report and issuance of the license amendment on April 26, 2006. *Letter to A.G. Wilson from D. M. Gillen, dated April 26, 2006 (ADAMS Accession Number ML053320014).* On May 1, 2006, the Licensing Board issued "Memorandum and Order (Scheduling Further Proceedings)" (May 1 Order), in which the Licensing Board permitted Save The Valley ("STV") to file a motion for leave to withdraw, to amend, or to supplement the contentions contained in its November 23, 2005 hearing request and/or the bases assigned for those contentions based on any new information that may have arisen out of the Staff's review documents.

On May 31, 2006, STV filed "Motion For Leave to Withdraw, Amend, and Supplement Contentions of Save the Valley, Inc." The Army and the Staff filed their respective responses to STV's Motion on June 19, 2006 and June 20, 2006, respectively. *Army's Response to the Motion for Leave to Withdraw, Amend, and Supplement Contentions of Save the Valley, Inc.; NRC Staff Response to Motion for Leave to Withdraw, Amend, and Supplement Contentions by Save the Valley, Inc.*

On December 20, 2006, the Board entered its Memorandum and Order (Determining Scope of Evidentiary Hearing). Subsequently, on January 29, 2007, the Board entered its Order Scheduling Further Proceedings. Thereafter on February 23,

2007, STV submitted its instant motion.

DISCUSSION

As discussed below, the Army objects to the admissibility of the proffered new contention filed by STV.

I. Admissibility of Contentions

The process for the filing of new contentions based on new information is codified in 10 C.F.R. § 2.309(f)(2). The Commission has stated that, as a general matter, the NRC does not look with favor on new contentions filed after the initial filing. *Dominion Nuclear Conn. (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 636 (2004).*

New contentions may be filed after the initial filing only with leave of the Licensing Board upon a showing that:

> (i) The information upon which the amended or new contention is based was not previously available;
>
> (ii) The information upon which the amended or new contention is based is materially different than information previously available; and
>
> (iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

10 C.F.R. § 2.309(f)(2).

In addition, new contentions that withstand the above analysis must still meet the admissibility requirements in 10 C.F.R. § 2.309(f)(1). This regulation requires a petitioner to:

> (i) Provide a specific statement of law or fact to be raised or controverted;

(ii) Provide a brief explanation of the basis for the contention;

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;

(iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;

(v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and

(vi) Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief.

10 C.F.R. § 2.309(f)(1).

As noted by the NRC Staff in similar filings herein, the Commission has emphasized that its rules on contention admissibility are "strict by design." *Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001).* Failure to comply with any of the above requirements is grounds for dismissing a contention. *See Private Fuel Storage, (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC, 318, 325 (1999).* "Generalized suspicions" are proscribed (*See Duke Energy Corp. (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2)); CLI-03-17, 58 NRC 419, 424 (2003)*), and, "neither mere speculation nor bare assertions alleging that a matter

should be considered will suffice to allow the admission of a proffered contention." *La. Energy Services (LES) (National Enrichment Facility), LBP-04-14, 60 NRC 40, 56 (2004); aff'd CLI-04-25, 60 NRC 223 (2004).* Further, "Although licensing boards are to litigate 'contentions' rather than 'bases,' it has been recognized that 'the reach of a contention necessarily hinges upon its terms coupled with its stated bases.' " *LES, LBP-04-14, 60 NRC at 57.* (*See* NRC Staff Response To Motion For Leave To Withdraw, Amend And Supplement Contentions By Save The Valley, Inc. Filed herein June 20, 2006, at page 5.)

II. STV's Proffered New Contention

Contention B-2: The Army's implementation of the Field Sampling Plan (FSP) is inadequate to achieve its objective of appropriate characterization of the Jefferson Proving Ground (JPG) Depleted Uranium (DU) Site.

Army's Response to Contention B-2

The Army submits that STV's proffered new Contention B-2 is legally deficient in several respects. The proffered new Contention:

1) fails to demonstrate that the issue raised in the contention is within the scope of the proceeding, contrary to 10 CFR § 2.309 (f)(1) (iii);

2) fails to demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding, contrary to 10 CFR § 2.309 (f)(1) (iv);

3) fails to provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact, contrary to 10 CFR § 2.309 (f)(1) (vi);

4) is based upon information which was previously available, contrary to 10 CFR § 2.309 (f)(2) (i); and

5) is based upon information that is not materially different to information that was previously available, contrary to 10 CFR § 2.309 (f)(2) (ii).

1. STV Fails To Demonstrate That The Issue Raised In The Proffered New Contention Is Within The Scope Of The Proceeding

In analysis of STV's current motion, the threshold issue is: What is the scope of this proceeding?

This matter comes before the Board on the Army's license amendment application requesting an alternate schedule for submitting a decommissioning plan for its facility at JPG. The application was approved and issuance of the license amendment occurred on April 26, 2006. *Letter to A.G. Wilson from D. M. Gillen, dated April 26, 2006 (ADAMS Accession Number ML053320014).*

It would therefore seem that the scope of these proceedings is limited to an event frozen in time, that is to say, the application for and granting of the license amendment on April 26, 2006. That event, in the wording of 10 CFR § 2.309(f)(1) (iv), is "the action that is involved in the proceeding."

To capsulate and summarize the ultimate gist of STV's Motion, it is that the license amendment should not have been granted because, *subsequent to its granting*, the Army either has not done what it said it was going to do or has not done

it "adequately". To the Army's thinking, STV's approach has confused the focus of this proceeding by attempting to inject a hindsight or "Monday-morning-quarterbacking" element. It also tends to broaden this proceeding into a roaming, endless critique of what has happened or is planned post April 26, 2006.

As the Army has previously stated, the Field Sampling Plan ("FSP") submitted in support of its application is iterative. It was hoped that, as the FSP was implemented, some of STV's concerns would be alleviated and one or more of its contentions would be mooted. While this is still Army's hope, the iterative nature of the FSP and its current implementation by the Army does not broaden the scope of this proceeding under NRC regulations. Nor does it give STV the continuing right to kibitz until a decommissioning plan is submitted.

A petitioner must demonstrate that the "issue raised in the contention is within the scope of the proceeding," which is defined by the Commission in its initial hearing notice and order referring the proceeding to the Licensing Board. Any contention that falls outside the specified scope of the proceeding must be rejected. *In the Matter of Nuclear Management Company, LLC (Monticello Nuclear Generating Plant),* LBP-05-31, __ NRC __ *2005 NRC LEXIS 194* (2005) .

The Commission follows the rule in licensing matters that the hearing notice published by the Commission for the proceeding defines the scope of the proceeding and binds the licensing board. See *In the Matter of Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1*), ASLBP No. 91-621-01-OLA, *33 N.R.C. 15; 1991 NRC LEXIS 42* January 8, 1991; citing *Northern Indiana Public Service Co.*

(Bailly Generating Station, Nuclear-1), ALAB-619, 12 NRC 558, 565 (1980); Commonwealth Edison Co. (Carroll County Site), ALAB-601, 12 NRC 18, 24 (1980).

The Hearing Notice in this action defines the scope of hearing as follows: "The NRC hereby provides notice that this is a proceeding on an application for a license amendment to License No. SUB–1435 to request an alternate decommissioning schedule." *70 Fed. Reg. 36,964, at 36,965 (June 27, 2005).* The Hearing Notice more particularly describes the scope of proceeding in the "*Supplemental Information*":

> "The Nuclear Regulatory Commission (NRC) is considering issuance of a license amendment to the Department of the Army (Army as the licensee) to amend its License No. SUB–1435 to authorize an alternate decommissioning schedule pursuant to 10 CFR 40.42(g)(2) for its facility at Jefferson Proving Ground, Madison, Indiana. License No. SUB–1435 authorizes the licensee to possess depleted uranium in the "impact area" of Jefferson Proving Ground. The license amendment request for an alternate decommissioning schedule was submitted by the licensee on May 25, 2005. An NRC administrative review, documented in a letter to the U.S. Army Garrison at Rock Island Arsenal on June 15, 2005, found the license amendment request acceptable to begin a technical review.
>
> If the NRC approves the license amendment request, the authorization for an alternate decommissioning schedule will be documented in an amendment to NRC License No. SUB–1435. However, before approving the proposed amendment, the NRC will need to make the findings required by the Atomic Energy Act of 1954, as amended, and NRC's regulations. These findings will be documented in a Safety Evaluation Report and an Environmental Assessment."

70 Fed. Reg. 36,964.

The Order granting the hearing request herein also delineates the scope of the proceeding in much narrower terms that STV's Motion contemplates:

> "Before this Board is a hearing request filed by Save the Valley, Inc.

> (Petitioner or STV) regarding an application submitted by the Department of the Army (Licensee) for an amendment to its NRC materials license (License No. SUB-1435). The amendment would authorize an alternate schedule for submittal of a decommissioning plan for its Jefferson Proving Ground (JPG) site located in Madison, Indiana.
>
> Requests for an alternate schedule for submittal of a decommissioning plan are governed by 10 C.F.R. § 40.42(g)(2). ... Section 40.42(g)(2), in turn, sets out the criteria that control:
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> The Commission may approve an alternate schedule for the submittal of a decommissioning plan required pursuant to paragraph (d) of this section if the Commission determines that the alternative schedule is [(1)] necessary to the effective conduct of decommissioning operations and [(2)] presents no undue risk from radiation to the public health and safety and [(3)] is otherwise in the public interest. "

Memorandum and Order (Granting Hearing Request and Deferring Hearing), LBP-06-06, at 26 (Feb. 2, 2006).

Again, the scope of this proceeding was clearly articulated by the Board in its order entered herein on December 20, 2006:

> "...the scope of this proceeding is limited to whether the Licensee's proposal for characterizing the JPG site during the alternate schedule period -- i.e. the next five years -- is: (1) "necessary to the effective conduct of decommissioning operations"; (2) will "present[] no undue risk from radiation to the public health and safety"; and (3) "is otherwise in the public interest." 10 C.F.R. § 40.42(g)(2). n27 In order for a contention to be considered "within the scope of th[is] proceeding" (10 C.F.R. § 2.309(f)(1)(iii)), it must challenge one of these three criteria."

Memorandum And Order (Determining Scope of Evidentiary Hearing), December 20, 2006.

STV's proffered Contention B-2 and its bases are beyond the scope of a

Section 40.42(g)(2) application for the reason that what has transpired subsequent to issuance of the license amendment does not effect the propriety of the determinations which the NRC was required to make under Section 40.42(g)(2) prior to April 26, 2006, (i.e., whether the alternative schedule is [(1)] necessary to the effective conduct of decommissioning operations and [(2)] presents no undue risk from radiation to the public health and safety and [(3)] is otherwise in the public interest.)

For this reason, STV's Motion should be dismissed.

2. STV Fails To Demonstrate That The Issue Raised In The Proffered Contention Is Material To The Findings The NRC Must Make To Support The Action That Is Involved In The Proceeding,

STV's proffered contention states that the Army's implementation of the FSP is inadequate to achieve its objective of appropriate characterization. On its face, this contention is not material to the findings that must be made to support the granting of an alternative decommissioning schedule.

As just stated, the findings that the NRC must make to support the approval of an alternative decommissioning schedule are set forth in Section 40.42(g)(2). The materiality of Contention B-2, now proffered by STV, implicitly rests on the unstated assumption that events subsequent to the NRC's grant of an alternative schedule somehow void or invalidate that action. The Army can find no support for this approach to a hearing involving a Section 40.42(g)(2) action in the Commission's decisions.

Indeed, there are sound reasons for avoiding such an approach. As demonstrated in these proceedings, such an approach creates a seemingly endless loop in which every filing subsequent to the issuance of the amendment begets a new contention. The Board and the parties return to "square one" in defining the contentions and scope of proceeding. Nor does disposing of some of these issues now guaranty smoother sailing when it comes to submission of the actual decommissioning plan. Studies published between now and then are likely to provide "a foot in the door" which might allow for re-opening of any previously litigated issue.

The Army's position is simply that events occurring after the issuance of the amended license on April 26, 2006, are not material to the findings the NRC must make to support the issuance of the amendment and should, therefore, not be admissible as contentions herein.

3. STV Fails To Provide Sufficient Information In Connection With Its Proffered Contention To Show That A Genuine Dispute Exists With The Applicant/Licensee On A Material Issue Of Law Or Fact,

STV's contentions relating to site characterization fall into several broad categories. The site characterization as implemented by the Army is: inadequate; grossly inadequate; seriously inadequate; collectively (or in multiple aspects) inadequate; fundamentally flawed; fails to include alternative methodologies; and is seriously and woefully inadequate. The Army duly notes the recurring theme, referenced above, of inadequacy in the degree of detail and specificity of its field sampling activities, both generally and in various particulars.

The adequacy of STV's bases challenging the implementation the FSP is discussed in the context both of prior Commission rulings concerning the objectives and/or sufficiency of site characterization and of the requirements of 10 C.F.R. § 2.309(f)(1) and (2).

The focus of a sufficient and adequate site characterization is radioactive contamination and dose modeling. As stated by the Board in the *Connecticut Yankee* proceedings:

> "Site characterization is provided to determine the extent and range of radioactive contamination on site, including structures, systems, components, residues, soils, and surface and ground water. On the basis of the site characterization, the final surveys are conducted to cover all areas in which contamination previously existed, remains, or has the potential to remain. The licensee should also use the site characterization information to develop input to the dose modeling. As part of the review, the NRC staff should review the licensee's site characterization plans and site records (required under 10 C.F.R. 50.75(g)) to ensure that the site characterization presented in the LTP is complete and that the data were obtained with sufficiently sensitive instruments and using proper quality assurance procedures to obtain reliable data applicable to determining if the site will meet the decommissioning limits."

Connecticut Yankee Atomic Power Company (Haddam Neck Plant), LBP-01-21, 53 N.R.C. 33, at 50-51 (2001).

With regard to site characterization, NUREG-1700 indicates that this information is provided to determine the extent and range of radioactive contamination on site. On the basis of the site characterization, the licensee designs final radiation surveys to evaluate all areas in which contamination previously existed, remains, or has the potential to remain.

As recognized by the Commission in *Yankee Atomic Electric Co. (Yankee Nuclear Power Station),* CLI-05-15, *2005 NRC LEXIS 101,* at 121, what constitutes adequate site characterization is dependant on specific site conditions. At a minimum, the site characterization and remediation plans should provide sufficient information to allow the NRC to determine the extent and range of expected radioactive contamination, to determine whether estimates for remaining decommissioning costs are reasonable, to determine the likely schedule for remaining activities, and to support the final site survey to verify compliance with Part 20 release limits - the ultimate goal of the decommissioning process.

In the *Yankee Atomic* proceeding, the Commission held:

> "The purpose of site characterization is to define relevant features of the soil, water, and buildings in order to assess risks and develop adequate plans to complete decommissioning. The LTP must deal with the correct issues -- those already identified and those reasonably anticipated. The key question at the LTP submission stage is whether the site characterization is sufficiently detailed to allow evaluation of the adequacy of each element prescribed by 10 C.F.R. § 50.82(a)(9) and for making the findings required for approval of the LTP (*see* 10 C.F.R. § 50.82(a)(10))." Id at 130.

In this proceeding, the key question at the LTP submission stage will be whether the site characterization is sufficiently detailed to allow evaluation of the adequacy of each element prescribed for restricted release in 10 CFR § 20.1403.

In determining what information is sufficient for a restricted release, one must also be cognizant of the specific site conditions at JPG. The danger of unexploded ordinance (UXO) permeates the area under site characterization. Characterization activities have been, and are continuing to be, conducted with this ever present

danger in mind. Thus, criticisms such as found on page 13 of STV's Motion, that transects for borings were chosen along perimeter roads instead of across the site or along paths perpendicular to topographic changes, seem to apply text book preferences to a decidedly non-text book setting. Sites along roads are chosen because the roads are known or presumed to be safe.

Similarly, criticisms of fracture trace analysis, well locations, etc. are stated in terms of abstract academic preference and fail to recognize the part that the inherent danger of the site plays in implementation activities.

In general, the bases offered by STV in support of Contention B-2 do not support its admissibility. Each must provide sufficient information in connection with its proffered contention to show that a genuine dispute exists. None of the bases offered by STV in support of Contention B-2 do that. Information contained in these bases asserts that more and/or different data might be obtained. But insufficient information is provided by STV to show that data being generated, or likely to be generated, *is not enough to satisfy the needs* of the NRC pertaining to radioactive contamination and dose modeling in a restricted release context. Instead, each basis rests on the generalized suspicion or bare assertion that failure to gather all gatherable data renders the data which will be obtained "inadequate to serve its intended purpose." Each basis contravenes the Commission's admonition that neither "generalized suspicions" (*See Duke Energy Corp,* supra), mere speculation nor bare assertions alleging that a matter should be considered will suffice to allow the admission of a proffered contention. (*La. Energy Services* (*LES*), supra. Without

connecting and supporting facts, STV's conclusions fail to show that a genuine dispute exists. Therefore, as will be discussed below, each of the bases offered by STV cannot support the admissibility of Contention B-2.

STV's Basis a. The Fracture Trace Analysis As Implemented is Inadequate To Serve Its Intended Purpose. 1

Basis a fails to provide sufficient information to raise a genuine dispute of law or fact and therefore cannot support the admissibility of Contention B-2. *See* 10 C.F.R. § 2.309(f)(1)(vi).

As Judge Rosenthal observed at the July 19, 2006, Hearing at Madison, Indiana (Transcript, pg. 39), what we're dealing with here is a proposal for an alternate schedule to allow five years to characterize this site sufficiently so that a decommissioning plan can be developed. The crucial descriptive word here is "sufficient".

While STV details the particulars wherein it takes exception to the Army's implementation of the Fracture Trace Analysis, the basis fails to connect the necessary dots to show that a genuine dispute exists. It ultimately rests on speculation and bare assertion that the implementation is inadequate because other methods *might yield* more information. There is no showing that the information

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1 **Factual Inaccuracies and/or Technical Errors in Basis a:** STV's assertion that there is a failure to discuss and document the site walkover and field verification (page 4, numbered paragraph 3) is incorrect. It is discussed and described in Section 4.1.2 of the January 2007 "Well Location Selection Report" (ML070220461).

being gathered is insufficient. Rather there is merely the unspoken assumption that because more information *might* be gathered it is therefore necessary. STV fails to draw an adequate nexus between the amount of information it would like to have and the amount of information the NRC needs. In other words, STV explains that the information which the Army is gathering is not as detailed and comprehensive as it would like. What it does not explain is why information being gathered is insufficient to supply the information necessary for development of a decommissioning plan and/or why the information gathered needs to be augmented.

Therefore, STV fails to provide sufficient information in this basis to show that a genuine dispute exists with the Army on a material issue of law or fact and is inadmissible.

STV's Basis b. The Electrical Imaging Survey As Implemented Is Inadequate To Serve Its Intended Purpose. 2

Basis b fails to provide sufficient information to raise a genuine dispute of law or fact and therefore cannot support the admissibility of Contention B-2. *See* 10 C.F.R. § 2.309(f)(1)(vi).

As with the previous basis, this basis rests on the speculation and bare

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2 **Factual Inaccuracies and/or Technical Errors in Basis b:** STV states that "...interpreted fractures on EI Line 1 are often resistivity anomalies that are dipping rather than vertical" (page 10, lines 2 and 3). This is either an interpretation by STV from Figure 5-1 of the "Well Location Selection Report" report or STV is basing this on the draft, preliminary results presented on Figure 19 presented to the NRC in a public meeting held October 12, 2006. Nowhere in the "Well Location Selection Report" and appropriate sections related to the EI survey was the interpretation or conclusion made as to the orientation of the resistivity anomalies.

assertion that more information *might* be gathered and therefore what information the Army is gathering is "grossly inadequate". Again, STV fails to provide sufficient information in this basis to show that a genuine dispute exists with the Army on a material issue of law or fact and is inadmissible.

STV's Basis c. The Soil Verification Survey as Implemented Is Inadequate To Serve Its Intended Purpose.3

Basis c fails to provide sufficient information to raise a genuine dispute of law or fact and therefore cannot support the admissibility of Contention B-2. *See* 10 C.F.R. § 2.309(f)(1)(vi).

As with the previous two bases, this basis rests on the speculation and bare assertion that more information *might* be gathered, that the Army has chosen to use a "broader brush" for soil verification than STV might have chosen and that, therefore, the information the Army is gathering is "seriously inadequate". Again, STV fails to provide sufficient information in this basis to show that a genuine dispute exists with

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3. **Factual Inaccuracies and/or Technical Errors in Basis c:** STV incorrectly states the location of Transect 1, being along E Road, is along the north perimeter of the DU Impact Area (page 13, lines 10 to 13). E Road is not the northern perimeter of the DU Impact Area as the northern perimeter extends to F Road, which is approximately 1 mile north of E Road. Transect 1 and E Road cross through the DU impact area between Morgan Road and Center Recovery Road.

Second, STV provides a web address (page 14, lines 18 and 19) to weather station data that is for January 27, 2006 and not for August 28, 2006 that they reference. They also incorrectly state that the weather station recorded 2.00 inches of rain on August 28, 2006 when the actual total recorded rainfall for August 28, 2006 was only 1.38 inches and1.27 inches of that total accumulated prior to 8:45 AM, which is over 24 hours prior to starting the first SVS soil boring.

the Army on a material issue of law or fact and is inadmissible.

STV's Basis d. The Well Location Selection Methodology For Ground Water Conduit and Overburden Characterization As Implemented Under FSP Addendum 4 Is Inadequate To Serve Its Intended Purposes.4

Basis d fails to provide sufficient information to raise a genuine dispute of law or fact and therefore cannot support the admissibility of Contention B-2. *See* 10 C.F.R. § 2.309(f)(1)(vi).

As STV recognizes, this basis is in many respects a re-hash of several of its Contention B-1 bases. And, once again, it is a cataloging of perceived inadequacies without sufficient information or explication of how this all negatively impacts on what the NRC needs to know in this situation. This basis fails to provide sufficient information to show that a genuine dispute exists with the Army on a material issue of law or fact and is inadmissible.

STV's Basis e. The Implementation To Date Of The Stream And Cave Gauging Program As Described In The WLS Report Is Inadequate To Serve The Program's Intended Purpose.

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4 **Factual Inaccuracies and/or Technical Errors in Basis d:** STV incorrectly states (page 19, lines 12 to 14) that well pair # 2 is proposed to be drilled between two features of interest identified on EI Line 1 base on Figure 5-1 (page 5-7) in the Well Location Selection Report. Table 6-1 (page 6-6) of the Well Location Selection Report indicates that well pair # 2 is proposed to be located at an inline distance of 6,890 feet along EI line 1, which as clearly illustrated on Figure 5-1 (page 5-7) of the Well Location Selection Report positions well pair # 2 nearly dead center on feature of interest B and not between feature of interest A and B as incorrectly stated by STV.

Basis e fails to provide sufficient information to raise a genuine dispute of law or fact and therefore cannot support the admissibility of Contention B-2. *See* 10 C.F.R. § 2.309(f)(1)(vi).

This basis is a recitation of STV's disagreements and exceptions to Army implementation of a gauging program. In essence it states that the Army *might* not be using data collected since September 2006 in its Well Selection Locations. Then STV states, that regardless of the data itself, the objective for which the data *might* be used is "inadequate and inappropriate"; and that use of the inappropriate gauging Data "could" underestimate the amount of recharge and rates of migration from the DU impact area. The discussion is phrased in terms of inadequacy because of the *possibility* of data being misunderstood or underestimated. Once again, in this basis STV fails to provide sufficient information as to the magnitude of the possible underestimation of recharge rates to show that it would have a significant impact on any radioactivity assessment.

This basis fails to provide sufficient information to show that a genuine dispute exists with the Army on a material issue of law or fact and is inadmissible.

STV's Basis f. The Field Collection And Analytical Methods Planned And Used To Document And Evaluate Data Yielded By FSP Implementation Are Inadequate To Serve Their Intended Purposes. 5

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5 **Factual Inaccuracies and/or Technical Errors in Basis f:** DU Recognition - Analytical Uncertainty: STV states that the high uncertainty of uranium concentrations in samples is because SAIC did not following procedures (i.e., collecting 500 milliliters (mL) samples instead of 1 gallon samples). This is further compounded by the fact that the lab analyzes only 100 mL of the sample. STV has overstated the impact of this issue. Regardless of whether a 1 gallon or a 500 ml

Basis f fails to provide sufficient information to raise a genuine dispute of law or fact and therefore cannot support the admissibility of Contention B-2. *See* 10 C.F.R. § 2.309(f)(1)(vi).

This basis appears on its face to be a thinly veiled attack on the ERM, which the Board has already stated is irrelevant to this proceeding. It is replete with criticism of ERM activities.

As with other bases offered in support of proffered Contention B-2, this basis rests on speculation and bare assertion. STV speculates that the use of methods and procedures developed for ERM purposes *might "not necessarily* be appropriate for FSP purposes." STV Motion, p. 26. It offers the bare assertion that there is a failure to acknowledge the validity and significance of samples with high U-238/U-234 activity ratios. It then uses this assertion as the springboard for several further assertions: there is a failure to acknowledge that uranium derived from DU penetrators will not retain the U-238/U-234 activity ratios of the penetrators over time; there is a failure to integrate complexities resulting from the mixing of natural uranium and DU; and there

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sample was collected, it is correct that only 100 mL of the sample will be drawn as an aliquot and analyzed. That is a standard laboratory practice. Steps are taken to ensure that the aliquot is representative of the collected sample.

- Samples with Mixed Sources of Uranium: None

- Alternative Analytical Methodologies and Protocols: STV states that it is a major flaw not to use ICP-MS because it is much more reliable than activity ratios. The UNEP report cited by STV states directly that alpha spectroscopy, which is currently used by the Army, can be faster and more reliable than ICP-MS.

is a failure to incorporate sampling protocols and analytical methods that will resolve source ambiguities.

At the risk of being overly blunt, the Army's response to this is simple. What difference does any of this make to sufficient site characterization?

There is nothing in this basis to support the assertion that the so-called "high" activity ratios are either high or worthy of concern. There is nothing that would show why the isotope activity ratios are necessary information for the NRC staff to have. At background levels or close to background levels, is it necessary to distinguish between DU and natural uranium sources? What will alternative analytical methodologies tell the NRC staff that it needs to know? STV's overriding assumption with regard to this basis, and indeed all its bases, is that nothing done by the Army will be adequate unless every possible piece of data imaginable is obtained and analyzed.

This basis fails to provide sufficient information to show that a genuine dispute exists with the Army on a material issue of law or fact and is inadmissible.

STV's Basis g. The Initial Deer Tissue Sampling Study As Implemented Is Inadequate To Serve Its Intended Purpose.6

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6 **Factual Inaccuracies and/or Technical Errors in Basis g:** There are several factual inaccuracies made by STV that require response from the Army at this time. First, mislabeling of sample duplicates did not occur in the field. Rather, a duplicate kidney sample was collected from a different deer than the duplicate liver, bone, and muscle samples. There is no requirement to collect all of the duplicate samples from the same deer, nor does the collection of the duplicate kidney from another deer affect the validity of the results.

Second, ovary data were collected during the February sampling period at the request of the USFWS, which wanted the ovary data for a research project being

Basis g fails to provide sufficient information to raise a genuine dispute of law or fact and therefore cannot support the admissibility of Contention B-2. *See* 10 C.F.R. § 2.309(f)(1)(vi).

STV continues to show an inability to meaningfully articulate any reasonable concern here. This arises out of a failure to distinguish between differences and significant differences in the radiation data contained in the deer samples. It also relies on bare assertions such as that DU "has *probably* migrated into the deer population" (STV Motion, p. 39) and that more (as in further deer and other biota sampling) is better. This basis is absent a sufficient factual showing that the results of the deer sampling raise legitimate radiation concerns which should be addressed by further sampling.

This basis fails to provide sufficient information to show that a genuine dispute exists with the Army on a material issue of law or fact and is inadmissible.

4. STV's Proffered Contention Is Based Upon Information Which Was Previously Available.

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conducted by one of its students. The Deer Tissue Sampling Report did not discuss any of the ovary results because these data were not collected for the purposes of the Army's study nor were any of the ovaries analyzed for DU.

Third, the main purpose of the deer tissue sampling was to address NRC concerns about human health ingestion of deer tissue. The deer tissue study was never intended to assess potential adverse health effects to the deer population. Use of the limited ovary data to make any assessment about the health and fecundity of the deer population is inappropriate.

Other errors or inaccuracies in STV's analysis of the accuracy of data collected will be discussed if, and when, the relevant portion of the basis is ruled admissible

5. STV's Proffered Contention Is Based Upon Information That Is Not Materially Different To Information That Was Previously Available.

Because Army's objections 4 and 5 are so similar, they are both discussed here.

STV's proffered Contention B-2 is generally a restatement of its previously admitted Contention B-1 in which only the tense of the verbs has changed (i.e. "will do" is replaced by "has done").7 For the most part, the only "new information" are the reports filed by the Army. These include: the *Fracture Trace Analysis Jefferson Proving Grounds* of June 2006; the *Selection of Monitoring Well Locations to Characterize the Groundwater for Jefferson Proving Ground Depleted Uranium License Decommissioning* presented in October of 2006; and the final *Well Location Selection Report* of January 2007; The third party studies and reports supporting the various bases bear dates from 1979 through 2005 with the majority being at least 5 years old.

Even assuming that the above cited Army documents released after issuance of the license amendment are deemed within the scope of this proceeding so as to satisfy the new information requirement of 10 C.F.R. § 2.309(f)(2)(i), neither proffered

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7 Compare the wording of **Admitted Contention B-1**: "As Filed, The FSP Is Not Properly Designed To Obtain All Of The Verifiable Data Required For Reliable Dose Modeling And Accurate Assessment Of The Effects On Exposure Pathways Of Meteorological, Geological, Hydrological, Animal, And Human Features Specific To The JPG Site And Its Surrounding Area." with

Contention B-2 (see Footnote 7) nor the supporting bases (compare bases a through f in support of Contention B-2 with bases a through k in support of Contention B-1; bases n and o in support of Contention B-1 with basis g in support of contention B-2) are materially different from the information contained in the admitted contention. Thus, the proffered contention is inadmissible under 10 C.F.R. § 2.309(f)(2)(ii).

CONCLUSION

For the reasons discussed above, the Amended Motion of Save The Valley, Inc. to Admit for Hearing Additional Contention B-2 and Supporting Bases A Through G (February 23, 2007) fails to satisfy the requirements of 10 C.F.R. §2.309 (f) (1) and (2). STV's request should, therefore, be denied.

Dated at Rock Island, Illinois, this 15th day of March, 2007.

Respectfully Submitted,

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Proffered Contention B-2: "The Army's Implementation Of The Field Sampling Plan (FSP) Is Inadequate To Achieve Its Objective Of Appropriate Characterization Of The Jefferson Proving Ground (JPG) Depleted Uranium (DU) Site."

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:

Alan S. Rosenthal, Chair
Dr. Paul B. Abramson
Dr. Richard F. Cole

In the Matter of	)	Docket No. 40-8838-MLA
	)	
U.S. ARMY	)	ASLBP No. 00-776-04-MLA
	)	
(Jefferson Proving Ground Site)	)	March 15, 2007
	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the ARMY RESPONSE TO AMENDED MOTION OF SAVE THE VALLEY, INC. TO ADMIT FOR HEARING ADDITIONAL CONTENTION B-2 AND SUPPORTING BASES A THROUGH G filed on March 15, 2007 in the above-captioned proceeding have been served on the following persons by U. S. Mail, first class, and (as indicated by asterisk) by e-mail this 15th day of March 2007:

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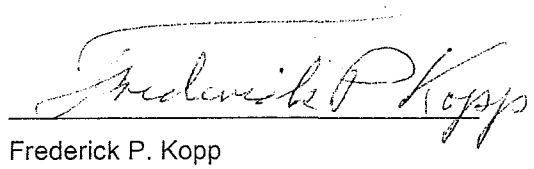
Dated March 15, 2007



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