

RAS 7307

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before Administrative Judges:
Alan S. Rosenthal, Presiding Officer
Thomas D. Murphy, Special Assistant

DOCKETED
USNRC

December 1, 2003 (3:05PM)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

In the Matter of

U.S.ARMY

(Jefferson Proving Ground Site)

Docket No. 40-8838-MLA

ASLBP No. 00-776-04-MLA

November 26, 2003

REQUEST FOR HEARING BY SAVE THE VALLEY, INC.
RE REQUEST FOR ALTERNATE DECOMMISSIONING PLAN SCHEDULE

On October 28, 2003, the Nuclear Regulatory Commission (“NRC” or “Commission”) published in the Federal Register notice of consideration of a possession only license amendment (“POLA”) request¹ submitted by the U.S. Army (“Army” or “DA”) for its Jefferson Proving Ground (“JPG”) site near Madison, Indiana, and of the opportunity for interested persons to request a hearing. 68 Fed. Reg. 61471. In accordance with this Federal Register notice, and pursuant to 10 C.F.R. Part 2, Subpart L, Save the Valley, Inc. (“STV”) respectfully submits its Request for Hearing on the Army POLA.

¹See U.S. Army Chemical Materials Agency, Transmittal of Contingent Request for an Alternate Schedule for the Submittal of a Decommissioning Plan for the Termination of the Jefferson Proving Ground License SUB1435, with supporting documentation, September 2003 (available for inspection and copying at www.nrc.gov from the Publicly Available Records (PARS) component of NRC’s document system (ADAMS) under accession number ML032731017).

I. PROCEDURAL HISTORY AND FACTS

A. Procedural History and Facts of the Case

In December, 1999, the Commission published a notice of opportunity for hearing in connection with the Army's application for an amendment to its materials license (SUB-1435) that would authorize the decommissioning of its JPG site. 64 Fed. Reg. 70294 (December 16, 1999). Under that license, the Army had engaged in activities on the site between 1984 and 1994 that had produced approximately 220,000 pounds of depleted uranium ("DU") projectiles and fragments. In its application for amendment to its license, the Army sought authorization for the termination of its license and restricted release of the site. Before the amendment sought by the Army could be approved, however, the Commission would have to make the findings required by statute and regulation, to be documented in a Safety Evaluation Report and an Environmental Assessment.

In response to the December 1999 notice of hearing, STV filed a timely hearing request which was granted by the Presiding Officer based on a determination that STV had established, as required by 10 C.F.R. § 2.1205(h), both its standing and the existence of an area of concern that was germane to the subject matter of the proceeding. See LBP-00-9, 51 NRC 159 (2000). That decision also noted that the Army had indicated "a distinct possibility that the current decommissioning plan will undergo revision in material respects" and had explicitly requested "that further proceedings be held in abeyance pending the outcome of its anticipated further interaction with the NRC Staff with regard to [that] plan." Id., at 3 .

Nothing transpired on the adjudicatory front for some time after the decision granting the hearing request, apart from the submission by the Army of quarterly status reports. During that time, the Army also provided its decommissioning plan to STV for its consideration and received

comments back from STV. Id. In June, 2001, the Army furnished the NRC with an entirely new plan, which it characterized as its “final decommissioning/license termination plan.” Id. The new License Termination Plan (“LTP”) received a very cool reception from the NRC Staff. Although the 1999 site decommissioning plan had obtained the Staff acceptance on administrative review that generally precedes the commencement of a technical review, such acceptance of the 2001 LTP was withheld due to a number of deficiencies which the Staff indicated required correction before it could initiate a technical review. Id., at 3-4. The Staff also expressed a desire to discuss the deficiencies with the Army in order both to ensure that the licensee understood the Staff’s concerns and to develop a schedule for resubmission of the LTP. The Staff subsequently provided formal notification that it considered the 2001 LTP to supersede the 1999 site decommissioning plan, with the consequence that the latter would receive no further review. Id., at 4.

After receiving assurances that the 2001 LTP would go through the process of public comment solicitation and an opportunity to request a hearing, STV moved that its request for hearing be held in abeyance to conform to a new timeline for review by the NRC Staff because the second LTP was very different from the first. The Presiding Officer found that although the second, revised LTP was a new plan, analytically there was no material difference between the then current situation and the more typical one where a plan is submitted which then must undergo substantial revision before a hearing can be held on the plan. See LBP-01-32, at 7. The Presiding Officer also found that the Army had not withdrawn its application and the NRC Staff had not formally denied it but rather the two parties were working to cure the deficiencies and develop a new LTP. Id. The Presiding Officer granted STV’s request that the proceedings continue to be held in abeyance pending submission of the Army’s new LTP. See id., at 10.

On June 27, 2002 the Army submitted its Revised DP. In the Revised DP, the Army identified the benefits of DU remediation at JPG to include: averted population dose, avoided regulatory and institutional costs, increased land value, aesthetics, and reduced public opposition. The total discounted benefit accruing from decontamination of the DU Impact Area to terminate the license without restrictions was estimated to range from \$268,286 to \$349,429 (see Table 7-1). The Army proposed, however, to do no remediation or monitoring and continued to rely solely on institutional controls. As a result, the Revised DP did not resolve the basic concerns previously expressed by STV regarding the Army's earlier plans.

In an October 17, 2002 memorandum, the NRC Staff reported that it had accepted for technical review the Revised DP, together with the environmental report that was submitted by the Army in connection with that DP. The technical review was projected to require two full years for completion. On November 14, 2002, the NRC published in the Federal Register its notice of consideration of the Army's license amendment request and opportunity for interested parties to provide comments and request a hearing. 67 Fed. Reg. 220.

On December 12, 2002, STV filed its comments and request for a hearing on the Revised DP. The principal concerns identified by STV were that the Revised DP did not meet certain criteria for restricted release established by 10 C.F.R. § 20.1403 and site characterization was inadequate to verify compliance with any of the requirements of 10 C.F.R. § 20.1403. Concurrently, STV moved to defer the requested hearing until completion of the NRC Staff's technical review of the Revised DP. The Army objected to STV's hearing request on the grounds that the identified concerns were not germane to approval of its Revised DP. However, if a hearing was to be held, the DA agreed it should be deferred. On February 6, 2003, the

Presiding Officer granted both STV's request for a hearing and its motion to defer the hearing pending completion of the Staff's technical review. See LBP-03-02, at 5-7.

The Staff's review raised some of the same concerns regarding the adequacy of the Army's site characterization that STV had identified. In fact, the Staff advised the Army that certain additional site-specific sampling and modeling would be required. In response, the Army expressed concern to the Staff that such site characterization activities would endanger the safety of DA and contractor personnel due to the presence of unexploded ordinance ("UXO"). As a result, on February 4, 2003, the Army submitted a contingent request for an alternate schedule for the filing of a decommissioning plan for the termination of its JPG license pursuant to 10 C.F.R. § 40.42(g)(2). The Army proposed negotiation with the Staff of a license amendment that would create a 5-year, possession-only license renewable for an indefinite time period, i.e. "until such time as the UXO is no longer explosive or there are safe ways available to handle UXO, permitting adequate site characterization." See NRC Staff's Comments in Response to Memorandum and Order, dated March 19, 2003, at 2. The negotiations between the Army and the Staff culminated in the submission of the POLA on September 22, 2003, which the Staff accepted for technical review on October 21, 2003. On October 28, 2003, the Commission published in the Federal Register its notice of consideration of the Army's POLA request and of the opportunity for interested persons to request a hearing. 68 Fed. Reg. 61471.

STV recognizes that the Army's POLA request differs materially from its earlier submissions. In particular, the Army is now proposing to defer indefinitely rather than begin promptly the decommissioning of JPG. However, STV submits that the filing of the POLA request does not change the fundamental character of the proceeding – which relates to the Army's plan for the eventual termination of License SUB-1435 – or require a change in the

procedural framework established by LBP-00-09, LBP-01-32 and LBP-03-02. Indeed, the Army's latest plan can be properly understood only in the context of the previous developments in this docket. This is reflected in the Commission's publication of its Federal Register notice regarding the Army's most recent POLA request in this docket. See 68 Fed. Reg. 61471. Consequently, STV also submits its Request for Hearing in this docket.

II. INTEREST OF THE INTERVENOR

A. STV has standing because it already has met the requirements for and been found to have standing earlier in this docket.

The genesis of this proceeding, Docket No. 40-8838, was the Commission's publication of notice of hearing (64 Fed. Reg. 70294, December 16, 1999) in connection with the Army's application for an amendment to its material license (SUB-1435) that would authorize the decommissioning of its Jefferson Proving Grounds Site located in Madison, Indiana, as a prerequisite to termination of that license. In response to that notice, STV filed a timely hearing request which was "granted in LBP-00-9, 51 NRC 159 (2000) on a determination that STV had established, as required by 10 C.F.R. § 2.1205(h), both its standing and the existence of an area of concern that was germane to the subject matter of the proceeding." See LBP-01-32, at 2-3.

Although it has submitted yet another plan to achieve them, the Army's goal and purpose are fundamentally and essentially the same as when it filed its first LTP in this proceeding – amending its material license (SUB-1435) preparatory to decommissioning the DU areas of the JPG site. In addition, although the Army's plan for eventual license termination has undergone significant revisions over the past several years, the basic nature of this proceeding and its subject matter have not changed.

Further, in the Memorandum and Order Granting Request to Put Hearing into Abeyance issued November 7, 2001, the Presiding Officer found that STV need not again plead its standing

for the purposes of granting future JPG hearing requests. Id., at 9. Specifically, the Presiding Officer stated, “I can perceive no good reason for putting STV to the burden, light as it may turn out to be, of having to reestablish its standing to question an Army decommissioning plan (no matter how denominated) for the JPG site.” Id.

Therefore, STV has standing with respect to a hearing on the Army’s POLA request because STV has already met the requirements of and been found to have standing with respect to the Army’s prior license termination and decommissioning proposals and the ongoing subject matter of this docket..

B. Save The Valley has an interest in this proceeding.

STV was incorporated in 1974 as a nonprofit environmental organization and is based in the Madison, Indiana area. STV was founded with the purpose of protecting the environment of the Ohio River Valley in Southeastern Indiana and Northeastern Kentucky between Lawrenceburg, Indiana and Louisville, Kentucky. This area includes the Jefferson Proving Ground and its surroundings.

Between 1984 and 1994, the Army engaged in activities at the Jefferson Proving Ground that produced approximately 220,000 pounds of depleted uranium (DU) projectiles and fragments at that site. The JPG site is located in Jefferson County, Indiana, which has a population of approximately 31,705 people. See Revised DP, at 3-1 & 2. Madison, Indiana is the nearest population center and has a population of 12,004 people, or approximately one-third of the Jefferson County population. Id. There are approximately 85,782 people living in the counties within a 15 mile radius of the DU area. Id.

Public water from a municipal system, or deep wells, is used by nearby communities or individuals. Id. Prominent water pathways on-site are Big Creek, Graham Creek, Otter Creek,

Harberts Creek, and several smaller creeks that are sub-basins of the Muscatatuck River, White River, and the Ohio River. Id. The Ohio River is located eight miles south of the site. Id.

Members of STV live primarily on property or in communities near the Jefferson Proving Ground. Some of these members live on property that is traversed by Big Creek downstream from the JPG. Other STV members hold property interests in land which may be affected by DU migration. These STV members are concerned about the effects of DU migration on their health and property, as well as on human health and the environment in the Big Creek area generally. These STV members, as well as local public officials, have expressed concern about the potential health effects to the general public of DU migration. STV, as an organization located in the general vicinity of the DU area, also has an interest in the air, land, wildlife and other natural resources that could be affected by the proposed license amendment and/or termination.

C. STV's request for a hearing is timely.

Pursuant to 10 CFR § 2.1205(a), “any person whose interest may be affected by a proceeding for the grant, transfer, renewal, or licensee-initiated amendment of a license subject to this subpart may file a request for a hearing.” When a non-applicant requests such a hearing, the request must be filed within thirty days from the agency’s publication in the Federal Register of a notice referring or relating to a licensing action. 10 CFR § 2.1205(d). In computing any period of time, the day of the act, event, or default after which the designated period of time begins to run is not included but the last day of the period being computed is included unless it is a Saturday, Sunday, or legal holiday, in which case the period runs until the end of the next day which is neither a Saturday, Sunday, nor holiday. See 10 CFR § 2.710.

Documents are filed with the Office of the Secretary in adjudications subject to subpart L either: (1) By delivery to the Rulemakings and Adjudications Staff of the Office of the Secretary

at One White Flint North, 11555 Rockville Pike, Rockville, MD 20852; or (2) By mail, telegram or facsimile addressed to the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemakings and Adjudications Staff. Filing by mail, telegram or facsimile is complete as of the time of deposit in the mail, with the telegraph company, or upon facsimile transmission. Filing by other means is complete as of the time of delivery to the Rulemakings and Adjudications Staff of the Office of the Secretary. See 10 C.F.R. 2.1203(b).

The NRC published its notice of opportunity for hearing on October 28, 2003. Thirty days from the publication date would be November 27, 2003, which is a holiday, and therefore the deadline for requesting a hearing would be Friday, November 28, 2003. STV's request for hearing is being filed by mail (and e-mail) on Wednesday, November 26, 2003, and is therefore timely.

III. STV's AREAS OF CONCERN PURSUANT TO 10 CFR § 2.1250: THE REQUESTED POLA IS INADEQUATE AND DEFICIENT IN MEETING THE REQUIREMENTS OF 10 CFR § 40.42(g)(2).

In an informal proceeding under § 2.1205(e), "areas of concern" constitute the general subject matter of issues that a petitioner seeks to litigate. Sequoyah Fuels Corporation, 50 N.R.C. 386, 395 (1999). These statements of concern must be sufficient to establish that the issues the petitioner seeks to raise fall "generally" within the range of matters properly subject to challenge in the proceeding. See NRC Statement of Considerations for 10 C.F.R. Part 2: Informal Hearing Procedures for Materials Licensing Adjudications, 54 Fed. Reg. 8269, 8272 (1989); Atlas Corp. (Moab, Utah Facility), LBP-97-9, 45 N.R.C. 414, 423 (1997). An area of concern is germane if it is relevant to whether the license amendment should be denied or conditioned. Hvdro Resources, Inc., LBP-98-9, 47 N.R.C. 261, 280 (1998).

NRC regulations state that an alternate schedule for the filing of a decommissioning plan may be approved only if it meets three requirements:

1. It is necessary to the effective conduct of decommissioning operations;
2. It presents no undue risk from radiation to the public health and safety; and
3. It is otherwise in the public interest.

10 C.F.R. 40.42(g)(2). STV seeks to raise concerns in all three areas.

A. Is the Alternate Schedule Necessary to the Effective Conduct of Decommissioning Operations?

This is obviously the centerpiece of the Army request. The Army maintains that the alternate schedule is necessary to protect the health and safety of its employees and contractors due to the presence of UXO. In particular, DA contends that the UXO precludes the activities that are necessary for adequate site characterization to support an appropriate decommissioning plan for the site. This is an attractive rationale for the Army: it conjures up the image of uniformed personnel stepping on UXO and being wounded and killed at a time when such images are especially powerful in the public mind due to the war in Iraq. However, STV contests both the factual and the regulatory basis for the Army's contention.

- 1. The Army has not presented an adequate factual basis to establish the need for an alternate schedule.**

Certainly, there are significant amounts of UXO at the JPG site – STV does not question that. But, the critical questions raised by the Army POLA request are these:

- First, what activities would be required for adequate site characterization?
- Second, could these activities be performed without undue risk to the safety of DA personnel?

The Army has presented no factual basis whatsoever for answering these questions in a manner that would preclude performance of the necessary site characterization activities, even though this is clearly its responsibility under the applicable regulations. Moreover, the public record strongly suggests that the activities necessary for adequate site characterization could be performed without undue safety risks to the personnel performing those activities notwithstanding the presence of UXO.

For example, during the period of DU ordnance testing, the Army routinely conducted sweeps of the DU Impact Area to retrieve DU rounds. See Revised DP, at 4-1. Since the account contained in the Revised DP does not indicate exactly when recovery sweeps were done, it is difficult to estimate how much retrievable DU munitions remain on the ground's surface. The Army is also less than clear with respect to the purpose(s) for which the prior recovery sweeps were performed. However, given that DU in substantial amounts was previously recovered for some purpose, it follows that DU rounds should be recoverable subsequently to determine precisely their composition and radiological and toxicological properties, as well as for remediation.

The Army also conducted surveys of the DU impact area without incident after it had stopped ordnance testing. With regard to those surveys, the Army stated:

It is important to note that **no areas** or surfaces within the 1,300-acre (5.3-km²) JPG DU Impact Area **were inaccessible** for this survey. **Due to the potential presence of UXO, suitable precautions were taken in the field to prevent the occurrence of any accidents involving such UXO.** The only other hazard present, which did not hinder the conduct of the survey, was the presence of sometimes rugged and steep terrain.

Revised DP, at 4-10 (emphasis added).

Thus, the Army's contention now that such activities would be impossible is belied by its own characterization survey. See Revised DP, § 4.2.2. The Army's own description of its

sampling program indicated that “no areas or surfaces within the 1,300-acre DU Impact Area were inaccessible for this survey.” The Army further describes how it sampled soil beneath DU imbedded rounds, taking “suitable precautions” to prevent the occurrence of any accidents involving UXO at the site. Inasmuch as it was able to inventory and recover DU in the past without incurring harm from the UXO, the Army should be able to conduct similar actions in the future for testing and characterization.

Moreover, the Army has drilled ground-water monitoring wells at the JPG site as recently as August, 2002, for purposes of its Regional Range Study, which further bring its contention into question:

Due to the size of JPG, the presence of multiple ground-water basins, and budgetary constraints, one general area was examined to evaluate the potential impact of live-fire training operations on ground-water quality. The selected study area (Figure 6-1) is within or in close proximity to the Delta Impact Area. . . .

Eight wells were installed by USACHPPM. **Four wells were installed within or near the perimeter of Impact Field 3W. Three wells were installed near the perimeter or within Impact Field 5.3E. One well was installed inside the Delta Impact Area.** Access to planned drilling locations shown in the QAPP was not feasible **at some locations** due to the presence of extensive UXO and topographical features, which precluded vehicle access to locations.”

See Regional Range Study, Jefferson Proving Ground, Madison, Indiana, Section 6, Groundwater, at 5, 8 (emphasis added).

Thus, STV’s first area of concern is that the presence of UXO at the JPG site does not actually preclude the performance of the activities required for adequate site characterization without undue risk to the safety of the DA employees and contractors performing the activities.

2. The Army has not presented an adequate regulatory basis to establish the need for an alternate schedule.

STV’s other concern that is germane here is that the indefinite postponement of decommissioning at JPG is inimical rather than necessary to the conduct of effective

decommissioning operations. The whole purpose of 10 C.F.R. § 40.42 is **timely**

decommissioning and decontamination. Here is what the NRC said in proposing the rule in

1993:

Over the past several years, the Nuclear Regulatory Commission (NRC) has identified over 40 nuclear material sites that warrant special attention by the Commission. The sites have buildings, former waste disposal areas, large piles of tailings, ground water, and soil contaminated with low levels of uranium or thorium (source material) or other radionuclides. Consequently, they present varying degrees of radiological hazard, cleanup complexity, and cost. At some sites, licensees are financially and technically capable of completing cleanup in a reasonable timeframe, whereas at other sites, the licensee or responsible party is unable or unwilling to perform cleanup. In addition, the sites are currently in various stages of decommissioning. At some sites, licensees have initiated decommissioning, whereas at other sites, decommissioning has not yet been planned or initiated.

In 1990, the NRC implemented the Site Decommissioning Management Plan (SDMP) to identify and resolve issues associated with the timely cleanup of these sites. The SDMP does not include mere routine decommissioning cases. The SDMP has been effective in ensuring coordination and resolution of some of the policy and regulatory issues affecting site decommissioning. Progress on actual site remediation, however, continues to be slow. The limited progress to date prompted the Commission to direct the NRC staff to initiate actions to accelerate the cleanup of SDMP sites. The staff developed, and on April 3, 1992, the Commission approved, an Action Plan to describe NRC's case-by-case approach for accelerating remediation of sites listed in the SDMP.

These SDMP contaminated sites are symptomatic of the need for definitive NRC regulations which specify acceptable time periods for decommissioning nuclear material facilities when the licensed activities have ceased. If decommissioning is delayed for long periods following cessation of operations, there is a risk that safety practices at the inactive facility or the inactive portion of the operating facility may become lax as key personnel relocate and management interest wanes. In addition, bankruptcy, corporate takeover, or other unforeseen changes in the company's financial status may complicate and perhaps further delay decommissioning.

The issuance of a rule to establish timeliness criteria for decommissioning nuclear materials licensee facilities would avoid future problems resulting from delayed actions on cleanup of contaminated inactive facilities, and minimize the difficulties associated with a case-by-case approach to requiring timely decontamination and decommissioning.

See 58 Fed. Reg. at 4099-4100.

In particular, the NRC proclaimed:

The lack of definitive criteria as to when licensees shall commence and complete decommissioning their facilities has resulted in instances where the Commission has had to issue orders to establish schedules for timely decommissioning. Because timeliness in decommissioning is a generic issue, the Commission is proposing to amend its regulations to clearly delineate the licensee's responsibility for timely decommissioning. **The proposed rule would provide the needed regulatory basis for compelling decommissioning in a timely manner. In addition, the proposed rule would place a limit on the time permitted to decontaminate and decommission and place the burden of proof directly on the licensee to demonstrate that a longer period of time is required for completing decommissioning.**

See 58 Fed. Reg. at 4100 (emphasis added).

Here, the alternate schedule fails to “place a limit on the time permitted to decontaminate and decommission” the site. Instead, it extends the time for submission of a DP indefinitely. It also fails to “place the burden of proof directly on the licensee to demonstrate that a longer period of time is required for completing decommissioning.” Instead, it effectively places the burden on STV (or any other concerned group in the future) to demonstrate that a shorter period is required. This effectively turns the rule on its head and creates precisely the type of situation which the rule was adopted to correct and prevent: the indefinite postponement of the decommissioning of licensed sites. And, it does so at an SDMP site.

B. Does the Alternate Schedule Present No Undue Risk from Radiation to the Public Health and Safety?

Basically, STV has the same concerns here that it offered in response to the 2002 LTP. First, without adequate site characterization, the Army cannot properly estimate the long-term risk to public health and safety from radiation resulting from an indefinite delay in decommissioning and decontamination. Second, without expanded and improved ground and

surface water monitoring, the Army will not be able to detect whether that risk is increasing over time as decommissioning and decontamination is delayed.

1. **The Army's characterization of the site is still flawed, inadequate and incomplete, making it impossible for the Army's modeling to verify that the indefinite delay in decommissioning and decontamination presents no undue risk from radiation to public health and safety.**

To construct an adequate exposure scenario for a site, the licensee must utilize accurate and complete information about the site and the surrounding area. Site characterization plays a foundational role in making calculations and determinations about radioactive dose, environmental remediation, and institutional controls at a site. If the site characterization is inaccurate or invalid, the calculations and determinations required to predict future effects on public health and safety will be equally erroneous and the source term model will be invalid.

As previously noted by both STV and the Staff during the review of the Revised DP, the JPG Conceptual Site Model (CSM), is flawed, inaccurate and incomplete. Specifically, the Army has failed to present verifiable data regarding dose modeling or the effects on exposure pathways of meteorological, geological, animal, and human features of JPG and the surrounding area. The Army has not corrected this failure in conjunction with its POLA request. This failure results in an inability by the Army to predict with accuracy the effects from radiation on public health and safety of an indefinite delay in decommissioning.

- a. The Army's Dose Modeling is inaccurate and incomplete.

Licensees requesting decommissioning must submit estimates of the potential future dose that could be caused by residual radioactivity remaining at the site after decommissioning activities are undertaken. See NMSS Decommissioning Program, Standard Review Plan 16.0: Restricted Use/Alternate Criteria (NUREG-1727), at 5.1. Dose limits are designed to allow the licensee and the NRC to take site-specific information into account in determining what, if any

remediation is necessary to assure acceptable concentrations of residual radioactivity at the site.

Id.

The Army's Dose Modeling is flawed because its conclusion that the TEDE limit will not exceed 25 mrem/yr is based on a generic rather than a site-specific model. Furthermore, the assumptions underlying its generic model are flawed when applied to JPG. For example, the Army assumes an average distribution of DU rather than concentrated pockets of the material. This assumption will generate concentration numbers in the model which are lower than those actually occurring. The dose measurement calculation also is flawed with respect to estimated doses for on-site recreationists, hunters, and fishermen as well as water users downstream of the JPG site. STV is also concerned that the Army's dose model is strictly hypothetical with respect to changes over time.

Further, it is apparent that the DU at JPG has not been tested for impurities, including the amounts of Plutonium, U-236, Neptunium, Americium, and other transuranics that it may contain. In order to assess fully the possible exposure risks to the environment and human health, the Army should know the exact composition of the JPG DU in terms of its constituent radioactive elements. The Army has yet to do such an analysis and without doing so, it cannot perform complete and accurate dose modeling.

In addition, the Army has provided insufficient data on the migration of DU contamination from the DU impact area into surrounding environmental media, including groundwater, surface water, air, soil, and biota (both plant and animal). While some data are provided characterizing the DU impact area itself, very little data has been developed regarding the extent of DU contamination and migration outside the impact area. Moreover, the Army's characterization of the surrounding area for purposes of defining exposure pathways includes

some startling inaccuracies.

For example, the Army identifies Bedford as the nearest downstream population center with a public water supply which could be affected by off-site migration of DU contamination. However, there are at least two public water supply systems that are closer to JPG than Bedford and which obtain their water from the Muscatatuck River downstream from the point at which Big Creek joins the river. Those two systems are Stucker Fork Water Utility, serving western Jefferson County and eastern Scott County, as well as the Scottsburg Water Department, which serves eleven thousand (11, 000) customers in Scott County.

- b. The Army's analysis is also inaccurate and incomplete with respect to key phenomena affecting exposure pathways, such as Indiana's weather, geology and hydrology.

The Army's site characterization is also inaccurate and incomplete with respect to weather phenomena in Indiana. For example, it does not consider tornadoes, which are common in Indiana, and their effect on soil and vegetation merely because the area lacks buildings which could be affected. In addition, the Army is wrong – again, startlingly so – with regard to the direction of prevailing winds at the JPG site.

The Army's analysis of geological conditions is also questionable. STV believes the Army has either overlooked or ignored the impacts of significant unconsolidated glacial deposits and karst in the JPG area. Located under the topsoil, the relatively porous layers of glacial till material allow water and other substances to flow readily through the ground. Karst refers to regions of limestone or other soluble rocks, where drainage has been largely diverted into subterranean routes. The topography of these areas is dominated by sinkholes, sinking streams, large springs, and underground caves. Groundwater will often travel through such formations at a faster rate and by more unpredictable routes than through other formations. In addition, the area

has been subject to test-firing of exploding ordinance which may have exacerbated the natural fractures. The presence of such formations generally requires data and modeling that the Army has either not performed or not made available.

Although the Army observes that the JPG area has an expanding beaver population which is creating new water impoundments, the Army has failed to consider the impacts such impoundments can have on the water table or on water flows.

In some instances the Army has relied solely on state databases, such as those regarding adjacent wells, which are often incomplete and inaccurate. The Army concedes the existence of domestic and stock groundwater wells in close proximity to JPG's western boundary, down-gradient from the DU area, but states that "it is unknown if these wells currently are operational." See Revised DP, at p. 3-21. These wells are, in fact, currently in use for human consumption and present a real potential of human DU contamination given the ability of DU to migrate through groundwater.

2. The Army's updated Environmental Radiation Monitoring Plan is still inadequate in several material respects.

STV is concerned that the updated Environmental Radiation Monitoring Plan ("ERMP") submitted by the Army to support its POLA request is still inadequate in a number of material respects. For example:

- The ERMP states with respect to the monitoring results for the various environmental media that, at 50% of Action Level, SBCCOM will conduct an "independent assessment" of the results and any trends. See ERMP, Table 3-1. Yet, there is no specification of the assessment which will be performed and no explanation offered as to how an assessment, however specified, will be "independent" if it is performed by the Army.
- The ERMP also states with respect to the monitoring results for the various environmental media that, if an Action Level is reached and that result is confirmed by additional sampling, specific remedial actions and timetables "may" be defined. See ERMP, Table 3-1. But, the whole point of an "Action Level" is to establish a monitoring result at which defined remedial action "shall" occur. Otherwise, the concept becomes

meaningless.

- The ERMP incorrectly denies the existence of neighbors who use private wells for drinking water:

Onsite and offsite human and ecological receptors could be impacted by DU leaching through soil to the underlying aquifer. Contaminated groundwater can enter the human or ecological food chain indirectly (e.g., livestock drinking water) or directly (e.g., drinking water supply). Direct exposure of humans to drinking water is unlikely given that the aquifer is not a drinking water source and is of poor quality (Rust, 1998).

See ERMP, at 3-4. However, it is known that two of the original STV affiants who live directly west of JPG get their drinking water from a private well, as do some other nearby residents. The Regional Range Study also acknowledges that “[t]here are limited numbers of private wells in the area surrounding JPG (Ebasco, 1990).” See Regional Range Study, Section 6, at 4.

- The aquifer underlying the JPG site is not sufficiently characterized to demonstrate its extent and gradient – as the Army itself has previously conceded. See Regional Range Study, Section 6.5.2.3.2, Hydrogeology, at 35 (“Monitoring wells near and within the Delta Impact Area south of Big Creek are too widely spaced to construct a meaningful ground-water elevation contour map.”)
- The entire monitoring data history for the JPG site is not used in the ERMP’s trend analyses. Most of the trending analyses begin in 1994 or 1996, with some beginning as late as 1998. The absence of discernable trends over the selected time period is then cited as the justification for not performing expanded sampling. See, e.g. ERMP, at 3-6. Establishment of background levels is critical to any data analysis. Examination of the entire data history, i.e. 1984/85 to present, would also provide a more complete picture for analysis purposes. Moreover, the ERMP characterizes historic data trends (or the absence thereof) in narrative terms, but the actual data are not included for review and confirmation of the Army’s conclusions.
- The ERMP dismisses the need for air monitoring during future prescribed burns. See ERMP, at 3-10 to 11. It also denies the need for future biota sampling. See ERMP, at 3-12. STV contends that these conclusions are based on insufficient site-specific information and references to other studies which are not representative of JPG.

C. Is the Alternate Schedule Otherwise in the Public Interest?

Despite a diligent search of reported NRC cases and ADAMS documents, STV has been unable to identify a single prior instance in which 10 C.F.R. § 40.42(g)(2) has been cited as the basis for an indefinite delay in the submittal of a decommissioning plan for a Commission

licensee. Based on the NRC's own policy statement in the preamble to the Timely Decommissioning Rule, STV has a concern that an indefinite delay in the submittal of a decommissioning plan is contrary to the regulatory principle of timely decommissioning and decontamination established by law and would thus set a bad precedent in a case of first impression. In STV's view, such a bad precedent is NOT in the public interest.

To address this concern, STV would use the requested hearing to propose additional conditions that should be included in the POLA "in the public interest" to assure that:

1. Any authorized delay in the submission of a decommissioning plan for JPG be for a definite rather than indefinite period of time;

2. In the future, DA must meet specific conditions to demonstrate that any further, definite delay in site characterization is warranted because specific, identified activities cannot be performed safely due to the specific, identified locations of UXO and specific, identified limitations in UXO detection and recovery technology that combine to preclude adequate site characterization; and

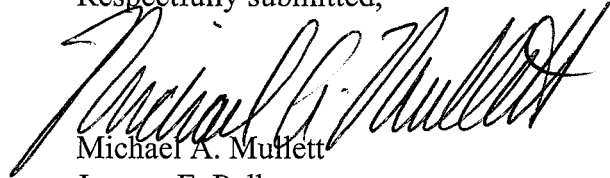
3. Site monitoring is adequate to assure that any measurable increase in risk to public health and the environment will actually be identified during the approved delay in decommissioning.

IV. CONCLUSION

For the foregoing reasons, STV requests that the Commission take notice of STV's intervenor status and schedule a hearing to address its concerns as outlined in this document. In view of the fact that the NRC Staff's technical review is not yet complete, STV has concurrently filed a motion requesting that the requested hearing be scheduled after the technical review is complete. Should this motion be granted, STV further requests leave to supplement its areas of

concern prior to the hearing should additional concerns be discovered after more extensive review.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael A. Mullett". The signature is written in a cursive style with a large, stylized initial "M".

Michael A. Mullett

Jerome E. Polk

Mullett, Polk & Associates, LLC

309 West Washington Street, Suite 233

Indianapolis, IN 46204

Phone: (317) 636-5165

Fax: (317) 636-5435

E-mail: jpolk@mullettlaw.com

mmullett@mullettlaw.com

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing pleading have been served this 26th day of November, 2003, upon the following persons by electronic mail and by U.S. Mail, first class postage prepaid.

Administrative Judge Alan S. Rosenthal,
Presiding Officer
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Mail Stop: T-3-F-23
Washington, D.C. 20555-0001

Adjudicatory File
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Mail Stop: T-3-F-23
Washington, D.C. 20555

Richard C. Wakeling, Esq. U.S. Army
Garrison Proving Ground
2201 Aberdeen Boulevard
Office of the Staff Judge Advocate,
AMSSB-GJA (Bldg. 310)
Aberdeen Proving Ground, MD 21005-5001

Administrative Judge Thomas D. Murphy
Special Assistant
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Mail Stop: T-3-F-23
Washington, D.C. 20555

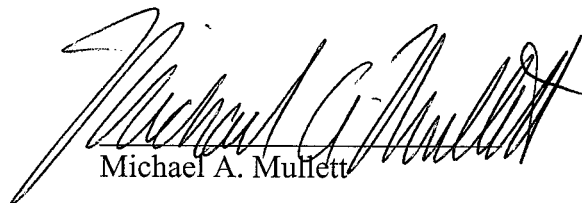
Office of the Secretary
ATTN: Rulemaking and Adjudications Staff
U.S. Nuclear Regulatory Commission
Mail Stop: O-16-G-15
Washington, D.C. 20555

Richard Hill, President
Save The Valley
P.O. Box 813
Madison, IN 47250

Stephen H. Lewis
David A. Cummings
Office of the General Counsel
U.S. Nuclear Regulatory Commission 0-15D21
Washington, DC 20555

Office of Commission Appellate Adjudication
U.S. Nuclear Regulatory Commission
Mail Stop: O-16-G-15
Washington, D.C. 20555

Tom McLaughlin, Decommissioning Branch
Division of Waste Management
Office of Nuclear Materials and Safegaurds
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001


Michael A. Mullett

MULLETT, POLK & ASSOCIATES, LLC

ATTORNEYS AT LAW
Old Trails Building, Suite 233
309 West Washington Street
Indianapolis, IN 46204-2721

Phone: (317) 636-5165

Fax: (317) 636-5435

November 26, 2003

Office of the Secretary
ATTN: Rulemaking and Adjudications Staff
U.S. Nuclear Regulatory Commission
Mail Stop: O-16-G-15
Washington, D.C. 20555

Re: Request for Hearing of Save The Valley, Inc. - In re U.S. Army (Jefferson Proving Ground),
Docket No. 40-8838-MLA, ASLBP No. 00-776-04-MLA

Dear Secretary:

Enclosed please find for filing in the above referenced case the original and two conforming copies of:

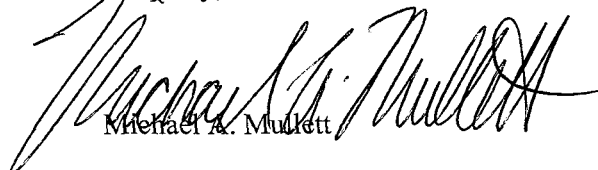
1. Save the Valley's Request for Hearing Regarding Contingent Request of the Department of the Army for a Possession-Only License Amendment; and
2. Save the Valley's Motion to Schedule Hearing Following Completion of Technical Review.

These pleadings are also being forwarded electronically.

Also enclosed please find an additional copy of each of the pleadings to be file stamped and returned to me in the enclosed self-addressed, stamped envelope.

Thank you.

Sincerely,



Michael A. Mullett