RAS 5717

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

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

In the Matter of	)	Docket No. 40-8838-MLA
U.S. ARMY	)	ASLBP No. 00-776-04-MLA
(Jefferson Proving Ground Site)	)	February 3, 2003

REPLY OF SAVE THE VALLEY, INC.
IN SUPPORT OF REQUEST FOR HEARING

On December 12, 2002, Save The Valley, Inc. ("STV") submitted its Request for Hearing and Comments with respect to the revised License Termination Plan ("LTP") of the Department of the Army ("DA") for the Jefferson Proving Ground ("JPG") Depleted Uranium ("DU") Test Site. On January 17, 2003, DA filed and served by mail its Response opposing STV's Request for Hearing on the grounds that none of STV's areas of concern are germane.

Pursuant to 10 C.F.R. §§ 2.706 and 2.710, STV respectfully submits that DA's Response is without merit and replies to each of DA's arguments opposing STV's Request for Hearing, as follows:

1. "STV's assertion [of] other restricted release alternatives which include partial remediation and continued monitoring [is] outside the scope of regulatory requirements and [is] not germane to proposed license termination amendment sought by DA." (DA Response, at 2).

Template=SECY-037

SECY-02

Prior to adoption of its current decommissioning rules in 1997, the NRC did not permit release of a facility for restricted use but limited a licensee's options in decommissioning to release of a facility for unrestricted use. 62 Fed. Reg. 39058, 39069. In providing for release for restricted use in the proposed version of its current rules, the NRC would have permitted restricted use only when release for unrestricted use would be "prohibitively expensive" or "technically infeasible." Id. After considering the comments on its proposed rules, the Commission rejected such strict requirements because they would virtually eliminate the option of release for restricted use. Id. Nevertheless, it maintained "the philosophy that, in general, termination of a license for unrestricted use is preferable because it requires no additional precautions or limitations on use of the site after licensing control ceases, in particular for those sites with long-lived nuclides. In addition, there may be societal or economic benefits related to future value of the unrestricted use of the land to the community." Id. To balance these competing considerations affecting release for restricted use, the Commission substituted a more flexible ALARA standard in the final rule for the stricter standards it had included in the proposed rule. Id. But, in so doing, the NRC expressly stated, "To support a request for restricted use, a licensee would perform an ALARA analysis of the risks and benefits of **all viable alternatives** and include consideration of any detriments." Id. (emphasis supplied). See also NUREG-1727, Section 6.0, "Alternatives Considered and Rationale for Chosen Alternative." Thus, contrary to the DA position, the ALARA analysis required here is **not** limited to **only** the restricted use alternative proposed by the Army but **must** include other viable alternatives such as that proposed by STV as well.

The DA's out-of-context citation to NUREG-1727, Section 5.3, does not challenge this

conclusion. In context, the NUREG-1727 provision cited by DA simply requires applicants to show that dose limits are not exceeded for its preferred alternative under two different assumptions: where restricted conditions are working and where restricted conditions have failed, respectively. By contrast, the ALARA requirement is addressed in NUREG-1727, Section 7.0, which expressly states in pertinent part:

> For many situations, licensees will need to prepare quantitative analyses of alternate decommissioning activities (e.g., removal for disposal versus burial in place) or decommissioning goals [3.7 Bq/g (100pCi/g) vs. 2.8 Bq/g (75 pCi/g)]. **The comparison of interest is the incremental difference in benefits and costs between the alternative and the preferred option.**

NUREG-1727, at 7.3 (emphasis supplied).

For STV, DA's obligation to look at reasonable alternatives to the one it prefers was reinforced by the comments of an NRC representative at a JPG Restoration Advisory Board meeting:

> **MR. ROBERT NELSON:**
>
> Good evening. My name is Bob Nelson. I'm with the Nuclear Regulatory Commission. I'm chief of the Facilities Decommissioning Section that would review the decommissioning plan for this - this site. . . .
>
> . . . Actually there's three (3) alternatives that come to mind right away. Do nothing, which is maintain the license. . . . We always look at the no action alternative. And in that case - in this case that means maintain the license. Second alternative is the proposed alternative, that is to release it under conditions of restricted use. The third is clean it up, get it out of here. So we would look at least those three (3). **There may be others.** I'm not sure what they would be at this point but we - I'm convinced that we would look at least at those three (3) alternatives. **And there may be iterations of those alternatives that we would want to look at. Some mitigating actions that maybe - maybe not have been proposed that come to our mind that we think maybe ought to be added in to the plan for example.** But we really haven't started the process yet so I don't want to get too far down that road committing to things that we haven't really started to look at yet. But - but those are the types of alternatives we would look

at . . . .

See http://jpg.sbccom.army.mil/community/rab_minutes.htm (May, 2000 meeting) (emphasis supplied).

2. "STV's assertion that the Army may be required by state or federal agencies other than NRC to engage in mitigation and monitoring is speculative and not germane to DA's net public or environmental harm analysis." (DA Response, at 3).

In urging a decommissioning plan that considers both the toxic and the radiologic impacts of DU, STV seeks no more than what the Commission's current rules require. As the Commission itself has noted, "Both terms, net public harm and net environmental harm, are retained in the final rule to indicate that a licensee's evaluation should consider the radiological **and nonradiological impacts** of decommissioning on persons who may be impacted, as well as the potential impact on ecological systems from decommissioning activities." 62 Fed. Reg. at 39,069 (emphasis supplied).

As DA contends, it is true that such a course could implicate the jurisdiction of agencies in addition to the NRC. But, this is no reason for either DA or the NRC to ignore the legal and logical imperatives of that course. Indeed, Congress and the GAO have recommended in recent reports and the Commission has directed in a very recent MOA the inter-agency coordination and consultation required to determine the optimal decommissioning plan for contaminated sites by considering **all** the foreseeable impacts (toxic as well as radiologic) and **all** the regulatory requirements (NRC or otherwise) applicable to them.

In 1999, the House Commission on Appropriations issued a report which strongly

encouraged the NRC and EPA to coordinate their regulatory oversight so as to avoid dual regulation of the same site. 67 Fed. Reg. at 65,375. In 2000, the General Accounting Office issued a report with the same recommendation. Id. In partial response, on October 17, 2002, the Commission executed a Memorandum of Agreement ("MOA") with the Environmental Protection Agency entitled "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites." This MOA provides for coordination and consultation between the two agencies in relation to one major source of dual regulation (CERCLA). The MOA applies to three priority site categories, one of which is the site category involved here: "where NRC contemplates restricted release or alternate criteria for release of the site." Id.

The conclusion that inter-agency coordination and consultation across jurisdictional boundaries is to be encouraged rather than prohibited in developing the JPG LTP is reinforced by NUREG-1727, Section 6.0, which expressly states:

> An otherwise reasonable alternative will not be excluded from discussion solely on the grounds that it is not within the jurisdiction of the NRC.
>
> Reasonable alternatives included those that are practical or feasible from a common sense, technical, or economic standpoint, rather simply being desirable from the standpoint of the applicant. . . . In fact, an alternative that is outside NRC's legal jurisdiction must still be analyzed if it is reasonable.

NUREG-1727, at 6.4. As a federal agency and an NRC licensee, DA should heed rather than ignore the regulatory guidance offered by the Congress, the GAO and the Commission.

3. "STV's alleged inadequacy of institutional controls attributable to alleged off-site migration of DU is not germane [because] [i]nstitutional control requirements are not designed to

prevent alleged migration of radiological exposure off the site but to ensure that exposure on the site fall within permissible exposure limits." (DA Response, at 4).

This DA argument is a classic example of "thinking inside the box"–in this case, the wrong box. The point that STV is making is precisely what DA is conceding: **institutional controls are not designed to prevent migration of radiological exposure off the site.** This inherent limitation is one of the "detriments" associated with DA's preferred alternative of institutional controls with no additional remediation or future monitoring which a proper ALARA analysis would unquestionably reflect. The fact that the DA proposal results in projected exposure below the unrestricted dose criterion is not enough to satisfy the regulatory requirement applicable here. As the Commission itself recognized in adopting its current rule authorizing restricted release, "the rule continues to require an ALARA evaluation **below the unrestricted dose criterion.**" 62 Fed. Reg. at 39,065 (emphasis supplied).

Moreover, the Commission provided for an ALARA evaluation below the unrestricted dose criterion for the precise purpose of distinguishing between remediation measures having costs that are "excessive" from those with costs that are "reasonable." For example, the Commission expressly stated its expectation that, "ALARA during decommissioning should include typical good practice efforts (e.g., floor and wall washing, **removal of readily removable radioactivity** in buildings or **in soil areas**), as well as ALARA analyses for buildings to levels less than 0.25 mSv/y (25 mrem/y) based on the number of individuals projected to be occupying the building, but that an ALARA analysis below 0.25 mSv/y (25 mrem/y) for soil removal would not need to be done." 62 Fed. Reg. at 39,066 (emphasis supplied) The Commission also recognized that groundwater contamination implicating drinking water sources

requires special consideration in a proper ALARA evaluation. Id. Additionally, the NRC contemplated that a proper ALARA analysis would reflect the results of consultation with affected communities regarding their evaluations of the costs and benefits of alternate approaches to site decommissioning. Id.

4. "STV's challenge to the adequacy of financial assurance is not germane since it seeks action DA is prohibited by law from taking." (DA Response, at 4).

NRC regulations provide that a site will be acceptable for license termination under restricted conditions only if the licensee has provided sufficient financial assurance to enable a third party to assume and carry out responsibilities for any necessary control and maintenance of the site. 10 C.F.R. § 20.1403(c). A federal entity may establish financial assurance by issuing a statement of intent as described in 10 C.F.R. § 30.35(f)(4). Id. A statement of intent must contain a cost estimate for decommissioning and indicate that funds for decommissioning will be obtained when necessary. 10 C.F.R. § 30.35(f)(4). Further, the decommissioning funding plan must also contain a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate. 10 C.F.R. § 30.35(e).

The DA's proffered statement of intent fails to meet the applicable regulatory standard because it does not certify, pursuant to 10 C.F.R § 30.35(e), an amount of financial assurance equal to its cost estimate. Specifically, it fails to certify the amount of financial assurance required by ongoing institutional controls. DA responds to STV's comments related to this matter by arguing that it is prohibited by from "making a commitment to pay money" for ongoing costs associated with implementation and maintenance of institutional controls at JPG. The

statute cited by DA provides in pertinent part that an officer of the United States government may not contract or otherwise obligate the government to pay money before an appropriation is made **unless authorized by law.** 31 U.S.C. § 1341(a)(1)(B) (emphasis added). Because of the regulatory requirements related to license termination, the DA is not only authorized, but required by law to provide financial assurance that the institutional controls at the JPG site will be implemented and maintained over the relevant post-closure period. As a result, STV's objection to DA's inadequate financial assurance is germane to a decision on the Army's proposed DP.[1]

5. "STV fails to specify any particular advice that was presented and not considered." (DA Response, at 5).

DA's contention is refuted by even a cursory review of STV's prior comments on DA's earlier versions of its LTP. For example, in its January 13, 2000 letter commenting and requesting a hearing on the initial LTP, STV specifically identified areas of concern involving the extent of the cleanup of the DU, future monitoring of the site and areas downstream, and the procedures that will be used to insure that use of the site remains restricted. Similarly, in the cover letter for its detailed comments on the first revision to the LTP, submitted on April 23, 2001, STV said:

> We believe that License Termination with its resultant abandonment of remediation and monitoring is not acceptable, either to us or to the public. We do

[1]STV notes for the record that DA's financial assurance addresses only its preferred decommissioning alternative. If another alternative is required to satisfy the ALARA requirement, as STV maintains, the Army's financial assurance would also be inadequate in that regard.

> strongly insist that sensible, incremental remediation should be pursued. And, most importantly, we strongly insist that soil, sediment, surface and groundwater monitoring be continued and that monitoring air, humans, and aquatic and terrestrial wildlife species should be implemented to determine the amount of DU that is migrating off-site and by which pathways migration is occurring.

The comments appended to the April 23, 2001 letter also raised many specific issues with the way the Army had conducted its site characterization, particularly with respect to exposure scenarios and migration pathways. They also specifically questioned whether DA was being responsive to public advice in developing the LTP.

STV and others have also raised these areas of concern in other contexts, including meetings of the Restoration Advisory Board ("RAB"). Particular reference is made, for example, to the minutes of the following RAB meetings: September, 1999 (comments of Ken Knouf re future monitoring); January, 2000 (comments of Richard Hill re future cleanup and monitoring); May, 2000 (comments of Vicki Jenkins re future monitoring). These are generally the same concerns that STV identified in its Comments and Request for a Hearing on the Revised JPG LTP submitted on December 12, 2002.

STV is particularly perplexed that DA appears not to recall at this point the prior occasions on which STV's areas of concern have been expressed. Obviously, DA has access to the record of prior filings in this proceeding cited above. Moreover, at the January, 2000 RAB meeting, the DA's representative, Paul Cloud, expressly stated that he had been providing the DA Program Manager for JPG, a Mr. Pittaglio, with copies of the RAB minutes "so he expected questions like this to arise. And, I will make sure that he's aware that the community has asked some questions about this." See http://jpg.sbccom.army.mil/community/rab_minutes.htm (January, 2000 meeting).

6. "Individuals engaging in criminal trespass activities on site and who engage in the off-site transport of stolen items which are alleged to result in harmful radiological exposure to the general public are not considered part of the critical group to which the standard applies." (DA Response, at 5).

DA indicates that it need not consider risks to trespassers at the JPG site who have the potential to endanger themselves or members of the larger public because these individuals "are not considered part of the critical group to which the standard applies." However, "critical group" is defined by the NRC as "the group of individuals reasonably expected to receive the greatest exposure to residual radioactivity for any applicable set of circumstances." Connecticut Yankee Atomic Power Company, 54 N.R.C. 368 (Dec. 5, 2001).

The "critical group" therefore represents a group of hypothetical persons who, given the range of all reasonable potential uses for the site, would receive the highest doses of radiation from exposure to unmitigated site conditions. Id. Since STV's Comments previously indicated that trespass is a relatively common occurrence at the JPG facility currently, it is entirely reasonable to expect those trespass activities to continue. Given this eventuality, individuals trespassing at the JPG site would certainly constitute members of the "critical group" of occasional users, since they would face the greatest individual exposure to radioactive debris abandoned at JPG after termination.

STV's position in this respect was reinforced by comments made by representatives of the NRC and DA at the May, 2000 RAB meeting:

MR. ROBERT NELSON:

Good evening. My name is Bob Nelson. I'm with the Nuclear Regulatory

Commission. I'm chief of the Facilities Decommissioning Section that would review the decommissioning plan for this - this site. . . .

. . . I think the, correct me if I'm wrong, but the dose assessment that the Army has done for - for an onsite intruder scenario is what, like forty-four (44)?

MR. JOHN CONTARDI:

Forty-four (44) millirem.

MR. ROBERT NELSON:

Forty-four (44) millirem. Well - and that's clearly above twenty-five (25) which is why they have to go for a restricted release. . . .

See http://jpg.sbccom.army.mil/community/rab_minutes.htm (May, 2000 meeting).

Based on these legal and factual considerations, DA's revised LTP is inadequate because it considers neither the dose to trespassing individuals, nor to the individuals who could be harmed by radioactive materials carried away from the site by the former. For this reason, STV's Comments on the DA's failure to protect the public from residual radioactivity are appropriately germane to the criteria set forth in 10 C.F.R. § 20.1403(e).

7. "[A]ssertions by STV to the effect that the Revised LTP is incomplete or inaccurate [regarding site characterization] are without merit and not germane." (DA Response, at 6).

In its Comments and Request for a Hearing, STV maintained that DA's site characterization was flawed because it did not include accurate, site-specific information relevant to dose-modeling and ALARA determinations. Generally, STV complained of DA's use of a generic and hypothetical rather than a site-specific and actual dose model. Additionally, STV pointed to flawed assumptions and inaccurate exposure scenarios (e.g. inaccurate prevailing wind direction, incomplete inventory of public water supplies at risk) related to several different types of individuals likely to be exposed to DU from the JPG site. STV also alleged that the Army's dose modeling failed to account for likely impurities in the DU found at the site, impurities

which have the potential to change the dose estimates related to contact with JPG DU. Finally, STV alleged that DA has not provided adequate data relevant to DU migration away from the site, ignoring or failing to adequately discuss several important exposure pathways related to local climate, geology, and hydrology.

Rather than refuting STV's contentions, DA baldly and simply asserts they are "without merit and not germane." Contrary to DA, incomplete or inaccurate site characterization is germane to whether the JPG LTP should be approved by the ASLB. See, e.g. Connecticut Yankee Atomic Power Co., 54 N.R.C. 33 (July 9, 2001). Moreover, complete and accurate site characterization is fundamental to a proper determination of the degree of remediation required for a site contaminated by depleted uranium. See Chemetron Corp., 44 N.R.C. 47 (July 3, 1996).

Also, contrary to what DA seems to believe, acceptance of a proposed LTP document at the "Acceptance Review" stage does not constitute an approval of the technical accuracy or completeness of the information. See NMSS Decommissioning Standard Review Plan (SRP) 3.0, "Facility Description," at 3.2. "The adequacy of the information will be assessed **during the detailed technical review.**" Id. (emphasis supplied). As a result, the DA's attempt to seek shelter behind the NRC staff's Acceptance Review is transparent, and the question of whether it included sufficient information to facilitate an assessment of the accuracy and plausibility of its dose modeling is indeed germane to any decision on the adequacy of the Revised LTP.

8. "NRC Subpart L, Informal Hearing Procedures for Adjudications in Materials Licensing Proceedings, 10 C.F.R. § 2-1201-2-1263, do not provide for supplementation of areas of concern after completion of technical review by NRC staff." (DA Response, at 6).

Despite the lack of any affirmative provision regarding supplementing an initial statement of areas of concern, the NRC regulations do recognize that circumstances in individual cases will differ and provide accordingly. For example, an applicant may ask in its request for hearing that

procedures other than those authorized under this Subpart L be used in the proceeding, provided that there are special factual circumstances or issues which support the use of other procedures. 10 C.F.R. § 2.1205(b). Thus, NRC regulations explicitly contemplate situations in which the standard procedures will not be sufficient and expressly provide for requests for procedures more appropriate to responding to special circumstances that arise in the hearing process.

Recognizing that the NRC Staff would not complete its technical review or the hearing file for two years, STV formally moved to defer the hearing in this matter until those requisite tasks had been performed. See STV Motion to Defer Hearing Pending Completion of Technical Review. In so doing, STV cited the similar action taken under comparable circumstances in the Sequoyah Fuels Corp. case. See Memorandum and Order, at 3-4, Docket No. 40-8027-MLA-4, ASLB No. 99-70-09-MLA (March 23, 2000). Assuming a hearing is granted, DA does not oppose this request. See DA Supplemental Response to Motion to Defer Hearing, at 2. The NRC Staff supported the STV deferral motion. See Staff's Statement, at 3.

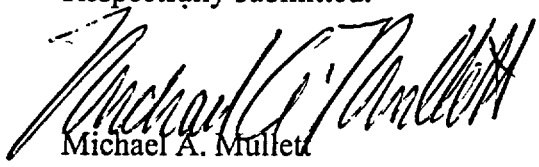
STV's request to supplement its areas of concern after the hearing file has been completed is similarly motivated as its request to defer a hearing. As the Presiding Officer noted in Sequoyah Fuels Corp.:

> As set forth in the Statement of Considerations for 10 C.F.R. Part 2, Subpart L, the statement of concerns need not be extensive but must be sufficient to establish that the issues a petitioner seeks to raise fall "generally" within the range of matters that are properly subject to challenge in the proceeding. 52 Fed. Reg. 8269, 8272 (Feb. 28, 1989). . . .
>
> Nor must the areas of concern be set forth at this stage of the proceeding with the degree of detail or specificity that might be appropriate for an issue that will be litigated. Babcock and Wilcox Co. (Apollo, Pennsylvania Fuel Fabrication Facility), LBP-92-24, 36 N.R.C. 149, 153-54 (1992). In fact, they are more like the "aspects" requirement in formal litigation, setting the stage for formal contentions in those proceedings and definitive issues for litigation in informal adjudications. Combustion Engineering, Inc. (Hematite Fuel Fabrication Facility), LBP-89-23, 30 N.R.C. 140, 147 (1989).

Memorandum and Order, at 16-17, Docket No. 40-8027-MLA-4, ASLB No. 99-70-09-MLA (December 16, 1999). Consequently, it is entirely appropriate for a party to supplement the areas of concern it articulates at this stage of the proceeding with definitive issues for litigation once the hearing file is complete. Id. at 21 ("The specific issues in an area of concern that are to be litigated must be particularized at a later date, following distribution of the hearing file.")

WHEREFORE, Save The Valley, Inc., respectfully renews its request for a hearing in this matter, and for all other relief just and proper in the circumstances.

Respectfully submitted.



Michael A. Mullett
Jerome E. Polk
Mullett, Polk & Associates, LLC
309 West Washington Street, Suite 233
Indianapolis, IN 46204
(317) 636-5165
(317) 636-5435

Attorneys for Save The Valley, Inc.

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing pleading have been served this 3rd day of February, 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