

ER ID#59975

(H)

ited States Government

## memorandum

Department of Energy  
Albuquerque Operations Office  
Los Alamos Area Office  
Los Alamos, New Mexico 87544

DATE:  
REPLY TO  
ATTN OF: LESH:BK: (OU 1071) 1.4.2.6.1.4.2.2  
SUBJECT: SWMU 0-016: Initiation of Shaker Plant VCA

TO: Joseph C. Vozella, Assistant Area Manager, EP

DRAFT

For the subject VCA, you have requested that I identify compliance issues and review the strategy associated with the VCA for meeting compliance requirements via submittal of this memo. The compliance requirements for the remediation fall into three categories: I) HSWA, or corrective action requirements, for validation that the site is clean after the remediation, II) RCRA requirements which cover A) the applicability of recycling and the question of dilution, and B) the hazardous waste determination: validating that the characteristic of lead is removed before releasing the soil after shaking, and III) OSHA, or health and safety requirements. The following discussion is provided in an effort to respond to your request:

#### I. HSWA

The remedial activity has been proposed as a VCA which means that formal approval of the cleanup will not be sought from NMED HRMB and EPA until after the activity has been completed. The approval will be sought via submittal of a VCA Report and a request for a Class III Permit Modification to remove SWMU 0-016 from Table A of the HSWA Permit. Because the Shaker Plant VCA Plan specifies a cleanup level that is the most protective under RCRA corrective actions, 400 ppm for lead under a residential scenario, and because this will be documented by a conservative confirmatory sampling plan, all HSWA requirements will be met (attachment A).

Even though the action is one that LANL will initiate at risk as a voluntary remedial measure, a VCA Plan for the Shaker Plant approach was submitted to both NMED HRMB and EPA Region 6 on March 8, 1996, in an effort to receive regulatory comment. NMED HRMB provided comments on the plan during a meeting on March 15, 1996 (attachment 1). The comments included a statement from B. Hoditscheck indicating that "it is a very good approach." Although NMED stated that they would prefer that LANL not create another revision to the VCA Plan, the plan will be updated and submitted to NMED HRMB so



**DRAFT**

J. Vozella

2

that the changes recommended by Ron Kern during the meeting are incorporated into the VCA Plan. EPA indicated verbally on March 19, 1996 that they would not be reviewing the plan because the action is voluntary (attachment 2). However, because the Shaker Plant dry sieving is in principle similar to the Soil Washing wet sieving, for which the EPA provided a only very simple NOD prior to initiation, there is a limited concern that EPA might find some fundamental inadequacy in the approach (attachment B).

**II) RCRA****A) Recycling**

As outlined in the Shaker Plant VCA Plan, the method of removing lead to levels below TCLP is a recycling approach. EPA Region 6 sent NMED HRMB a letter, dated October 10, 1995 (attachment 3), stating that LANL could Soil Wash and recycle the lead bullets and that the soil could be reused as fill or berm material if the hazardous characteristic of D008 is removed. The Shaker Plant VCA Plan is also a recycling approach to remove bullets below levels that are characteristic for lead. The only differences between the Shaker Plant recycling and the Soil Washing recycling, as explained to NMED HRMB during the March 15, 1996 meeting, is that the Shaker Plant is a dry form of sieving while Soil Washing is simply a wet form. Because of this difference, the Shaker Plant approach will remove fewer fine particles of lead than the Soil Washing approach. However, since the sampling performed by LANL in October of 1995 indicates that lead is already less than the TCLP limit, this difference should not present a problem for meeting the definition of clean soil after shaking (attachment C).

**B) Dilution (40 CFR 268.3)**

Mr. Beaver raised the issue of dilution at the site in his letter to Sam Coleman, of EPA Region 6 Hazardous Waste Enforcement Bureau, in his letter of January 18, 1996 (attachment 4). His concerns have raised the general question of whether recycling, or for that matter any form of treatment, is valid. In other words, is the soil locked into the designation of hazardous waste because dilution took place after the USFS sampled the material and found it to be at levels of lead above the TCLP limit. Apparently, EPA OSWER OGC has considered this issue internally and has indicated verbally to NMED HRMB that dilution is not an issue relative to any future recycling operations at the site because: 1) the dilution that occurred at the site did not occur with the intent of avoiding a hazardous waste determination, and 2) when dilution occurs during treatment or recycling and there is a net reduction in volume of waste, there is no violation of the hazardous

J. Vozella

3

waste regulations (attachment 5). Items 1 and 2, together with the EPA letter of October 10, 1995, indicate that recycling is still valid as a means of changing the waste stream to remove the characteristic of lead as documented by the USFS.

NMED HRMB indicated during the meeting on March 15, 1996 (attachment 1), that the sampling strategy outlined in the VCA Plan for documentation that each 25 cubic yards of material is below TCLP limits for lead before releasing the material to the TA-72 firing range, would have to be modified to meet their concerns. Because the guidance for modification was very specific and because NMED HRMB indicated that they would provide actual oversight during the initiation of the operations so that LANL has clear indication that the modifications meet NMED's specifications, there will be no violation of the regulations for determination of whether the material meets the definition of clean soil before release from the SWMU.

Summarizing A and B above, the recycling approach in combination with the sampling strategy that NMED HRMB specified on March 15 ensure that the VCA operations will be conducted according to regulations under 40 CFR 261.6(a)(3), which address requirements for recyclable materials, and 40 CFR 261.24, which addresses identification of hazardous waste.

### III. OSHA

ESH-5 has prepared and approved a Health and Safety Plan for the Shaker Plant VCA activities (attachment 6). Therefore all OSHA requirements will be met during the Shaker Plant VCA operations.

The Shaker Plant VCA activities are scheduled to initiate on or before April 8, 1996. Because the activities have been designed to be conducted in accordance with applicable HSWA, RCRA and OSHA requirements, I am recommending you provide authorization for the field activities to begin. If you have any further questions regarding this discussion, please let me know so that I can meet with you.

Bonnie Koch  
ER Geologist

J. Vozella

4

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Enclosures:

cc w/enclosures:

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