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DEPARTMENT OF ECOLOGY

March 6, 1995

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Nuclear Waste Program

FROM: Alisa Huckaby, Permit Writer *ah*
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SUBJECT: 4843 AMSF



LOCATION AND BACKGROUND

The 4843 Alkali Metal Storage Facility (AMSF) is located in the northwest corner of the 400 Area. Construction of the 4843 AMSF (originally known as Building #3) was completed in 1971. From 1971 to 1980, Building #3 was used primarily as a tool shed. In 1980, Building #3 was relocated to its current site and renamed Building 4722-E. From 1980 to 1986, Building 4722-E was used as construction support for the Fuels and Material Examination Facility. In 1986, Building 4722-E was renamed 4843 AMSF. 4843 AMSF began receiving dangerous and mixed alkali metal waste in April 1986. 4843 AMSF continues to be used to store dangerous and mixed alkali metal waste, including sodium and lithium, which has been generated at the Fast Flux Test Facility and at various other Hanford Site operations which used alkali metals.

PROGRESS TO DATE

Ecology is currently reviewing, for approval, the closure plan submitted for the RCRA unit entitled, "The 4843 Alkali Metal Storage Facility Closure Plan," dated June 1991 (document # DOE/RL-90-49, Revision 0). To date, the majority of waste stored at the unit has been relocated to the Central Waste Complex. One large bulky item remains at the unit, and is awaiting shipment to the Central Waste Complex. *107-22*

ADMINISTRATIVE REVIEW PROCESS STATUS

Concerning the review process related to the closure plan, the original plan has not been revised and USDOE has responded to the First Notice of Deficiency (dated December 9, 1992) on February 23, 1993. Ecology responded with a Response Table on July 19, 1993. USDOE responded to Ecology's Response Table on November 4, 1993. Ecology responded to USDOE's Response Table with a Response Table on February 28, 1994. *337-4*

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On March 24 and 31, 1994, issue resolution meetings were held by Ecology, USDOE, and WHC. The purpose of these meetings was to discuss and resolve the open NOD Response Table comments. Resolution was reached on 22 NOD comments with these comments being considered closed. Four comments were consolidated into another comment dealing with the same subject. This brings the total number of resolved and closed comments to 81 out of a total 88. Of the remaining 7 comments, 3 are considered to be associated directly with the Data Quality Objectives (DQO) process. The other 4 comments are more general in nature.

During the issue resolution process, it was agreed to schedule the DQO process after the radiation release survey for the unit has been performed. In addition, it was also agreed to not revise the closure plan until after the radiation release survey and the DQO process were complete (to avoid the numerous "what if" scenarios which would have to be addressed in the closure plan). It should be noted the agreement to postpone resolution of the remaining 7 comments was two-fold in nature. Not only did the postponement avoid the numerous "what if" scenarios, which would be required to be included in the closure plan, but the postponement would allow emerging MTCA regulation to be adopted, as well as Ecology's closure guidance to be issued.

FUTURE PLANS

The remaining waste will be moved out of the unit and transferred to the Central Waste Complex, possibly in March 1995.

After the waste is removed, the radiation survey (to release the entire building from radiological control requirements) will be conducted. The survey will take approximately two weeks to schedule and approximately one day to conduct. The survey could possibly be conducted in March or April 1995.

It has been agreed to schedule the DQO meetings upon completion of the 4843 AMSF radiation release survey to resolve the outstanding deficiencies of the Notice of Deficiency (NOD).

The closure plan will be revised (Revision 1) after the completion of the DQO process. It should be noted the current permit writer has formally expressed a commitment to generate only one closure plan revision prior to approval of the closure plan to avoid additional costly revisions. During the NOD resolution process, USDOE concurred with this commitment.

Upon approval of the closure plan, via modification of the Hanford Facility RCRA permit to include the plan, the plan will be implemented and the RCRA storage unit will undergo closure.

PERMITTING SCHEDULE

Currently, there is a draft permitting schedule which identifies that 4843 AMSF will be included in the Hanford Facility RCRA permit by July 1, 1996. The modification will be made by March 1, 1995. The final copy of the closure plan for "advance review" will be due by October 1, 1995. Therefore, to support this schedule, the waste must be removed from the unit, the radiological

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survey must be completed, the DQO must be completed, and the closure plan must be revised. These activities would be necessary to be completed within seven months.

TRANSITION ISSUES

There are several regulatory and technical considerations which must be addressed during the DQO process. Of particular importance are the decontamination and/or confirmation requirements. Prior to the adoption of MTCA, numerical values for RCRA closure standards and the issuance of Ecology's closure guidance, the confirmation path for the closure would have required the generation of a statistically defensible number of concrete samples. In addition, due to the lack of MTCA values for lithium and sodium, background comparisons would have been consistent with RCRA clean closure guidance. Using Ecology's closure guidance (issued last fall), a debris-like approach may be utilized whereby the concrete may be decontaminated, meeting three criteria. The debris-like approach also allows the decontamination to be conducted without requiring the follow-up confirmation sampling. During February's Unit Manager's meeting, the usage of Ecology's closure guidance debris-like application was discussed and will very likely be utilized for closure at 4843 AMSF. This application should greatly simplify the DQO process.

During the NOD resolution process, although USDOE and Ecology could not agree on radionuclide authority as it relates to mixed waste, USDOE agreed to include the data generated during the radiological survey in the closure plan. In addition, the Department of Health (DOH) has agreed to provide oversight support during the radiological survey. The intent to use the radiological survey data as part of the clean closure confirmation warrants utilization of DOH's expertise during the conductance of USDOE's radiological survey. It is recommended Ecology coordinate the survey to allow DOH's oversight support to be provided.

Transition of the closure plan to another permit writer can occur at any time. If the transition directly to another permit reviewer cannot occur soon, an evaluation of the priority of this unit's closure plan approval is recommended to be performed (i.e., should the unit's closure plan be included in the Hanford Facility RCRA permit effective July 1, 1997?). As this is not an urgent closure project (environmental insult is not occurring with a delayed closure), an out-year deferral of closure plan approval may be the preferred path.

If you have any questions or comments, please let me know.

AH:mf

cc: Joe Witzak
Administrative Record - 4843 AMSF