



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV
URANIUM RECOVERY FIELD OFFICE
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FEB 08 1993

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MEMORANDUM FOR: John J. Surmeier, Chief
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Office of Nuclear Material Safety and Safeguards

FROM: Ramon E. Hall, Director
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Division of Radiation Safety and Safeguards
Region IV

SUBJECT: SURETIES FOR TITLE II LICENSEES

This memo is in reply to your memo on the same subject dated December 18, 1992. The subject matter was limited to conventional mills, since each in situ licensee has a current and adequate surety arrangement. Answers to your questions on mill licensees are presented below.

1. Are the existing sureties based on the most recently approved decommissioning and reclamation plans?

Yes, with the exception of Homestake. The Homestake surety is based on a conceptual plan; the final plan is under review. There is only one approved decommissioning and reclamation plan for each licensed facility. The issue of potentially inadequate surety amounts stems from the fact that the reclamation plans for certain licensees are 10 or more years old, and may bear little resemblance to the actual reclamation which will be performed. Several of these licensees have submitted revised reclamation plans to the NRC which have not yet been approved. In these cases, the revised reclamation plan involves significantly different or greater efforts to complete than in the previously approved plan. It is therefore expected that once the revised reclamation plans for these facilities are approved, the cost estimates and associated surety amounts may have to be increased. Ongoing reclamation activities at these facilities may offset some or all of any such increases. Meanwhile, the current surety amount continues to be based on the previously approved reclamation plan as required by Criterion 9 of Appendix A to 10 CFR 40.

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2. How many of the currently approved decommissioning and reclamation plans are in compliance with Appendix A to 10 CFR 40? Prepare a list of those with uncertainties.

Four Title II licensees have approved reclamation plans which meet current criteria:

ARCO-Bluewater
 BEAR CREEK
 QUIVIRA-Ambrosia Lake
 UNITED NUCLEAR-Church Rock

Nine licensees have existing reclamation plans which are outdated and have submitted revised reclamation plans for review:

*ATLAS-Moab
 *HOMESTAKE-Milan
 *PATHFINDER-Lucky Mc
 PATHFINDER-Shirley Basin
 PLATEAU RESOURCES-Shootaring Canyon
 *RIO ALGOM-Lisbon
 UMETCO-Gas Hills (Heap Leach)
 UMETCO-White Mesa
 *WESTERN NUCLEAR-Split Rock

* Indicates those licensees required to have approved reclamation plans by September 30, 1993, under the EPA-NRC Memorandum of Understanding.

It should be noted that the reclamation plan reviews for Homestake and Western Nuclear are essentially complete, and we are only awaiting resolution of the issue of Environmental Reports before approving these reclamation plans.

The remaining eight facilities have reclamation plans which were approved prior to the issuance of the STP on Cover Design in August 1990, and may or may not meet current criteria:

AMERICAN NUCLEAR-Gas Hills
 EXXON-Highlands
 KENNECOTT-Sweetwater
 PETROTOMICS-Shirley Basin
 SOHIO WESTERN-L-Bar
 TVA-Edgemont
 UMETCO-Gas Hills (Old Tailings and A-9)
 WESTERN NUCLEAR-Day Loma

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Each of these licensees has been requested to review their reclamation plan against current criteria and report the results of their review to the NRC. American Nuclear and TVA have completed their reviews and proposed some revisions to their reclamation plans. Responses have been received from the other licensees which propose no changes.

3. What guidance has URFO used to assure compliance with the requirement in Criterion 9 that sufficient funds be available for completion of the reclamation plan?

The guidance document used for surety reviews is the Technical Position on Financial Assurances for Reclamation, Decommissioning, and Long-Term Surveillance and Control of Uranium Recovery Facilities; October 1988. In order to assure sufficient funds are available until final compliance with the reclamation plan is determined, reductions in the surety amount are only allowed for discrete activities which have been completed irreversibly. For example, if a licensee is required to place 3 feet of cover material, we will not allow a reduction in the surety amount until the entire 3 feet of material has been placed and the next operation (e.g. erosion protection) has begun.

Criterion 9 of Appendix A to 10 CFR 40 states, in part, that the surety amount "must be based on Commission-approved cost estimates in a Commission-approved plan." We have implemented this requirement by basing the surety amount only on an approved reclamation plan. An estimate of costs associated with a revised reclamation plan can only be made after the designs and scope of work have been approved by the NRC. Thus, although we may sense that costs in a revised plan will increase, we have no basis for quantifying the amount until the revised plan is approved. Each Title II license has a condition which requires the licensee to submit a revised cost estimate within 3 months of NRC approval of a revised reclamation plan. The licensee then has 3 months after NRC approval of the revised cost estimate to provide a surety to reflect the updated amount.

Each surety arrangement and amount is reviewed annually, as required by Criteria 9 and 10. Adjustments are routinely made to account for the effects of inflation, completed activities, and other changes. The inflation factor used is the change in the Consumer Price Index (CPI-U) as required by Criterion 10.

4. Has the need for ground-water cleanup been assessed for each site and the regulations established to cover remediation requirements.
- a. Identify mill sites for which a full surety is in place based on an approved ground-water cleanup plan.

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The actual costs associated with corrective action plans are difficult to establish. Aquifer response, considering geochemical attenuation or the lack of it, requires continual modifications to the funds assigned for this task. The following mill sites have an approved ground-water cleanup plan and a surety amount which reflects the most current estimate of ground-water cleanup costs:

ARCO-Bluewater
BEAR CREEK
EXXON-Highlands
HOMESTAKE-Milan
SOHIO WESTERN-L-Bar
KENNECOTT-Sweetwater
PATHFINDER-Shirley Basin
PETROTOMICS-Shirley Basin
QUIVIRA-Ambrosia Lake
UMETCO-Gas Hills
UNITED NUCLEAR-Church Rock

- b. Identify mill sites that are not currently required to have ground-water cleanup and the basis for such determination.

Two mill sites have no ground-water corrective action requirements since no ground-water contamination has been detected:

PLATEAU RESOURCES-Shootaring Canyon
UMETCO-White Mesa

The TVA-Edgemont mill site no longer has a ground-water corrective action program since the contaminated aquifer was pumped dry and remains in that state.

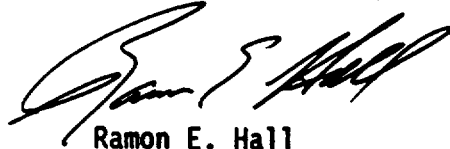
- c. Identify mill sites that do not have a currently approved ground-water plan or a full surety based on an approved ground-water plan. Discuss the status of each mill site, including the amount of the current surety for ground-water remediation and the basis for that amount.

Every mill site has an approved ground-water corrective action program. There are five mill sites whose sureties do not currently include amounts to cover ground-water corrective action costs:

AMERICAN NUCLEAR-Gas Hills
ATLAS-Moab
PATHFINDER-Lucky Mc
RIO ALGOM-Lisbon
WESTERN NUCLEAR-Split Rock

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Each of these facilities has submitted a revised reclamation plan for review, which includes the appropriate ground-water corrective action measures and the associated costs. None of these facilities currently has any amounts within their existing surety designated for ground-water cleanup, since such costs were not included in the previously approved reclamation plan.



Ramon E. Hall
Director