

APR 22 1994

Mr. James E. Gilchrist, Vice President  
Environmental Affairs  
American Mining Congress  
1920 N Street N.W., Suite 300  
Washington, D.C. 20036

Dear Mr. Gilchrist:

Enclosed is the meeting summary of the Uranium Recovery Facility Workshop, jointly sponsored by the Nuclear Regulatory Commission and the American Mining Congress, which was held in Denver, Colorado on March 16 and 17, 1994. I want to thank you for working with me to produce what was, from NRC's perspective a very informative and successful workshop.

Sincerely,

Original Signed by *Daniel M. Gillen*

*for*

Joseph J. Holonich, Chief  
High-Level Waste and Uranium  
Recovery Projects Branch  
Division of Waste Management  
Office of Nuclear Material Safety  
and Safeguards

Enclosure:  
As stated

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**URANIUM RECOVERY FACILITY WORKSHOP  
MEETING SUMMARY**

**Dates:** March 16-17, 1994

**Location:** Stouffer Concourse Hotel  
Denver, Colorado

**Sponsors:** U.S. Nuclear Regulatory Commission  
American Mining Congress

**Agenda:** Attachment 1

**Attendees:** Attachment 2

**March 16**

The American Mining Congress (AMC) opened the workshop and welcomed the participants. This was followed by the Nuclear Regulatory Commission's (NRC) opening remarks which included an introduction of NRC managers in attendance and an invitation to industry representatives to the March 18 public meeting of NRC's Transition Oversight Team. Next were presentations from the NRC staff on the NRC program for uranium recovery licensees. Specific presentations covered the following topics.

- 1) NRC's proposed reorganization, which will result in one division, within the Office of Nuclear Material Safety and Safeguards, responsible for all waste management and uranium recovery activities. The division will be organized as a matrix with two project branches and two technical branches.
- 2) NRC's effort to prioritize the uranium recovery workload, giving definitions of the priority groups and examples for each.
- 3) The organization of NRC's Region IV which is responsible for the inspection of uranium recovery licensees.
- 4) Discussions by NRC's Office of Nuclear Regulatory Research on the new 10 CFR Part 20. This presentation was specifically requested by AMC. Discussed, in the context of one presentation, were questions that AMC had previously raised with NRC on the new Part 20.
- 5) Efforts by NRC to reduce licensees' regulatory burden. NRC staff considered several suggestions made by licensees over the past several months and concluded that many could not be implemented because of existing legislation and regulations. Two areas that appeared promising were 1) "modernization" of licenses to replace very prescriptive conditions, such as naming individuals in the license, with more general conditions and 2) use of a "performance based license condition" to allow licensees to make some changes to operations without having to amend the license.

Enclosure

- 6) An overview of NRC's inspection program including procedures that apply to uranium recovery facilities and inspection findings that could result from an inspection.
- 7) Discussions of NRC enforcement policy including the various levels of violations, ranging from non-cited violations to willful violations.
- 8) An overview of NRC's Incident Response Center and process for responding to emergencies.

Attachment 3 contains copies of slides and handouts from NRC presentations.

The industry presentations started with a discussion by AMC on the historical perspective of the interrelationship between NRC and EPA, and between NRC headquarters and the Uranium Recovery Field Office (URFO).

Next, AMC provided an overview of issues considered critical by licensees. Topics covered included: 1) AMC comments on the draft technical position relating to design of erosion protection; 2) concerns that the closure of URFO may result in delays in meeting milestones for closure of impoundments in compliance with 40 CFR Part 61, Subpart T of the Clean Air Act regulations; 3) the issue of licensees having to amend their licenses if their approved reclamation plan needs to be revised during construction. AMC also discussed groundwater corrective action plans and asked for more flexibility in NRC's reviews. AMC emphasized its position that alternate concentration limits (ACLs) for groundwater cleanup are a major concern since most sites will need them. AMC's major concern with NRC's draft technical position on ACLs is the requirement of an advance commitment, by the long-term custodian of the site, to take excess land to satisfy an ACL. AMC expressed concern that the U.S. Department of Energy's (DOE) approach to site closure would be imposed on licensees. AMC also expressed concern with EPA's involvement in site specific uranium recovery issues. Finally, AMC stated that Shaw, Pittman, Potts & Trowbridge has written to NRC expressing the view that NRC has no authority to regulate *in situ* leach wellfields.

In the afternoon, licensee presentations of individual sites and issues commenced. Licensees that made presentations included the Umetco White Mesa mill in Blanding, Utah. Slides of the facility, which is currently in standby with a mill run planned for later this year, were shown. Umetco also discussed the proposal to dispose of tailings from DOE's Monticello facility in the tailings impoundment; Umetco hopes to prepare a license amendment request to NRC by the end of the month. Also discussed was a recent license amendment allowing the mill to dispose of waste from *in situ* leach mines and the controversy surrounding that amendment.

Next the Umetco Gas Hills mill in Wyoming showed slides of the site, and discussed the history of the reclamation plan and of reclamation at the site. Umetco noted that tailings from the DOE Title I site in Riverton, Wyoming were disposed of in the A-9 pit at this site. It also discussed the groundwater cleanup program at the site and stated that Umetco may not need to request ACLs.

The Tennessee Valley Authority (TVA) discussed reclamation at its Edgemont, South Dakota site, which involved moving 4.5 million cubic yards of tails two and one half miles to a new site in 1989. NRC has raised questions about the reclamation under its "current criteria" review, which is the review of previously approved sites using recent NRC guidance. TVA identified two issues with the current criteria review of Edgemont. These were: 1) the length of time to get NRC approvals and 2) the issue of "backfit" in relation to NRC's "current criteria" review.

Next, Western Nuclear Corporation's (WNI) Split Rock mill in Wyoming showed slides of the site, and reported that the mill, which was active from 1956 through 1986, has been decommissioned. WNI related that reclamation of the tailings impoundment is scheduled to begin this spring, and stated that ACLs will be needed for the groundwater cleanup program.

Homestake Mining Company's Milan mill in Grants, New Mexico showed slides of its site. It also discussed the reclamation plan, which was approved by NRC in July 1993 and ongoing reclamation, which is currently in progress. Groundwater aspects of the site were discussed and Homestake noted that in 1975 groundwater contamination in wells in a nearby subdivision was identified. It also noted that the site is a Superfund site and is subject of a Memorandum of Understanding between NRC and EPA. The groundwater remediation in progress was presented and maps of constituent concentrations in groundwater were used.

Exxon's Highlands mill in the Powder River Basin of Wyoming showed slides of the site. The Exxon presentation noted that the mill operated from 1972 to 1984, and that some of the mill buildings were taken down in 1984. Exxon further stated that Power Resources owns the remaining mill buildings, using them for its *in situ* leach facility. Exxon also discussed reclamation of the tailings impoundment, a 20 acre area of which has had wicks installed to speed up dewatering and settlement.

#### March 17

United Nuclear Corporation's (UNC) presentation on its Church Rock mill in Gallup, New Mexico noted that the site is a Superfund site and is subject of a Memorandum of Understanding between NRC and EPA. UNC's consultant, Canonic Environmental, discussed groundwater aspects of the site. It described the complex groundwater system and the progress made in cleaning up groundwater.

Pathfinder Mines Lucky Mc mill in the Gas Hills of Wyoming showed slides of the site and discussed the reclamation plan for the site, which was approved by NRC, with conditions, in September 1993. Pathfinder also discussed the reclamation plan and the groundwater corrective action program for the site.

Pathfinder also discussed its Shirley Basin mill in Wyoming and showed slides of that site. Pathfinder reported that the site is currently undergoing reclamation and groundwater remediation. In response to a question, Pathfinder stated that approval by NRC of deep-well injection of water recovered during groundwater cleanup would be helpful. NRC said that it is

planning to soon issue a position on this subject. Pathfinder also discussed disposal of *in situ* leach wastes at the site, and noted that Wyoming initially permitted only 20,400 tons of such waste to be disposed of at the site under its authority to regulate the nonradioactive constituents in the *in situ* material. Pathfinder reported that it challenged the decision, arguing that Wyoming didn't have jurisdiction, and noted that an agreement was recently reached with Wyoming which will allow disposal of 78,00 tons *in situ* leach wastes from Pathfinder and associated facilities.

Highland Resources discussed its *in situ* leach facility in the Powder River Basin of Wyoming and showed slides of the site. Power Resources owns 75 percent and Cogema 25 percent of the facility. It discussed current issues with NRC including the number of licensing actions required, the need for a policy allowing disposal of liquid effluents, timely approval of requested license amendments, and duplicative regulations.

The Kennecott Sweetwater mill in Wyoming, which was acquired by Green Mountain Mining Venture in June 1992, was discussed next. The mill is in standby but is revising its license for future operation. It also reported that a conceptual tailings management plan was submitted to NRC in August 1993 with the final design submittal planned for the second quarter of 1995. Timely review by NRC was identified as a major concern.

Cogema next made a presentation on its corporate structure and several of its *in situ* leach facilities. It discussed the history and operations of the Iragary Ranch and Christen Ranch *in situ* leach mines, acquired by Cogema in 1993, and also discussed the North Butte, Ruth, and Brown Ranch *in situ* leach mines. The major issue identified by Cogema was the need for timely NRC approvals to bring new well fields on line without disrupting production.

Next, Atlas Corporation discussed its mill in Moab, Utah. Atlas described its history and that of the mill, which is located on the Colorado River near Arches National Park. It noted that in August 1993, NRC issued a Finding of No Significant Impact (FONSI) as part of its approval of the Atlas reclamation plan, but withdrew its FONSI, primarily because of the large number of significant comments received, in October 1993. Atlas also discussed some of the major technical issues raised in the comments, including the potential for Colorado River migration to erode the tailings and groundwater contamination. Descriptions of the alternate disposal sites and the issue of relocating the tailings were also covered by Atlas.

Attachment 4 contains copies of slides and handouts from presentations by AMC and industry representatives.

At the conclusion of the workshop, AMC observed how important groundwater considerations are. NRC identified seven themes in the discussions where it needs to:

- 1) address issues related to old reclamation plans;
- 2) move forward on the performance based license condition;
- 3) follow up on the issue of deep-well injection of effluents;
- 4) move forward on ACL reviews using the draft guidance;
- 5) evaluate duplicative regulatory activities between NRC and EPA or

States, which are a concern to licensees;  
6) resolve issues with commercial disposal of wastes from offsite; and  
7) improve timely approval of license amendments.

Several participants commented that dialogue between the industry and NRC and other government agencies, as a result of the workshop, was good. A representative from EPA stated that he was pleased that 40 CFR Part 61, Subpart T items are progressing. A representative from a DOE contractor commented that DOE's Uranium Mill Tailings Radiation Control Act Title I program shares many common problems and concerns with the Title II program.

**ATTACHMENTS**

1. Agenda
2. List of Participants
3. NRC Staff Presentation Slides and Handouts
4. AMC and Industry Presentation Slides and Handouts