January 15, 1999 SECY-99-011

FOR: The Commissioners

FROM: William D. Travers /s/
Executive Director for Operations

SUBJECT: DRAFT RULEMAKING PLAN: DOMESTIC LICENSING OF URANIUM AND THORIUM RECOVERY FACILITIES - PROPOSED NEW 10 CFR PART 41

PURPOSE:

To obtain Commission guidance as to the appropriate timing for providing the attached draft Rulemaking Plan to the Agreement States for comment. This rulemaking would update and revise the regulatory requirements for uranium and thorium recovery facilities in a new 10 CFR Part 41, "Domestic Licensing of Uranium and Thorium Recovery Facilities." The draft Rulemaking Plan does not include key issues addressed in two related SECY Papers that will be sent to the Commission shortly (SECY-99-012 and SECY-99-013).

BACKGROUND:

The U.S. Nuclear Regulatory Commission (NRC) does not have a stand-alone regulation for uranium and thorium recovery facilities. Instead, generally applicable requirements in 10 CFR Part 40, "Domestic Licensing of Source Material," and Appendix A of Part 40, "Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material from Ores Processed Primarily for Their Source Material Content," establish the regulatory requirements that the staff uses to license and regulate domestic uranium and thorium recovery activities. NRC and industry experience in using and implementing Part 40 to regulate uranium and thorium recovery facilities, particularly in the last few years, has led the staff to conclude that revisions are necessary to correct problems that are detracting from a consistent and effective regulatory program.

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In addition, in April 1998, the National Mining Association submitted a report to the Commission, “Recommendations for a Coordinated Approach to Regulating the Uranium Recovery Industry,” that identified specific concerns with NRC’s current position and guidance regarding concurrent jurisdiction at uranium mills; dual regulatory authority at in situ leach (ISL) facilities; the use of mill tailings impoundments for disposal of radioactive material other than 11e.(2) byproduct material; and the ability to process alternate feed material at uranium mills. The staff has addressed most of these concerns in two SECY papers that are being concurrently provided to the Commission. These papers are: 1. SECY-99-013, “Recommendations on Ways to Improve the Efficiency of NRC Regulation at In Situ Leach Uranium Recovery Facilities”; and 2. SECY-99-012, “Use of Uranium Mill Tailings Impoundments for the Disposal of Waste Other than 11e.(2) Byproduct Material and Reviews of Applications to Process Material Other than Natural Uranium Ores.” The staff has not incorporated the recommendations in these SECYs into the draft Rulemaking Plan, but has noted that, based on Commission direction resulting from consideration of these two papers, the draft Rulemaking Plan would be revised accordingly.

DISCUSSION:

The current Part 40 regulatory framework for uranium and thorium recovery is difficult to administer. The staff’s most significant concern with the current requirements is that they primarily address the regulation of conventional uranium mills, the prevailing milling method when Part 40 was originally promulgated, not ISL facilities. However, ISL facilities have become the source of most of the uranium production in the United States, which is expected to continue into the foreseeable future. Regulating the ISL facilities in the absence of specific regulatory requirements for ISL recovery activities has become increasingly problematic and more complicated for the staff, which has relied heavily on guidance documents and license conditions in this area, as the recovering uranium production industry seeks to expand ISL facility production and submits new applications for additional facilities. This rulemaking would codify the numerous regulatory decisions and precedents that have been developed by following this approach to ISL facility regulation.

The other significant concern with the requirements in Part 40 is that, as the uranium recovery process has developed, some of the Part 40 regulations are becoming outdated and do not address the operational problems identified through the uranium industry’s efforts to implement the requirements or staff’s efforts to apply them to these facilities.

For example, one of the issues addressed in the SECY Papers is the use of mill tailings impoundments as a cost-effective way to dispose of reclamation materials from other fuel cycle facilities. The NRC Strategic Planning Process identified this issue and in Direction Setting Issue 9, ”Decommissioning of Non-Reactor Facilities,” Option 7, directed the staff to take an aggressive position to develop the regulatory framework to facilitate such disposal. The staff believes that developing and codifying criteria for such disposal in uranium recovery regulations would be an important part of developing the framework requested by the Commission.

The issues that will be addressed in this rulemaking are controversial. The industry, the public, and the environmental groups each have their own, sometimes divergent, positions on many of the issues, and have been vocal regarding other recent NRC uranium recovery actions. The industry has sought to involve the Commission directly to gain support for their viewpoints. In

an effort to balance this process by obtaining public input early and enhancing public participation in the rulemaking process, the staff held a series of public meetings in August 1998. This draft Rulemaking Plan reflects the staff's examination of the information gleaned from the various stakeholders in this process.

There are three possible approaches for providing this draft Rulemaking Plan to the Agreement States. The first approach, as prescribed in Management Directive 6.3 (The Rulemaking Process), would provide the draft Rulemaking Plan to the Agreement States for comment and a copy to the Commission for information. The second approach is to forward the draft Rulemaking Plan to the Agreement States for their comment after Commission approval of, or required changes to, the staff's proposed changes to Commission policy and guidance contained in the two related SECY Papers discussed in the "Background" section. After the Commission provides its decisions, the staff would incorporate these positions into the draft Rulemaking Plan, for submittal to the Agreement States. The third approach would allow the Agreement States to provide input on the topics in the related SECY Papers before Commission approval. Following this approach, the staff would incorporate the current staff recommended changes into the draft Rulemaking Plan and forward this to the Agreement States for their comments, before Commission action on the SECY Papers.

The staff recommends the second approach. The staff believes that Commission guidance, prior to forwarding the draft Rulemaking Plan to the Agreement States, is appropriate because of the significant policy issues raised in the SECY Papers and the interrelated nature of the issues. These issues are known to the States, and the staff received public input during the four public meetings held in August. The staff believes that there is sufficient information in the SECY Papers for the Commission to make a decision. Since the issues would impact the Agreement States, the staff would then be able to provide a more complete draft Rulemaking Plan package to the Agreement States for their comments.

AGREEMENT STATE IMPLEMENTATION ISSUES:

The compatibility of the Part 41 rule parts will be determined in accordance with the NRC Policy Statement on Adequacy and Compatibility of Agreement State Programs. Agreement States will be notified of the availability of the draft Rulemaking Plan on the Technical Conferencing Forum on NRC's website, and their comments will be solicited and considered in the development of the final Rulemaking Plan.

COORDINATION:

The Office of the General Counsel has no legal objection to this Rulemaking Plan. The Office of the Chief Financial Officer has reviewed this Commission Paper for resource impacts and has no objection. The Office of the Chief Information Officer has reviewed the rulemaking plan for information technology and information management implications and concurs in it. However, the plan suggests new information collection requirements that must be submitted to the Office of Management and Budget for review no later than the date the proposed rule is forwarded to the Federal Register for publication.

RESOURCES:

The resources estimated to complete this rulemaking and the associated support and guidance documents would be 3.0 full-time equivalent (FTE) positions (2.5 FTEs in the Office of Nuclear Material Safety and Safeguards and 0.5 FTE in other offices) and $700,000, over approximately 2 years. This estimate is based on the rulemaking being completed in early Calendar Year 2001. Resources for this work are currently included in the budget. The staff has contracted with the Center for Nuclear Waste Regulatory Analyses (CNWRA) to provide support on the changes that the staff would make in a new Part 41. The CNWRA will also assist in preparing supporting documents for this rulemaking, including the regulatory analyses and the environmental assessment.

SCHEDULE:

This rulemaking, including the Rulemaking Plan, the proposed rule, and the final rule, is on the Commission Tracking System. The final Rulemaking Plan, which is to include recommendations based on Commission guidance following its consideration of the two related SECY Papers, is currently scheduled to be provided to the Commission in April 1999. The staff estimates that it will take at least 3.5 months, from the time the Plan is sent to the Agreement States, to provide the Commission with a revised final Rulemaking Plan. Therefore, the staff requests that the Commission adjust the date for the final Rulemaking Plan to 4 months after issuance of Commission direction.

RECOMMENDATION:

It is recommended that the staff use the second aforementioned approach, and provide the Agreement States for comment a draft Rulemaking Plan that includes Commission guidance on the issues raised in the two related SECY Papers.

William D. Travers
Executive Director
for Operations

Attachment:
Draft Rulemaking Plan

Draft Rulemaking Plan

# DOMESTIC LICENSING OF URANIUM AND THORIUM RECOVERY FACILITIES - 10 CFR PART 41

## REGULATORY PROBLEM

Under the Atomic Energy Act of 1954, as amended (AEA), and the Uranium Mill Tailings Radiation Control Act of 1978, as amended (UMTRCA), the U.S. Nuclear Regulatory Commission (NRC) is responsible for regulating the production of source material from uranium and thorium mills, including conventional and in-situ leach (ISL) facilities. In addition, NRC must ensure that uranium mills that are no longer operating are reclaimed and the 11e.(2) byproduct material [1] is stabilized consistent with applicable requirements before the site-specific licenses are terminated and the sites are taken over by a long-term custodian (in most cases the Department of Energy).

The NRC has used 10 CFR Part 40, "Domestic Licensing of Source Material," (which also covers other source material licensees) as well as 10 CFR Part 40, Appendix A, "Criteria Relating To the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material From Ores Processed Primarily for Their Source Material Content" to regulate uranium recovery and thorium recovery facilities for nearly 20 years. However, the NRC staff and industry experience in using these requirements has led the NRC to conclude that these regulations need to be revised. In particular, the NRC has found that the regulation of ISLs using the existing 10 CFR Part 40 requirements is becoming increasingly problematic.

In addition, in April 1998, the National Mining Association (NMA) submitted a report, "Recommendations for a Coordinated Approach to Regulating the Uranium Recovery Industry" (hereafter White Paper), to the Commission that covered four issues related to uranium recovery facilities. These issues are: (1) Jurisdiction of non-Agreement States over non-radiological components of 11e.(2) byproduct material; (2) Scope of NRC jurisdiction over ISLs; (3) Disposal of non-11e.(2) byproduct material in tailings impoundments; and (4) NRC's alternate feed policy. The NRC agrees that these are valid concerns. The last three issues will be discussed within this Rulemaking Plan as the topic is covered and the first item will be addressed within the Statement of Consideration for the proposed rule.

## EXISTING REGULATORY FRAMEWORK

### Background

In general, the requirements in 10 CFR Part 40 were developed for all licensees authorized to possess, use, transfer, or deliver source or byproduct material (as defined in 10 CFR Part 40). Many of the requirements in 10 CFR Part 40 fall into one of three categories: (1) those that apply to all source material licensees; (2) those that apply to source material licensees other than uranium and thorium recovery facilities; and (3) those that apply to just uranium and thorium recovery facilities as detailed in Appendix A to 10 CFR Part 40. The scope of the current 10 CFR Part 40 requirements that apply to uranium recovery facilities

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[1] The AEA defines 11e.(2) byproduct material as the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

essentially address conventional uranium mills, where ore is crushed and processed to concentrate the uranium and thorium source material.

When the price of uranium fell in the early 1980s, conventional uranium mining production in the United States dropped precipitously. Many of the conventional mills either ceased operations or closed permanently and began decommissioning and reclamation. As mills closed, the principal technology used to recover uranium changed from conventional mills to ISL facilities. Originally, the ISL facilities were used to extract ore that was uneconomical to conventionally mine and mill. Subsequently, because they have proven to have continuing commercial viability, ISL facilities have become the predominant source of uranium production, and are now responsible for most of the uranium production in the United States today. However, since the requirements in 10 CFR Part 40 were promulgated, there has been no corresponding change in the regulations to address this emerging technology.

At ISL facilities, uranium is extracted by injecting processing fluid (lixiviant) through wells into uranium bearing aquifers where the uranium is leached in place underground, and the uranium bearing solution is then pumped through other wells to the surface for further processing into yellowcake. Some of the issues of regulatory concern at ISL facilities are similar to those for conventional mills. For example, the NRC regulates the radiation safety program at processing plant operations of ISL facilities like it does at conventional mills, because these facilities concentrate the uranium into source material through identical processes. The applicable requirements for either facility covering this aspect of their operations are primarily found in 10 CFR Part 20.

However, some of the regulatory issues at ISL facilities are quite different from those at conventional mills, for example, groundwater requirements. At conventional mills groundwater requirements are codified in 10 CFR Part 40. Because there are no requirements in 10 CFR Part 40 for ISL facilities that cover the protection of groundwater or establish standards for assuring that the water quality in the impacted aquifers is restored after uranium extraction operations are completed, NRC's uranium recovery program has regulated the ISL facilities by using generically applicable requirements in 10 CFR Part 40 and by drawing on applicable groundwater standards from the U.S. Environmental Protection Agency (EPA) or States. Much of the regulation for ISL facilities has been imposed by the NRC through license conditions.[2]

Although conventional mills will continue to contribute to the supply of uranium, for economic reasons and because of reduced surface environmental impacts, it is likely that ISL facilities will be the predominant source of domestic uranium production into the foreseeable future. Within the non-Agreement States (NRC-licensed facilities), there is currently one operating conventional mill and two mills that have ceased operation, but expect to resume operation in the future. There are six ISL facilities that are operating or are licensed to operate. In addition, there are 16 conventional mills that have ceased operations and are in reclamation, and 1 operating 11e.(2) byproduct material disposal cell. Based on discussion with the industry,

[2] In an April 1980 memorandum, the Office of the Executive Legal Director (ELD) concluded that under the Uranium Mill Tailings Radiation Control Act of 1978, the Commission had the authority to protect groundwater at ISL facilities through the imposition of groundwater protection conditions in ISL licenses.

the NRC expects a considerable increase in licensing activity for both types of uranium recovery facilities into the foreseeable future.

Difficulties With Regulating ISL Facilities

Regulating ISL facilities in the absence of specific applicable regulations is becoming increasingly problematic and more complicated for the NRC. In November 1995, the NRC completed the Draft Environmental Impact Statement (DEIS) for the Hydro Resources, Inc. (HRI) ISL project in Crownpoint, New Mexico. When the NRC announced the availability of the DEIS, it also provided an opportunity for hearing. Seven petitions for leave to intervene were filed, and the Presiding Officer decided to hold the hearing in abeyance until the NRC completed its review. Examples of the issues that were raised in the petitions include such things as: (1) the impacts on the environment of ground water from the uranium extraction operation; (2) the application of 10 CFR Part 40 by the NRC to ISL facilities; and (3) the use of performance-based licenses. In the absence of codified requirements for ISL facilities, the ultimate decision of this proceeding would establish NRC policy in this area with the possible result of overturning longstanding NRC uranium recovery practices.

In addition, the regulated industry also continues to raise concerns about the NRC guidance dealing with effluent discharge from ISL facilities and the disposal of material other than 11e.(2) byproduct material in tailings impoundments. The NMA White Paper lays out the concerns that the industry has with NRC's regulation of ground water at ISL facilities. The industry argument is that the NRC regulation of ground water is duplicative of the ground-water protection programs required by the Safe Drinking Water Act (SDWA). For the most part, the U.S. Environmental Protection Agency (EPA), or EPA permitting States, conduct many of the same types of reviews that the NRC currently does. In addition, licensees must obtain underground-injection-control (UIC) permits from EPA or the permitting State before mining can begin. Because both the NRC and EPA oversee the ground water at ISL facilities, the industry believes that the NRC's activities are duplicative of EPA's.

[The NRC's Office of the General Counsel has conducted a legal review to determine if the NRC could defer to EPA, or its permitting States, for the active regulation of ground water at ISL facilities. TO BE ADDED AFTER COMMISSION RECOMMENDATIONS ON RELATED SECY PAPERS]

It should be noted that the NRC received some comments on the dual regulation of ground water at ISL facilities during its recent public meetings on the NMA White Paper and 10 CFR Part 41. The Southwest Research Information Center (SRIC), an environmental organization currently intervening in the HRI Crownpoint application, recommended that the NRC not eliminate its review of ground water at ISL facilities. SRIC argued that the NRC regulation was complementary not duplicative of the UIC program. The State of Wyoming believed that NRC's efforts on ground water at ISL facilities was not needed. Industry representatives advocated that the NRC adopt the position in the White Paper.

Problems With the Current Requirements in 10 CFR Part 40 as They Relate to Uranium and Thorium Recovery Facilities

There are several other significant problems with the current requirements in 10 CFR Part 40 as they are applied to conventional mills, specifically, and to all uranium and thorium recovery facilities in general, that need to be clarified. First, the regulations need to be updated because changes in the NRC uranium recovery program have resulted in inconsistencies within regulations in 10 CFR Part 40 itself, as well as between these regulations and other NRC regulations. For example, 10 CFR Part 40, Appendix A, Criterion 4, contains specific requirements covering the long-term stabilization of mill tailings impoundments, which are more restrictive than the performance objective for long-term stabilization in Criterion 6. Criterion 4(c) requires that slopes should not be steeper than 5 horizontal to 1 vertical and requires justification for steeper slopes. However, Criterion 6 requires closure of the waste disposal area in accordance with a design to provide reasonable assurance of control of radiological hazards to be effective for 1000 years to the extent reasonably achievable and in any case for at least 200 years. Such a design must consider runoff on slopes and the potential for erosion. The specific steepness requirement should be deleted since the performance requirements in Criterion 6 are sufficient to protect the waste.

In addition, other requirements should be revised or added in order to capture the regulatory decisions that have been developed for uranium recovery facilities since 10 CFR Part 40 was originally promulgated. For example, the NRC has identified the use of a performance-based license as a way uranium recovery licensees could be provided regulatory flexibility in operating their facilities. Performance-based licensing, however, has never been established through regulation as an agency policy for uranium recovery licensees. The NRC is currently issuing performance-based licenses, but as noted above, this has been questioned in the HRI hearing. As such, since the NRC believes this approach to regulating uranium recovery facilities is worth continuing, it should be codified in the regulations.

Further, the NRC strategic planning process has identified the use of mill tailings impoundments for disposal of materials resulting from the reclamation of other fuel cycle facilities and Site Decommissioning Management Plan (SDMP) sites as a cost-effective way to help ensure that fuel cycle facilities receive the desired cleanup and decommissioning. This approach was identified in Option 7 of the Direction-Setting Issue Paper (DSI) 9 - Decommissioning of Non-Reactor Facilities. In the Staff Requirements Memorandum (SRM), dated April 24, 1996, for SECY-96-058, the Commission directed the staff to proceed with Option 7, that is, to "take an aggressive position to develop regulatory frameworks for lower cost decommissioning waste disposal options." The staff believes that codifying criteria for such disposal in uranium recovery regulations would be an important part of developing the framework.

[As part of its effort in developing this rulemaking plan, the staff conducted a review of the current guidance used to evaluate the acceptability of applications to dispose of material other than 11e.(2) byproduct material in tailings impoundments. TO BE ADDED AFTER COMMISSION RECOMMENDATIONS ON RELATED SECY PAPERS]

[In addition to the above, 10 CFR Part 40 does not currently address the situation of processing material, other than natural ore, at uranium mills. This has created problems when

licensees request NRC approval to process alternate feed material in uranium mills. TO BE ADDED AFTER COMMISSION RECOMMENDATIONS ON RELATED SECY PAPERS]

## CONCLUSION

These problems will continue to complicate the uranium recovery facility licensing process for both the NRC and licensees, and serve to detract from an effective and consistent regulatory program for uranium recovery facilities. The NRC recognizes that these problems should be addressed in order to facilitate the most effective regulation possible for uranium recovery facilities.

## HOW THE PROPOSED RULEMAKING WILL RESOLVE THE REGULATORY PROBLEM

The NRC recognizes that the regulatory framework set out in 10 CFR Part 40 for uranium and thorium recovery facilities should be changed in response to the problems identified above. Two principle options, discussed below, have been considered for dealing with the regulatory problem.

Some of the more significant specific changes that the NRC would make to improve, clarify, update, and make consistent the regulatory requirements as they apply to uranium and thorium recovery facilities are discussed in Attachment 1 of this rulemaking plan. The NRC has also contracted with the Center for Nuclear Waste Regulatory Analyses (CNWRA) to provide additional support in developing this rulemaking.

### Options Considered

Two principal options have been considered for dealing with the regulatory problem. Option 2 has two suboptions, Option 2a and 2b.

Option 1 - Make no changes -- continue to use existing 10 CFR Part 40, including guidance documents and license conditions, for regulating uranium and thorium recovery facilities.

Option 2 - Amend the existing regulations to specifically address uranium and thorium recovery facility issues.

Option 2a - Revise requirements in 10 CFR Part 40 related to uranium and thorium recovery facilities.

Option 2b - Promulgate a new Part, 10 CFR Part 41, that would be dedicated to the regulation of uranium and thorium recovery facilities.

Option 1: Make no changes -- continue to use existing 10 CFR Part 40 for regulating uranium and thorium recovery facilities.

The NRC could continue to regulate uranium and thorium recovery facilities using the applicable regulations of 10 CFR Part 40 in conjunction with 10 CFR Part 40, Appendix A, and supplemental guidance and precedent. Although not perhaps an ideal

arrangement, the NRC has been able to fulfill its statutory mandate to protect public health and safety and the environment by using the existing combination of somewhat fragmented 10 CFR Part 40 requirements, other applicable NRC regulatory requirements, and relevant regulatory and policy guidance and directives, to make licensing decisions. However, without codified requirements, regulating ISL facilities is becoming increasingly problematic. Also, by codifying the requirements there is a greater opportunity for public input on the appropriateness of the proposed requirements. Continuing to regulate ISL facilities using the existing regulatory framework will likely result in continued challenges to the NRC's program, guidance, and decisions from industry and environmental groups. Also, given that there are numerous changes that are needed, regulating without revised requirements raises questions as to whether in some areas the content of the regulation is appropriate or desired.

No additional resources are needed to continue with this option. In the short term it would not require expenditure of resources, whereas embarking on any effort to revise the regulations for uranium recovery facilities will be a major undertaking that will require significant amounts of limited agency resources. However, in the long term, regulating the uranium recovery industry under the current framework is likely to be more costly than it would be under new regulations. Without codifying the necessary regulatory requirements the NRC is likely to be involved in repeated hearings or industry debates to resolve controversial regulatory decisions. Depending on the complexity of the issues and the number and sophistication of the parties, hearings may require large time expenditures by the NRC and may represent a significant drain on agency resources for fairly prolonged periods of time. Because hearings are not fee-recoverable and are included in the overhead for the agency, the cost of prolonged hearings for individual licensees must ultimately be spread to all uranium recovery licensees and could result in increases to the fee base.

In addition, the NRC has already expended considerable resources to address the industry's concerns with the NRC policy. The lack of a clearly codified position on such issues as the disposal of commingled evaporation pond residues, has led to extensive criticism from the industry. More generally, over the past several years, industry has become more proactive in taking issue with NRC's authority. Addressing these issues takes considerable effort. Not amending the regulations will continue the ambiguous regulatory environment, and could cost the agency more than the cost of conducting a rulemaking.

Option 2: Amend the existing regulations to address uranium and thorium recovery facility issues. Option 2 has two suboptions, Option 2a and 2b.

Under either Option 2a or 2b, several of the changes that would be made to the regulations through rulemaking would address problems that have been raised by the industry regarding the current regulatory requirements for uranium and thorium recovery facilities and thus, from a regulatory perspective, would be a significant improvement. Recently, the industry provided a White Paper to the Commission, as well as to the U.S. Senate, on policy issues surrounding the regulation of uranium and thorium recovery facilities. Several of these issues would be addressed in the rulemaking process. Amending existing regulations would also provide an opportunity for the current licensing process to be codified through the rulemaking review and comment process.

This should reduce the extent of challenges to NRC's regulatory program. In addition, rule amendments would clearly lay out the requirements that each licensee must meet in order to obtain a license, thus establishing a common level of regulation among the facilities located in different states.

Option 2a: Revise requirements in 10 CFR Part 40 related to uranium recovery facilities.

This option is supported by the Commission's decision which rescinded the Advanced Notice for Proposed Rulemaking proposing to revise 10 CFR Part 40. The Commission directed that changes to 10 CFR Part 40 associated with the uranium recovery licensees could proceed separately. However, this option would require extensive revisions to 10 CFR Part 40 and, because of the interconnected nature of many of the 10 CFR Part 40 provisions, it would be difficult to make these revisions without disrupting the regulatory requirements for the approximately 200 other materials licensees licensed under 10 CFR Part 40. Such a revision would require a considerable effort to assess what effect the changes in regulatory requirements for uranium recovery facilities would have on the other various types of licensees regulated under 10 CFR Part 40.

Option 2b: Promulgate a new Part, 10 CFR Part 41, that would be dedicated to the regulation of uranium and thorium recovery facilities.

Such a regulation would draw out all of the requirements from 10 CFR Part 40 and 10 CFR Part 40, Appendix A, that are applicable to licensing of uranium and thorium recovery facilities. These regulations would be revised and updated as necessary, but without the need to address how the change would impact other 10 CFR Part 40 licensees. Relevant regulatory requirements from other NRC regulations, uncodified decisions and guidance would also be included in order to develop a set of uranium recovery license requirements that address both conventional and ISL facilities. In addition, development of a new 10 CFR Part 41 will help avoid future situations where changes made to 10 CFR Part 40 to cover other licensees could inadvertently impact uranium recovery facilities.

Developing 10 CFR Part 41 should increase regulatory efficiency, reduce regulatory uncertainty, and facilitate the licensing and enforcement process for the NRC and licensees. Having a single Part that consolidates, updates, and clarifies the regulatory requirements for uranium and thorium recovery facilities should reduce administrative costs both for licensees and NRC. This improved licensing and enforcement situation should also benefit the public.

Preferred Option:

The level of protection afforded public health and safety is essentially the same for all the options being considered. However, staff recommends Option 2b, promulgating a new 10 CFR Part 41 for uranium and thorium recovery facilities because (1) it allows for the broad sweeping changes that are needed in the uranium recovery regulatory framework, and (2) it should be less costly in terms of resources, requiring less time to develop than Option 2a and causing the least amount of disruption to other 10 CFR Part 40 licensing actions.

As part of the development of a new 10 CFR Part 41, conforming amendments would be made to 10 CFR Part 40 to remove references to uranium recovery facilities. Conforming changes would also be made to any other parts of Title 10 which require modification to make appropriate reference to a new 10 CFR Part 41.

OGC ANALYSIS

The Office of the General Counsel (OGC) has reviewed the Draft Rulemaking Plan proposing to amend the requirements for uranium and thorium recovery facilities by adding a new Part 41 to Title 10 of the Code of Federal Regulations entitled "Domestic Licensing of Uranium and Thorium Recovery Facilities." This proposed rulemaking would be undertaken because the NRC staff believes that the current regulations in 10 CFR Part 40 and Appendix A of 10 CFR Part 40 have made licensing and enforcement of uranium mining increasingly more complicated and problematic, particularly as these requirements apply to in situ leach uranium recovery facilities.

The proposed rule will require preparation of an Environmental Assessment (EA), as it appears that there are no categorical exclusions in 10 CFR 51.22(c) which would apply to this rulemaking. This proposed rule is not subject to the backfit considerations of 10 CFR 50.109, as no 10 CFR Part 50 licensees would be affected.

The determination of whether the rule is a “major rule” (over $100 million impact to uranium recovery facilities) under the Small Business Regulatory Enforcement Fairness Act of 1996, will be made during the development of the Regulatory Analysis prepared for the proposed rule. If the rule is not a major rule, then the mandated 60-day period prior to effectiveness of major rules is not applicable.

The proposed rule will require licensees to generate and maintain records related to their operations. Accordingly, the change will require OMB review for the purpose of the Paperwork Reduction Act.

[OGC recently prepared a legal analysis, analyzing whether the NRC could defer to EPA, or its permitting States, in the regulation of groundwater -- TO BE ADDED AFTER COMMISSION RECOMMENDATIONS ON RELATED SECY PAPERS]

OGC suggested in its memorandum that this issue be included and addressed if the Commission decides to undertake a 10 CFR Part 41 rulemaking. OGC has made the same recommendation for the issues in the two related SECY Papers, because they represent a change in the Commission policy and rulemaking would provide an underlying legal and technical basis for any change in Commission interpretation of its regulation and thus aid Courts to defer to this agency’s interpretation of its regulations.

AGREEMENT STATE IMPLEMENTATION ISSUES

The compatibility of the 10 CFR Part 41 rule parts will be determined in accordance with the NRC Policy Statement on Adequacy and Compatibility of Agreement State Programs. Agreement States will be notified of the availability of the this plan on the Technical Conferencing Forum on NRC's website and their comments will be solicited and considered in the development of the final plan.

MAJOR RULE

The determination of whether this is a major rule, impacts over $100 million, will be based on the accompanying Regulatory Analysis that would be prepared if a new 10 CFR Part 41 is developed. It is the staff's opinion that the costs of implementation of this rule would not result in any major costs to NRC or Agreement State licensees. Much of what is proposed would be codifying existing practice or modifications that could reduce licensees' burden. Changes that could increase licensees' burden deal with reporting and recordkeeping requirements.

SUPPORTING DOCUMENTS

This rulemaking would require a Regulatory Analysis that would estimate the cost impacts to both the NRC and licensees for a new 10 CFR Part 41. It is expected that the CNWRA work will provide a bases for preparation of the Regulatory Analysis. The information provided in the Regulatory Analysis for each proposed change concerning the impact on small entities would be sufficient to support a Regulatory Flexibility Analysis or certification that the proposed rule would not have a significant economic impact on a substantial number of small entities.

An Environmental Assessment (EA), and finding of no significant impact, would be needed to show, as previous environmental analyses have indicated and as experience has demonstrated, that the revised requirements would not result in a significant adverse impact to public health and safety and the environment. This proposed rulemaking would codify much of what is, for the most part, already existing practice. The NRC is currently using regulations, guidance documents, and licensing conditions to regulate uranium recovery facilities. A new 10 CFR Part 41 would incorporate into one place appropriate existing requirements and current practice; however it would -- TO BE ADDED AFTER COMMISSION RECOMMENDATIONS ON RELATED SECY PAPERS]. In addition, changing some of NRC's prescriptive requirements with more performance based regulations will provide flexibility, but should not impact safety.

An OMB Clearance Package will be needed because the rulemaking could increase, or at least change, the reporting or record keeping requirements for some of the affected licensees. No backfit analysis will be needed because the rulemaking would not affect 10 CFR Part 50 or 10 CFR Part 72 licensees.

Licensing and inspection guidance documents are either currently in use or are in preparation. Existing licensing guidance documents include Regulatory Guides that were issued previously for uranium mill licensing, two Manual Chapters and Inspection Procedures that were issued in July 1997, and a guidance document regarding the disposal of effluents at ISL facilities. In addition, the NRC is preparing one Standard Review Plan (SRP) for ISL facilities and one SRP for conventional uranium and thorium mills. A draft copy of the ISL facility SRP and a draft of the conventional mill SRP will be available to accompany the proposed rule for comment. If a new 10 CFR Part 41 were promulgated, the NRC would revise the existing Regulatory Guides and other documents to make them consistent with the new regulation and applicable to both conventional mills and ISL facilities (those guides and documents were originally developed for conventional mills only). Also, guidance related to implementing 10 CFR Part 20 for uranium recovery facilities would be completed in parallel to

the 10 CFR Part 41 effort. This guidance is approximately 20 years old, and was written for the superceded 10 CFR Part 20.

RESOURCES

The resources estimated to complete this rulemaking and the associated support and guidance documents would be 3.0 full-time equivalent (FTE) positions (2.5 FTEs in the Office of Nuclear Material Safety and Safeguards and 0.5 FTE in other offices) and $700,000, over approximately 2 years. This estimate is based on the rulemaking being completed in early Calendar Year 2001. Resources for this work are currently included in the budget.

STAFFING

| | Staff Level Working Group | Concurring Official |
|---|---|---|
| NMSS: | Mark Haisfield<br>Myron Fliegel | Carl Paperiello |
| OSP: | Tom O'Brien | Paul Lohaus |
| OGC: | Maria Schwartz | Stuart Treby |

STEERING GROUP

None needed for this rule.

PUBLIC PARTICIPATION

Rulemaking documents will be placed on NRC's website to enhance pubic dialogue. The NRC website allows users to review NRC documents, submit comments on the documents, and review comments and questions submitted by others. The approved Rulemaking Plan, the proposed rule, and associated guidance documents would all be placed on NRC's website.

To facilitate the Agreement State review of the rulemaking plan, notice of its availability will be placed on the Technical Conferencing Forum on NRC's website. Agreement States will be provided 45 days to comment.

The NRC has already profited from enhanced public participation for this rulemaking by holding public meetings in the western part of the country where most of the licensees of concern are located early in the rulemaking process. Transcripts have been provided to interested parties, and have been placed in the Public Document Room. Essentially, the comments received at the meetings covered several areas. Members of the public asked for greater involvement in the process early, and recommended that an Advance Notice of Proposed Rulemaking be published. To address this concern, the Commission may consider using an approach for 10 CFR Part 41 similar to other recent rulemakings where during development of the proposed rule the staff's proposal could be made available on the NRC web site. As mentioned earlier, another comment received from the public dealt with the elimination of NRC oversight of ground water at ISL facilities. This commenter noted that the NRC program complements, not duplicates the EPA UIC program. The State of Wyoming, on the other hand, commented that it believed the NRC could remove itself from the regulation of ISL facility ground water. Several members of the public did not support the use of tailings

impoundments for the disposal of material other than 11e.(2) byproduct material. In addition, members of the public also opposed the processing of alternate feedstock material through mills. The industry generally, did not believe that a rulemaking was needed, and suggested that the Commission need only adopt the recommendations in the NMA White Paper. The Rocky Mountain Low-Level Waste Compact opposed the removal of LLW compact approval from the disposal of material other than 11e.(2) byproduct material.

EDO OR COMMISSION ISSUANCE

Since the recommended action would result in a new Part, as well as implementing new Commission policy, it is recommended that the Commission issue the proposed and final rule.

SCHEDULE

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| Public Meetings | August 98 |
| Commission Paper | January 99 |
| Draft RP to the States and CRCPD (45 day comment period) | 1 week after Commission guidance |
| SECY Paper, including RP, with disposition of States comments for Office concurrence | 9 weeks after Commission guidance |
| SECY Paper, for approval of RP, to EDO | 13 weeks after Commission guidance |
| Proposed rule to the EDO (will include OMB package) | Nine months after approval of the RP |
| Final Rule to EDO | Seven months after close of the public comment period |

Attachment 1

## Specific Proposed Changes

The following discussions addresses the more significant changes that the NRC would make to the requirements to improve, clarify, and update the regulations as they apply to uranium and thorium recovery facilities in a new 10 CFR Part 41. The proposed revisions fall into one of three categories: additions to the existing regulations, deletion from the existing regulations, and modifications and clarifications to existing regulations.

### A. ADDITIONS TO THE EXISTING REGULATIONS

#### 1. Regulations For In Situ Leach Facilities

Regulations for in situ leach (ISL) facilities are necessary in order to codify acceptable standards for the operation and decommissioning of ISL facilities, to clarify NRC's authority, to establish the regulatory philosophy that will guide NRC's decisions, and to define what the NRC will inspect against, so that these requirements do not have to be imposed through individual license conditions, as is presently the case. The new 10 CFR Part 41 would include a subpart with licensing requirements for ISL facilities that would parallel a subpart for conventional mills derived from the licensing requirements currently in Appendix A of 10 CFR Part 40. In addition, it would address several of the issues raised by the National Mining Association (NMA) in its April 1998 White Paper, specifically the regulation of ground water.

The current requirements in 10 CFR Part 40, Appendix A are written in a manner that makes them either specifically applicable to conventional uranium mills or mill tailings impoundments, or generally applicable to both conventional mills and ISL facilities. Currently, NRC uses the generally applicable requirements in 10 CFR Part 40, Appendix A, to regulate ISLs. For example, the cleanup criterion for radium contamination in soils, which is general enough to apply to both conventional mills and ISL facilities. Ground-water cleanup standards, however, are written in a manner that make them applicable to only uranium mill tailing impoundments. Because of this, as mentioned earlier in this analysis, the staff has regulated the ground water at ISL facilities by using generically applicable requirements in 10 CFR Part 40 and by drawing on applicable groundwater standards from the U.S. Environmental Protection Agency (EPA) or States, mainly through license conditions. Any new rulemaking should codify the requirements necessary for the operation and cleanup of ISL facilities.

[TO BE ADDED AFTER COMMISSION RECOMMENDATIONS ON RELATED SECY PAPERS]

#### 2. Addition of Regulations for Disposal of Other Material in Tailings Piles

In Defining Strategic Issue 9 (DSI-9), Option 7, the NRC staff identified mill tailings impoundments as a potentially cost-effective place to dispose of materials from reclamation and cleanup of other fuel cycle facilities. Option 7 recommended that a regulatory framework be developed to allow this use of mill tailings impoundments. In the SRM for DSI-9, COMSECY-96-058, the Commission included Option 7 in its directive for action on the issue. Although Option 7 did not specifically identify the development of a regulation as the approach to take,

the NRC believes it would be useful to codify the requirements and criteria for such disposal in uranium recovery regulations.

Specific criteria outlining what would be needed to dispose of other AEA material besides 11e.(2) byproduct material in uranium mill tailing piles would be included in the new 10 CFR Part 41. [TO BE ADDED AFTER COMMISSION RECOMMENDATIONS ON RELATED SECY PAPERS]

3. Criteria for Construction of 11e.(2) Byproduct Material Disposal Cells

At present, the Envirocare facility is the only operating 11e.(2) disposal cell (not associated with a mill) in the United States. Also, at least one uranium mill has received permission to dispose of any type of 11e.(2) material in its existing tailings impoundments. Other mills have the authority to take 11e.(2) material generated only at ISL facility operations. In licensing the 11e.(2) disposal cell and the one mill, the NRC staff followed Commission direction which was provided in a Federal Register (FR) Notice published on January 25, 1991 (56 FR 2959). The Envirocare facility is a commercial facility accepting wastes from other generators, similar in some respects to LLW facilities regulated under 10 CFR Part 61. However, the waste is classified as 11e.(2) byproduct material. This FR Notice established recommendations on how the review should be conducted, and what regulations applied. For example, 10 CFR Part 40 establishes the general requirements for 11e.(2) material, but certain administrative and recordkeeping requirements from 10 CFR Part 61 were included in the license, as well as, manifesting requirements from 10 CFR Part 20.

In the future, other facilities may desire such authority. A new 10 CFR Part 41 would address the recommendations from the 1991 FR Notice for new disposal facilities and mills desiring to accept significant quantities of 11e.(2) material.

4. Addition of Regulations for Processing Alternate Feed Material

Because of requests by licensees to process material, other than natural ore, at uranium mills and because 10 CFR Part 40 does not address this issue, staff prepared guidance in 1995 to address under what conditions alternate feed material could be processed at a mill and the residue allowed to be disposed of in the tailings pile as 11e.(2) byproduct material. The NMA proposed revising the guidance to allow virtually any material with uranium to be processed at a mill and the waste disposed of in the tailings pile.

[TO BE ADDED AFTER COMMISSION RECOMMENDATIONS ON RELATED SECY PAPERS]

5. Operational Flexibility Provision

By memorandum dated August 26, 1994, the staff informed the Commission that it had identified several ways to reduce the regulatory burden on uranium recovery licensees. As part of this effort, the staff stated it would begin the use of a performance-based license condition as a way to allow licensees, under certain conditions, to make changes to their facilities without prior NRC approval. Subsequently, the NRC began implementing this performance-based licensing approach as it renewed existing uranium recovery licenses.

Use of the performance-based license has been most effective at ISL facilities. In the past, ISL facility licensees had to come to the NRC for each individual wellfield that they wanted to bring into production. The NRC would then review the proposal, determine if it was acceptable, and issue an amendment. Under a performance-based license, ISL facility licensees establish the methods they will use to open new wellfields, and then apply that method for each wellfield. This eliminates the need for the NRC to review each new wellfield.

A new 10 CFR Part 41 would codify this approach to the licensing of ISL facilities and the specific requirements that would have to be met for licensees to undertake changes without prior NRC approval. While performance-based licensing is becoming a part of uranium recovery licensing practice, it has not been codified in the regulations. In addition, at least one HRI hearing petitioner has raised a question about the validity of the performance-based licensing process. Thus, currently, staff has implemented a performance-based license through a license condition rather than a regulation since performance-based licensing is consistent with Commission actions for other facilities.

6. Requirement for Standby Trust

10 CFR Part 40 requires that licensees have financial assurance to cover the cost of reclamation and restoration of licensed sites and facilities. However, under most surety arrangements currently in place, should the surety have to be drawn on, the assets would go to the NRC which is required to deposit those assets directly into the U.S. Treasury. Because the NRC would have to request a special appropriation to reacquire the monies so deposited, these monies may not be available for timely remediation of a uranium recovery site. The "Technical Position on Financial Assurances for Reclamation, Decommissioning, and Long-Term Surveillance and Control of Uranium Recovery Facilities," published in October 1988, recommends that licensees incorporate a standby trust in their surety arrangement. Under this arrangement, the trustee would receive assets from a surety that had been called and could dispense funds to the NRC to complete remediation. While the Technical Position recommends establishment of a standby trust, it cannot require it and most uranium recovery licensees have not established one. The NRC proposes to codify a requirement for the establishment of standby trusts for financial sureties in a new 10 CFR Part 41.

7. Addition of General License Provision for 11e.(2) Byproduct Material

Current 10 CFR Part 40 regulations contain a provision granting a general license for possession of small quantities of source material. However, there are no similar provisions for the possession of small quantities of 11e.(2) byproduct material under a general license. Because of this, laboratories that conduct testing and analyses for uranium mills must be fully licensed by the NRC in order to possess 11e.(2) byproduct material onsite, even if only for short amount of times (a few weeks) a few times a year. As a result, these laboratories incur the administrative burden and cost (including licensing fees) associated with becoming fully licensed. Therefore, only a very limited number of laboratories have obtained the necessary licenses, limiting the number of laboratory facilities available to uranium recovery licensees for such testing and analyses.

It takes approximately 30 pounds of byproduct material from a single uranium mill to conduct standard, required, material analyses needed to support such things as the design of a radon barrier. To provide regulatory relief to both the laboratories and the licensees, the NRC would add a General License provision in a new 10 CFR Part 41 that would allow the possession of not more than 300 pounds of 11e.(2) byproduct material by laboratories for the

purpose of conducting routine testing and analyses for uranium recovery facilities. The amount of 300 pounds would allow laboratories the ability to conduct testing and analyses on samples from more than one site at a time. This provision would describe the qualifications for being a general licensee, stipulate the amount of material that could be possessed at any one time under a general license, and describe the transfer and disposal provisions for such quantities.

## B. DELETIONS FROM THE EXISTING REGULATIONS

### 8. Deletions of Prescriptive Site and Design Requirements

10 CFR Part 40, Appendix A, contains "Criteria Relating to the Operation of Uranium Mills and the Disposition of Tailings or Wastes Produced by the Extraction or Concentration of Source Material from Ores Processed Primarily for Their Source Materials Content." Appendix A establishes technical, financial, ownership, and long-term site surveillance criteria relating to the siting, operation, decontamination, decommissioning, and reclamation of conventional uranium mills and the tailings at sites where such mills are located. The requirements in Appendix A represent a mix of prescriptive, performance-based, deterministic, and risk-informed criteria, because they have been revised and expanded repeatedly since they were originally issued. Most of Appendix A is prescriptive: (1) Specifying the design of a tailings disposal facility, the materials to be used in construction, where they would be used, and where the tailings are to be located; (2) Specifying the slopes for the various surfaces of the impoundments; and (3) Establishing the condition that to be approved by the NRC, the completed tailings impoundment must require no active maintenance.

Several of the proposed deletions from the prescriptive requirements in Appendix A include: (1) Eliminating prescriptive requirements currently contained in several criteria that restrict the ability to implement performance based licensing; (2) Eliminating prescriptive design and siting requirements currently included in Criterion 4. Criterion 6 contains performance objectives for cleanup and long-term stabilization of tailings and is sufficient to protect public health and safety without the prescriptive requirements in Criterion 4; and (3) Eliminating the provision in Criterion 12 precluding maintenance in the long-term design of tailings impoundments. This provision is not warranted, and the proposed rule would remove the prohibition against the use of maintenance in the long-term design of the impoundments. The last two proposed deletions result from recommendations of the National Performance Review which evaluated ways to eliminate obsolete or unnecessary requirements.

## C. MODIFICATIONS AND CLARIFICATIONS TO EXISTING REGULATIONS

### 9. Clarify the Meaning of 11e.(2) Byproduct Material as it Relates to Uranium Recovery Facilities

This issue deals with what constitutes 11e.(2) byproduct material at ISL facilities. [TO BE ADDED AFTER COMMISSION RECOMMENDATIONS ON RELATED SECY PAPERS]

### 10. Clarification of Reporting Requirements

Criteria for reporting events at uranium recovery facilities are contained in 10 CFR 40.60. The reporting thresholds are generic for all 10 CFR Part 40 licensees, and are based on the doses that could exceed regulatory limits. Because the material handled at both mills and

ISL facilities is either natural ore or tailings, it is highly unlikely that regulatory limits will be exceeded. However, this does not mean that certain events which happen at uranium recovery facilities should not be reported.

Spills occurring at ISL facilities tend to pose a different hazard to public health and safety than spills associated with other NRC-regulated facilities. ISL facility operators occasionally experience operational problems or leaks in their wellfields that result in spills or the release of solutions or restoration water to the environment. Typically these solutions contain very low levels of uranium and other potentially hazardous substances. The NRC is becoming increasingly sensitive to the fact that there can be non-radiological, hazardous constituents associated with spills at ISL facilities, and that the risk from these non-radiological substances has to be factored into decisions regarding the significance of the spills.

Many of these constituents have not been addressed in the license conditions. The spills or releases that occur in the wellfields or associated processing areas are usually isolated, so exposures and resulting doses are limited. Such spills can be small or involve tens of thousands of gallons of solutions.

Because of the thresholds related to regulatory requirements in 10 CFR 40.60, there are currently no reporting requirements in 10 CFR Part 40 that result in uranium recovery licensees notifying the NRC of events at their facilities. As a result, reporting requirements are established through license conditions that have resulted in inconsistent reporting of events, uneven documentation, and inconsistent responses from different licensees to similar incidents. For example, some licensees clean up after spills and others take no action at all. The requirements may also be open to different interpretations by the licensees and inspectors.

Because spill information is not consistently reported, the NRC does not have an accurate picture of the frequency or the severity of the problem, or a complete assessment of the real impacts that the spills have on public health and safety or the environment. In particular, the NRC may not have the information required to mobilize an appropriate regional or national response to a serious spill.

In addition, the types and frequency of events that occur at facilities are a direct indicator of licensee performance, and as such, the NRC needs to be informed in a timely manner of significant events that might indicate a drop in performance. Examples of the types of spills that would be reported include those that could result in exceeding the final clean-up standard for decommissioning ISL facilities. Also, spills greater than 10,000 gallons would be reported. This information would allow the NRC to gain better insight into how well facilities are being operated consistent with health and safety and environmental protection requirements.

A second set of reporting requirements would include the need to report events that result in any contamination in an area. As noted earlier, the reporting threshold in the existing 10 CFR Part 40 is sufficiently high that events at ISL facilities or uranium mills often do not get reported. However, this does not mean that the events at these facilities are not significant. As such, the NRC would include reporting provisions in a new 10 CFR Part 41 that would ensure events at uranium recovery facilities with safety significance would be reported.

The NRC plans to include criteria for reporting events in a new 10 CFR Part 41. The main benefit to licensees of standardized reporting requirements is consistency in regulation and decision making. Clarifying requirements would also facilitate inspections. However, a

new regulation could require some licensees to report events to the NRC that are currently not reportable under their license conditions.

11. Clarification of Applicability of Siting and Design Requirements for Existing Facilities

Criterion 1 of Appendix A identifies goals and broad objectives in the siting and design of tailings piles. In promulgating Appendix A, it was recognized that existing sites may not meet these goals to the same level of conservatism as new sites. The Generic Environmental Impact Statement on Uranium Milling, NUREG-0706, explicitly discussed this. The NRC staff has also interpreted Appendix A as allowing consideration of engineering designs to show compliance with requirements dealing with erosion protection and groundwater contamination. However, a February 28, 1991 decision of the Atomic Safety and Licensing Appeal Board (ALAB-944) interpreted Criterion 1 in a much more restrictive manner. In 1996, the Commission vacated the Appeals Board decision for reasons unrelated to the Criterion 1 issue. However, in order to avoid future misinterpretations, the proposed 10 CFR Part 41 would clarify siting and design goals and broad objectives.

12. Modification of Annual Surety Requirements

Currently, uranium and thorium recovery licensees are required by Appendix A to submit an annual surety certification covering the cost of third party reclamation and restoration of their sites. In some cases the actual surety amount does not change from year to year because any increases in reclamation and restoration costs are offset by a reduction in the surety amount due to work to remediate the site that has been completed. The preparation of the surety submittals on an annual basis imposes an unnecessary regulatory burden on licensees and the NRC. The NRC reviews 28 uranium recovery sureties a year and generally spends 2-4 days on each review.

The NRC proposes to revise the requirement for an annual surety update to a biannual update unless the NRC determines, on a case-by-case basis, that a particular licensees's circumstances require a more frequent review.

The NRC also proposes to clarify when sureties must be updated to accommodate proposed changes in reclamation plan designs. Currently, the regulation states that the surety will be updated once a reclamation plan has been accepted by the NRC, and that the surety will be updated annually to reflect any changes. The NRC recently issued a Generic Letter requiring licensees to revise their sureties to reflect proposed changes at the annual surety update. However, this may be before the prepared reclamation plan changes are accepted by the NRC and at least one licensee has questioned this interpretation. Therefore, a new 10 CFR Part 41 would clarify that sureties should be updated for reclamation plan changes after acceptance by the NRC.

13. Update the Long-Term Surveillance Fee

Criterion 10 of Appendix A requires that prior to license termination, a charge to cover the costs of long-term surveillance be paid by the licensee. The minimum charge is given as $250,000 in 1978 dollars. A new 10 CFR 10 CFR Part 41 would update the charge to 1998 dollars.