



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

January 28, 1993

The Honorable Robert T. Matsui  
United States House of  
Representatives  
Washington, DC 20515

Dear Congressman Matsui:

This is written in response to your letter dated January 8, 1993, in which you request information, on behalf of Ms. Sandra L. Carreiro, one of your constituents, regarding new regulations pertaining to nuclear impregnated tungsten welding electrodes. The use of thoriated welding rods is exempt from licensing; however, the manufacture and/or distribution of these welding rods may be subject to regulatory control.

Enclosure 1 is the Nuclear Regulatory Commission news release dated October 28, 1992, which notices NRC's intent to update regulations governing use of uranium and thorium. The news release summarizes the Advance Notice of Proposed Rulemaking (ANPRM). Enclosure 2 is a copy of the ANPRM. The focus of this rulemaking is to ensure that the requirements governing source material are comparable to those governing radioactive byproduct materials and to bring them into conformance with the Commission's revised radiation protection requirements.

Enclosure 3 is an NRC Information Notice highlighting the new exposure limits for airborne uranium and thorium. Recent revisions of 10 CFR Part 20 contain reduced values for permissible air and water effluents containing thorium. These values are based on new biological data and dose evaluation methodologies. Title 10 Part 20 is applicable to all licensees, such as manufacturers and distributors of welding rods. The revised regulations become effective January 1, 1994.

If you have any further questions, please do not hesitate to contact us.

Sincerely,

*for James M. Taylor*  
James M. Taylor  
Executive Director  
for Operations

Enclosures:

1. NRC News Release of 10/28/92
2. ANPRM
3. NRC Information Notice No. 92-34

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# UNITED STATES NUCLEAR REGULATORY COMMISSION

Office of Public Affairs  
Washington, D.C. 20555

No. 92-158  
Tel. 301-504-2240

FOR IMMEDIATE RELEASE  
(Wednesday, October 28, 1992)

## NUCLEAR REGULATORY COMMISSION NOTICES INTENT TO UPDATE REGULATIONS GOVERNING USE OF URANIUM AND THORIUM

The Nuclear Regulatory Commission has issued an Advance Notice of Proposed Rulemaking which will reexamine and update the requirements, contained in Part 40 of its regulations, governing the possession and use of the source materials uranium and thorium.

The focus of this rulemaking is to ensure that the requirements governing source material are comparable to those governing radioactive byproduct materials and to bring them into conformance with the Commission's revised radiation protection requirements (Part 20 of its regulations).

The Commission's staff also has underway analyses to reevaluate the potential radiation exposure to the public from the various uses of source materials which are exempt from the NRC's licensing requirements as well as the exemptions for byproduct materials contained in Part 30 of the Commission's regulations and may, in the future, reconsider the appropriateness of some of these exemptions.

The Advance Notice of Proposed Rulemaking addresses those issues which the staff has preliminarily identified as being candidates for a Part 40 rulemaking. They are:

- 1) Improvements in the control of source material released for unrestricted uses through more specific requirements for licensees who commercially distribute products or materials to persons exempt from licensing.

- 2) Reconsideration of two general licenses contained in Part 40. One authorizes commercial and industrial firms, research, educational and medical institutions and Federal, state and local governments to use and transfer not more than 15 pounds of source material at any one time (or not more than 150 pounds per year) for research, development, educational, commercial or operational purposes. The other authorizes, subject to specified conditions, the receipt, acquisition, possession, use or transfer of depleted uranium contained in industrial products or devices

Enclosure 1

for the purpose of providing a concentrated mass in a small volume of the product or device.

3) Possible revisions of the requirements governing specific licensees to make them more specific or detailed and possibly tailored to major categories of use.

4) Issues involving mills and mill tailings including: the use of alternative feed materials in uranium mills; the disposal of waste materials that do not meet the definition of byproduct material in mill tailings compounds; licensing of a commercial disposal site for mill tailings including wastes from in-situ extraction operations; the disposal of waste from in-situ leaching operations; and the obligation of the NRC to obtain concurrence from the Environmental Protection Agency that NRC regulations governing uranium mill tailings are comparable to those of the EPA. A separate rulemaking proceeding will be used to conform the NRC's Part 40 requirements governing radon emissions from the operation of uranium mills and the disposition of tailings or wastes to those being proposed by the Environmental Protection Agency.

Part 40 was first promulgated by the former Atomic Energy Commission in 1947 and, with one exception, has not been systematically reviewed for effectiveness and consistency with other NRC regulations since that time. In 1961, the requirements in Part 40 were amended to establish licensing procedures, terms and conditions for source material that were substantially similar to those for byproduct material set forth at that time in Part 30 of the Commission's regulations.

Accordingly, the Advance Notice of Proposed Rulemaking contemplates an overall revision of Part 40 to deal with all of the identified areas and issues. However, depending on the information received in response to the Advance Notice, rulemakings on discrete issues--such as obtaining better information on products and materials being distributed for use under an exemption and for use under a general license or to deal with mill issues--could be initiated.

Written comments on the Advance Notice, including comments on a number of specific matters identified in the notice, should be received by January 25, 1993. They should be addressed to the Secretary of the Commission, Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch.

**List of Subjects in 7 CFR Part 1413**

Cotton, Feed grains, Price support programs, Rice, Wheat.

Accordingly, it is proposed that 7 CFR part 1413 be amended as follows:

**PART 1413—FEED GRAIN, RICE, UPLAND AND EXTRA LONG STAPLE COTTON, WHEAT AND RELATED PROGRAMS**

1. The authority citation for 7 CFR part 1413 continues to read as follows:

Authority: 7 U.S.C. 1306, 1306a, 1308, 1441-2, 1444-2, 1444f, 1445b-3a, 1481-1489; 15 U.S.C. 714b and 714c.

2. Section 1413.54 is amended by adding paragraph (a)(5)(iii) and revising paragraph (d)(3) as proposed at 57 FR 44709 (September 29, 1992) to read as follows:

**§ 1413.54 Acreage reduction program provisions.**

(a) \* \* \*

(5) \* \* \*

(iii) 1993 ELS cotton shall be within the range of 15 to 25 percent, as determined and announced by CCC.

\* \* \* \* \*

(d) \* \* \*

(3) Shall not be made available to producers of the 1993 crops of wheat, feed grains, upland and ELS cotton, and rice.

\* \* \* \* \*

Signed at Washington, DC on October 26, 1992.

John A. Stevenson,

Acting Executive Vice President, Commodity Credit Corporation.

[FR Doc. 92-26256 Filed 10-26-92; 12:54 pm]

BILLING CODE 3410-06-B

**NUCLEAR REGULATORY COMMISSION**

**10 CFR Part 40**

RIN 3150-AE33

**Licensing of Source Material**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Advance notice of proposed rulemaking.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) is considering amending its regulations governing the licensing of source material and mill tailings. The contemplated rulemaking would consider revisions to improve control of source material through more specific regulation and to update the applicable requirements to conform with the revised standards for protection

against radiation. This advance notice of proposed rulemaking is being issued to solicit comments and recommendations from interested parties on the issues that have been identified as candidates for consideration in this rulemaking.

**DATES:** Comment period expires January 26, 1993. Comments received after this date will be considered if it is practical to do so, but the Commission is able to assure consideration only for comments received on or before this date.

**ADDRESSES:** Mail comments or suggestions to: The Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch.

Deliver comments to: 11555 Rockville Pike, Rockville, Maryland, between 7:45 am and 4:15 pm Federal workdays.

Examine copies of comments received at: the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC.

Copies of NUREG-1324 and NUREG/CR-5681 which support this advance notice may be purchased from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20013-7082. Copies are also available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. A copy is also available for inspection and/or copying at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Catherine Mattsen, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 492-3638.

**SUPPLEMENTARY INFORMATION:**

**Background**

Source material, which consists of uranium or thorium, is a naturally-occurring low specific-activity material. The regulations in 10 CFR part 40 were initially based on the assumption that the health and safety impacts of source material were low and that considerations of protecting the common defense and security were most significant. Since 10 CFR part 40 was first promulgated on March 20, 1947 (12 FR 1855) by the Atomic Energy Commission (AEC), the provisions of 10 CFR part 40 have not been systematically reviewed for effectiveness and consistency with other NRC (AEC) regulations except for the overall revision of 10 CFR part 40 on January 14, 1961 (26 FR 294) to establish licensing procedures, terms, and conditions for source material which

were substantially similar to those set forth for byproduct material in 10 CFR part 30. Therefore, the existing structure and general requirements have not been evaluated for conformance with the current radiation safety standards and current industry needs, practices, and capabilities.

Some of the exemptions from licensing for certain consumer products, such as gas mantles containing thorium, have not been modified since they were included in the original promulgation of 10 CFR part 40. These exemptions essentially accommodated existing practice. However, consistent with a policy statement on consumer products published on March 16, 1965 (30 FR 3462), the Commission has made various evaluations of potential doses from exempt products to assure that exposures from any individual exempt practice do not exceed a small fraction of the overall recommended dose limit for the public and that the combined effect of exposures from various exempt practices does not result in a significant impact to public health and safety. The recent revision of 10 CFR part 20 published on May 21, 1991 (56 FR 23360) contains standards for radiation protection and decreased values for permissible concentrations in air and water effluents containing uranium and thorium. These revisions suggest the need for a reevaluation of the potential doses from exemptions because the new biological data and dose calculation methodology reflected in the revised standards for protection against radiation could result in changes in some of the dose estimates. In addition, various radiation protection standards organizations (e.g., the International Commission on Radiological Protection, the National Council on Radiation Protection and Measurements, etc.) have recommended reduction in overall doses to the public. Thus, the Commission decided to review the potential doses from existing exemptions and to reevaluate the adequacy of controls to assure that materials and products distributed under an exemption do indeed meet the limitations provided for that exemption.

A preliminary analysis suggested that the regulations in 10 CFR part 40 governing the control of source material released for unrestricted use may be improved by making them more comparable to those governing similar exemptions for byproduct material (10 CFR part 30). This would result in more specific requirements being imposed on licensees who distribute products or materials used under an exemption and



for applicants for a license planning this type of distribution.

The Commission is also concerned with the degree of control of material and how it has been used under the general license in § 40.22. Therefore, the Commission was planning to reevaluate this issue.

The Commission has decided to review all of 10 CFR part 40 and, in particular, to consider the need for updating requirements pertaining to source material to make them more comparable to similar requirements for byproduct material. The Commission is also considering the extent to which the requirements in 10 CFR part 40 should be updated to conform to the revised standards for protection against radiation. Although this review has not been a systematic point-by-point analysis of all of 10 CFR part 40, the Commission has solicited questions and concerns from knowledgeable NRC staff, from outside consultants, and from the Agreement States. This Advance Notice of Proposed Rulemaking (ANPRM) presents the issues identified and preliminary views. The Commission is issuing this ANPRM to solicit input from all interested parties.

The NRC staff discussed the idea of an ANPRM with the Agreement States at a public meeting held in conjunction with their October 1991 annual meeting at Sacramento, CA. By letter dated January 3, 1992, the NRC staff followed up the meeting with a request for further information concerning areas or issues that should be addressed in a revision of 10 CFR part 40. Of the 28 Agreement States, a total of 15 States responded of which 7 States responded with no comment. The Agreement States that commented indicated 12 general areas that need to be evaluated. The NRC has considered all general areas of concern in the development of this ANPRM.

Although several States suggested specific changes to the current wording of 10 CFR part 40, the NRC will delay consideration of these specific changes until the initiation of a proposed rule in order to collect views from a broad spectrum of interests prior to initiating the drafting of specific regulatory language. The NRC summary of comments from the Agreement States is available from the staff contact listed in the address heading, and is available for inspection and copying for a fee in the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC.

#### Issues Being Considered for Proposed Rulemaking

The following discussion presents the issues identified as candidates for

consideration in rulemaking. This discussion is categorized into the four major elements which include all aspects of source material regulation: exemptions, general licenses, specific licensing for other than mills and tailings, and milling and mill tailings. A more detailed discussion of the issues addressed in this notice is contained in a contractor report on options for rulemaking on revision of 10 CFR part 40, NUREG/CR-5881, "An Examination of Source Material Requirements Contained in 10 CFR part 40," October 1992.

#### Exemptions

The Commission is considering whether to propose regulations to improve the control of source material released to unrestricted use through more specific requirements on licensees who sell, transfer, or distribute products or materials to exempt persons.

Controls that will be considered to achieve consistency with the requirements governing byproduct material in 10 CFR part 30 include:

- (1) Specific requirements on the manufacturers of products, such as quality assurance program, that would provide assurance that the products distributed meet the specifications important to safety;
- (2) A requirement for specific license authorization to commercially distribute, or import for commercial distribution, products for use on a license exempt basis; and
- (3) Periodic reporting by the manufacturer or importer of the type and number of products and quantities of source material distributed so that the nature and extent of use is readily available to the Commission and other interested parties.

In addition, the Commission is reevaluating potential doses from materials and products which are exempt from licensing. On the basis of this study, those exemptions with significantly greater potential doses will be further reevaluated on a cost-benefit basis. A determination will then be made if any particular exemptions should be modified or revoked. This process will take some time to complete and, in order to have a firm basis for rulemaking, the Commission may need to obtain more complete information on those products and materials containing source material that are being distributed for exempt use.

While soliciting issues for consideration in the updating of 10 CFR part 40, the issue was raised concerning the exemption of source material under the 0.05% weight concentration contained in § 40.13(a). This exemption

will be reevaluated along with the others in parts 30 and 40.

#### General Licenses

The issues raised concerning generally licensed source material are:

- (1) Whether the quantity of source material and activities authorized in the general license in § 40.22 are sufficiently limited and defined so that the workers and the general public are adequately protected; and
- (2) Whether the general license in § 40.25 is effective in the current regulatory environment.

The NRC staff has been concerned with improving the control of material used under general license, particularly as authorized by 10 CFR 40.22. General licenses are in effect without the filing of applications with the Commission or the issuance of licensing documents to a particular person. The safety principle underlying the general license is based on limitations on the type, form, and quantity of material and restrictions on the type of activities that are permitted.

Section 10 CFR 40.22 provides a general license authorizing commercial and industrial firms, research, educational, and medical institutions and Federal, State, and local government agencies to use and transfer not more than 15 pounds of source material at any one time for research, development, educational, commercial, or operational purposes. Under this general license, a person may not receive more than a total of 150 pounds of source material in any one calendar year. The underlying principles of the general license are:

- (1) That the source material will be used in a responsible manner by institutions and agencies; and
- (2) That it will be afforded an appropriate degree of radiation safety control through the safety controls applied to its use as a chemical compound. The quantity limits appear to have been established to preclude substantial processing or production operations that might cause safety problems for workers. In a recent enforcement case processed by the NRC staff (SECY-92-128),<sup>1</sup> the general licensee conducted operations that, although allowed by the regulations, were not evaluated in the development of the regulations and appear to have a potential for inappropriate radiation exposure. Therefore, in the current regulatory environment, these conditions may no longer be adequate in

<sup>1</sup> This document is available for inspection and/or copying at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC.

affording a proper level of safety. The Commission is conducting an analysis of the activities that are currently authorized in the general license to determine what controls, if any, should be established to improve the effectiveness of this general license.

Since there is no reporting or registration requirement imposed on distribution of source material under this general license or on the users, the extent of use of this general license is not well known.

There are several actions that could be taken, either individually or in some combination, to provide greater assurance of safety under this general license:

(1) The Commission could require that either general licensees be registered or that commercial transfers to general licensees be reported on a quarterly basis in the same manner as in 10 CFR 32.52. These actions would identify users of source material and would permit the implementation of an inspection program.

(2) The Commission could reduce the quantities of source material authorized under the general license to levels which provide greater assurance of safety.

(3) The Commission could limit the scope of activities permitted under the general license to those which are less likely to result in radiation exposure problems.

(4) The Commission could include requirements that would provide adequate controls over release of effluent and disposal of radioactive waste, as appropriate, and

(5) The Commission could require that commercial distribution of source material for use under the general license be performed only by a specific licensee. This would provide a means for the Commission to require that the transfers be accompanied by safe handling instructions or other information (as in 10 CFR 32.71(e)).

Any new conditions on the general license, such as quantity limits or activity restrictions, would be developed taking into account the radiation dose limits, effluent concentrations, and waste disposal provisions of the revised standards for the protection against radiation.

The general license in § 40.25 governs the use of certain industrial products or devices containing depleted uranium. This general license contains requirements for reports from licensees of distribution for use under the general license and for registration certificates from these general licensees. An issue with this general license is its possible lack of effectiveness and lack of understanding by the regulated

community. Although the Commission has not issued any licenses authorizing distribution under § 40.25 and there is very limited use of comparable provisions by Agreement States, there are many industrial products and devices used under specific licenses that are candidates for use under the § 40.25 general license.

This general license and the licensing requirements in §§ 40.34 and 40.35 will be reviewed to determine if justifiable changes could be made to make the general license more useful to the regulatory program. Expanded use of products and devices under this general license would reduce the burden on both licensees and the NRC staff that now exists by reducing current specific licensing activity. For example, source material used for shielding under a specific license may be a candidate for use under a revised § 40.25 general license. The public is specifically invited to suggest mechanisms which would improve the effectiveness of the general license, while at the same time providing adequate protection of health and safety.

#### Specific Licensing

The basic issue raised was whether licensing requirements for specific licenses should be made more specific or detailed and whether the licensing requirements should be tailored to major categories of use.

License requirements fall into three types:

(1) Information required to be submitted to the NRC in support of an application.

(2) Requirements for issuance of specific licenses, and

(3) Terms and conditions of licenses.

Section 10 CFR 40.31 states that an application may be filed on NRC Form 313, "Application for Material License." This form requests information about the applicant's training and experience, equipment and facilities, and radiation protection program. However, the form does not request safety information specific to any given category of use. Thus, the NRC staff develops regulatory guides which specify the type of information to be provided in an application for a particular category of use. The NRC staff has also used specific license conditions to control activities conducted by licensees within a certain category of use. This approach enables the NRC staff to tailor the licensing requirements necessary for health and safety to the particular activities being proposed by an applicant.

However, other provisions in 10 CFR part 40 specify detailed information

requirements for certain aspects of an operation such as emergency planning for activities involving greater than specified quantities of uranium hexafluoride (UF<sub>6</sub>) and financial assurance and recordkeeping for decommissioning for licensees possessing more than specified quantities of source material. Licensing requirements for milling and mill tailings are comprehensive and presented in appendix A to 10 CFR part 40. The requirements for licenses to manufacture and distribute industrial devices and products for use under the general license in § 40.25 are spelled out in considerable detail in § 40.34(a).

The requirements for issuance of specific licenses and the conditions of licenses specified in 10 CFR Part 40 are generally stated and applicable to all licenses, except for the case of licenses involving distribution of devices and products to be used under the general license in § 40.25. A number of detailed conditions for these licenses are spelled out in §§ 40.34 and 40.35.

Generally, if a category of use involves a number of firms conducting similar activities, and regulatory requirements can be developed which are applicable to all users within a category, it is a desirable practice to include the requirements in the regulation. This provides a stable framework for the guidance of licensees, NRC staff, and other interested parties.

However, except for regulations governing the milling and mill tailings, this practice is not followed with respect to 10 CFR part 40 licenses. There are about 200 NRC 10 CFR part 40 licenses and these licenses authorize a wide variety of activities. Source material may also be used under specific licenses which are primarily for byproduct material. For example, a teletherapy license for a 3,000 Curie Co<sup>60</sup> source may also provide for the use of up to several hundred pounds of depleted uranium as shielding in the teletherapy unit. Source material activities are also licensed by Agreement States.

Even within a given category of use, the licensed activities may have significant differences. For example, there are only two UF<sub>6</sub> production plants under license and each uses a different technology to convert uranium oxide to UF<sub>6</sub>. Thus, generally applicable requirements for a category of use would necessarily be general in nature and specific requirements related to the individual licensee's activity would still need to be imposed.

Given the broad nature of the uses of source material, it is not clear whether there is a sufficient benefit from

developing more specific licensing criteria for inclusion in the regulation that would be based on category of use. However, as indicated in the discussion of 10 CFR part 40 exempt products, there may be a need to impose certain requirements on licensees manufacturing and distributing exempt products to assure a proper level of safety. There may also be a need to impose certain requirements on licensees who commercially distribute source material for use under the general license in § 40.22. The NRC may also consider an additional change to add sealed sources and devices containing source material that are used under a specific license to the Sealed Source and Device Registry System. This change would be consistent with comparable provisions for sources and devices containing byproduct material in §§ 30.32(g) and 32.210.

Separate from this effort, an NRC staff task force has recently completed a review of approaches to regulating materials licensees: "Proposed Method for Regulating Major Materials Licensees," NUREG-1324, published for comment in February 1992. The intent of this review was to examine all facets of the existing regulatory methods, unfettered by any existing regulations, guidance, and resource limitations, and propose an ideal method for regulating large materials licensees. The task force found that for the most part the regulations on which the licensing of large materials processors are based provide safeguards against theft or sabotage of special nuclear material and protection against exposure of workers and the public to radiation and radioactive materials. However, the task force believed that improvements in the area of process safety and managerial controls should be considered and identified. The task force also identified potential regulatory changes applicable to major material processors. However, these are idealized recommendations without cost/benefit considerations. The NRC staff is developing an implementation plan that will identify priorities for future action. If the implementation plan determines that changes to 10 CFR part 40 are appropriate, these changes would be applicable to relatively few 10 CFR part 40 licensees. It may be appropriate to consider such changes in conjunction with any comparable changes being considered for 10 CFR parts 30 and 70. Comments received on NUREG-1324 will be considered by the NRC staff developing any future rulemakings concerning 10 CFR part 40.

#### Mills and Mill Tailings

Six issues in the area of mills and mill tailings have received recent attention by the Commission. In general, these issues have been addressed by the NRC staff and regulatory positions have been established. In a few cases, the NRC staff have suggested that rule changes be made to reflect these NRC staff regulatory positions.

The first issue concerns the use of feed materials other than natural ore in uranium mills. The Commission allows the use of materials other than natural ore to be used by mills to extract source material and has developed a definition of ore as "a natural or native matter that may be mined and treated for the extraction of any of its constituents or any other matter from which source material is extracted in a licensed uranium or thorium mill." This definition assures that the tailings resulting from the extraction of source material from feed material other than natural ore meets the definition of byproduct material, which is "the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content, including discrete surface wastes resulting from uranium solution extraction processes." The words "processed primarily for its source material content" are important in preventing "sham disposal," or the addition of low level or mixed waste to mill feedstock in order to dispose of it in the tailings impoundment as byproduct material. The NRC staff has published guidance on this issue for comment (57 FR 20525; May 13, 1992). Depending on the staff's evaluation of the comments received, the Commission may propose adding this definition of ore to the regulations in 10 CFR part 40 in the future.

The second issue concerns requests by mill licensees to dispose of waste materials that do not meet the definition of byproduct material into tailings impoundments. The NRC staff has prepared and published guidance for reviewing these requests for comment (57 FR 20525; May 13, 1992). The guidance assures that only material physically comparable to 10 CFR part 40 byproduct material is disposed of in tailings impoundments, that the material is not covered by EPA standards for hazardous or toxic wastes, that there is no significant environmental impact, that appendix A is complied with, that the Department of Energy be informed and have an opportunity to comment, and that the authorization constitutes a license amendment. If many requests of this type are made, the NRC staff will

consider an amendment to the regulations to incorporate the guidance.

The third issue concerns initiation of a rulemaking to amend 10 CFR part 40, appendix A to conform the Environmental Protection Agency (EPA) proposed amendments to its regulations in 40 CFR part 192, subpart D. EPA has initiated the process, based on consensus-building discussions, to rescind the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for radionuclide emissions from uranium mill tailings disposal sites (limited to those sites licensed by the NRC or an Agreement State, not those sites under the control of the Department of Energy) in subpart T of 40 CFR part 61. One result of these consensus-building discussions was completion of a staff-level Memorandum of Understanding (MOU) which establishes the process whereby EPA will rescind 40 CFR part 61, subpart T based on a determination that the NRC's regulatory program protects public health with an ample margin of safety. The MOU was signed by NRC, EPA, and the Agreement States regulating uranium mill tailings sites (Colorado, Idaho, Texas, and Washington) and published by EPA on October 25, 1991 (56 FR 55434). Supported by the MOU, EPA published a Proposed Stay of Effectiveness of subpart T in the Federal Register on October 25, 1991 (56 FR 55432). On December 31, 1991, EPA published a Final Stay of Effectiveness (56 FR 67537) and a Proposed Rule to Rescind (56 FR 67561) for 40 CFR part 61, subpart T, and an Advance Notice of Proposed Rulemaking for 40 CFR part 192, subpart D (56 FR 67569). EPA is proceeding with additional rulemaking activities to achieve sole regulatory responsibility for NRC and its Agreement States over subpart T mill tailings sites.

The Commission intends to revise appendix A of 10 CFR part 40 to conform to EPA's revised 40 CFR 192 standards and will proceed with this rulemaking concurrent with EPA's rulemaking. The NRC rulemaking will address the timing of closure activities and measurement of radon emissions to confirm compliance with the 20 pCi/m<sup>3</sup> radon emission standard (Criterion 6 of appendix A). In view of the need for concurrent action with EPA in the rulemaking, action on this is being undertaken separately from other issues discussed in this ANPRM.

The fourth issue concerns the licensing of a commercial disposal site for mill tailings, including wastes from in-situ extraction operations. The licensing requirements for mill tailings in 10 CFR part 40 are primarily intended



to address the situation where the tailings disposal operation is directly associated with a source material extraction operation. A commercial tailings disposal activity may be independent of any extraction process and thus comparable in certain respects to a low level radioactive waste disposal site. This facility would serve to aid the reduction of the number of small disposal sites and provide additional options for disposal of wastes from in-situ extraction operations consistent with Criterion 2 of appendix A. The authority to license a separate commercial disposal site under 10 CFR part 40 is not clearly stated in 10 CFR part 40. The Commission recently issued an order providing for the issuance of a specific license under 10 CFR part 40 for such an operation and intends to consider amendments to 10 CFR part 40 to specifically cover this activity in order to eliminate the need for issuing orders in the future. The Commission will consider applying appendix A to 10 CFR part 40 and whether additional requirements consistent with 10 CFR part 61 are appropriate.

The fifth issue concerns the disposal of waste from in-situ leaching operations. The NRC staff has prepared a position paper establishing a course of action for both the NRC staff and the licensee to follow in dealing with a proposal to dispose of in-situ wastes on site. This position paper was reproduced as appendix E to NUREG/CR-5681. The position paper amplifies the principles stated in Criterion 2 of appendix A to 10 CFR part 40, concerning reducing perpetual surveillance operations by avoiding, to the extent practicable, proliferation of small waste disposal sites. The position paper provides guidance to both the NRC staff and licensees for dealing with the disposal of in-situ waste on site. Basically, it provides for interim (up to 5 years) on-site storage of waste in those cases where it is demonstrated that there is no practicable off-site disposal option available and that on-site disposal is feasible. During the third year of the interim storage period, if no off-site disposal became available, the NRC staff would consider a request for permanent on-site disposal. By the end of the third year of interim storage, the licensee is to propose a suitable on-site disposal design for NRC review and approval. The Commission will consider whether these provisions should be incorporated into Criterion 2 of appendix A to 10 CFR part 40.

The sixth issue concerns the obligation of the NRC under section 14a(3) of the Atomic Energy Act, as

amended, to ensure that its general requirements for the management of uranium mill tailings are comparable to EPA requirements applicable to similar wastes under the Solid Waste Disposal Act (SWDA). In the Supplementary Information for the final rule (52 FR 43562; November 13, 1987) amending NRC regulations to incorporate EPA's ground-water protection requirements, the Commission noted that the rulemaking action was limited to incorporating requirements legally imposed by 40 CFR part 192 into NRC rules. The Commission also noted that a future rulemaking would probably be necessary to fully satisfy the comparability requirement of section 84a(3) of the Atomic Energy Act, as amended. The notice pointed to acknowledged technical difficulties with the provisions of 40 CFR part 264 as a principal reason for delaying conformance action. Finally, the Commission stated that the question of when to initiate rulemaking would be reassessed periodically. In 1989, the Commission evaluated the degree of comparability but has not reached agreement with EPA on what further action, if any, is appropriate. The Commission will again review the situation and explore the need for further rulemaking with EPA.

#### Additional Considerations

In addition to the substantive issues, the Commission will consider ways that 10 CFR part 40 could be made clearer or otherwise easier to implement, such as structure or format changes.

#### Options for Rulemaking

The staff is pursuing consideration of an overall revision to 10 CFR part 40 to deal with all of the described issues and areas in a comprehensive fashion. As noted in the Background Section, the NRC has not undertaken a comprehensive revision of 10 CFR part 40 since 1961. However, the NRC staff is also considering alternatives to a comprehensive rulemaking based upon the timing and efficiency of dealing with certain issues. For example, depending on the nature and extent of information obtained in response to this notice, a simple rulemaking may be initiated designed to obtain better information on products and materials being distributed for use under an exemption and for use under the general license in § 40.22. This rule could require:

- (1) Annual reports from specific licensees as to the types and number of products and quantities of source material distributed for exempt use.
- (2) Quarterly reports from specific licensees about commercial transfers to

§ 40.22 general licensees, including what material is transferred, the identity of the general licensee, and a point of contact for the general licensee, and

- (3) That distribution of source material to persons exempt from licensing and to persons using the general license in § 40.22 be made under a specific license.

Comparable action on the part of the Agreement States for item (2) would likely be necessary.

The information obtained as a result of this first rulemaking would provide a basis for determining what additional changes are appropriate. Further dealing with the issues of specific licensees other than mills, general licensees, and exemptions would depend on developing a better data base and would not be undertaken until this was achieved.

Issues related to mills could be dealt with sooner if handled separately from these other issues. However, the NRC staff is uncertain at this time as to whether the changes to 10 CFR part 40 related to mills warrant a separate rulemaking. As the scope of rulemaking in the area of uranium mills develops, the NRC staff will determine if these issues should be dealt with separately.

Any further separation of issues will be determined after a clearer definition of the scope of rulemaking in each area is developed and will depend on the timing of resolution of the various issues involved.

#### Request for Information and Comment

The Commission specifically seeks comment in a number of areas. These relate primarily to obtaining more detailed information on how the exemptions in 10 CFR part 40 and the general license in § 40.22 are used. The information would assist the Commission in preparing proposed amendments that would provide for the protection of health and safety with the least impact on the conduct of activities related to these provisions of 10 CFR part 40.

- (1) The Commission requests information and comments from licensees who distribute source material to exempt persons. In the case of manufacturers or importers of products, the Commission is interested in information on the type and amount of source material in each product, its chemical and physical form, the number of products currently distributed annually and in the recent past, as well as a projection of distribution in the next few years. The Commission is also interested in information on the type, quantity, and form of the source



material distributed by distributors of materials exempted under §§ 40.13 (a), (b), and (c)(1)(vi).

(2) The Commission requests information and comments from licensees who distribute source material for use under the general license in § 40.22 and also from users of that general license. From distributors, the Commission is interested in information on the type, the quantity, and the chemical and physical forms of source material distributed annually, including the number of shipments in the past 3 years and the approximate quantity per shipment. From users of the general license, the Commission is interested in information on the types of activities conducted under this general license and on the quantities of material needed for those activities.

(3) With respect to the general license in § 40.25, the Commission seeks information on how this provision of the regulations might be made more useful.

(4) The structure and format of the revisions to 10 CFR part 40 will be determined at a later date based in part on the ultimate scope of rulemaking. However, commenters may wish to comment on the pros and cons of options such as:

a. Creation of a separate part for general licensing of source material comparable to 10 CFR part 31 or for manufacturers or those transferring for the first time products containing source material for sale or distribution comparable to 10 CFR part 32.

b. Creation of subparts within 10 CFR part 40 covering these same subjects and/or containing specific requirements for particular classes of specific licensees.

Commenters are, of course, welcome to provide comments on any issue raised in this notice, discussions contained in NUREG/CR-5881, or any other issue related to updating the regulations contained in 10 CFR part 40. Comments which include the rationale for the suggestions or views will be especially useful.

#### List of Subjects in 10 CFR Part 40

Criminal penalty, Government contracts, Hazardous materials—transportation, Nuclear materials, Reporting and recordkeeping requirements, Source material, and Uranium.

Authority: Sec. 161, Pub. L. 83-703, 68 Stat. 948, as amended (42 U.S.C. 2201); sec. 201, Pub. L. 93-438, 80 Stat. 1242, as amended (42 U.S.C. 5841).

Dated at Rockville, Maryland, this 22nd day of October 1992.

For the Nuclear Regulatory Commission,  
Samuel J. Chilk,  
Secretary of the Commission.  
[FR Doc. 92-26004 Filed 10-27-92; 8:45 am]  
BILLING CODE 7590-01-M

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 92-CE-48-AD]

#### Airworthiness Directives; Piper Aircraft Corporation PA-23 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes to adopt a new airworthiness directive (AD) that would be applicable to certain Piper Aircraft Corporation (Piper) PA-23 series airplanes that have Met-Co-Aire 48-gallon tip tanks installed. The proposed action would require replacement of any existing rubber fuel hose with a hose of improved design that is not susceptible to fuel leakage. The Federal Aviation Administration (FAA) has received a report of fuel leakage from the end fitting of a flexible fuel line that connects one of the 48-gallon tip tanks to the main fuel system on a Piper Model PA-23-250 airplane. This incident resulted in the left wing tip exploding, catching fire, and separating from the airplane. The actions specified by the proposed AD are intended to prevent such fuel leakage and possible fire, which could result in passenger injury.

**DATES:** Comments must be received on or before January 12, 1993.

**ADDRESSES:** Submit comments in triplicate to the FAA, Central Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 92-CE-48-AD, room 1558, 601 E. 12th Street, Kansas City, Missouri 64106. Comments may be inspected at this location between 8 a.m. and 4 p.m., Monday through Friday, holidays excepted.

Service information that is applicable to this AD may be obtained from Met-Co-Aire, P.O. Box 2218, Fullerton, California 92633; Telephone (714) 870-4610. This information also may be examined at the Rules Docket at the address above.

**FOR FURTHER INFORMATION CONTACT:** Mr. Roy McKinnon, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, 3229 E. Spring Street, Long

Beach, California 90806-2425; Telephone (310) 988-5247.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 92-CE-48-AD." The postcard will be date stamped and returned to the commenter.

##### Availability of NPRMs

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Central Region, Office of the Assistant Chief Counsel, Attention: Rules Docket No. 92-CE-48-AD, room 1558, 601 E. 12th Street, Kansas City, Missouri 64106.

##### Discussion

The FAA has received a report of fuel leakage from the end fitting of a flexible fuel line that connects one of the tip tanks to the main fuel system on a Piper Model PA-23-250 airplane that has Met-Co-Aire 48-gallon tip tanks installed in accordance with Supplemental Type Certificate (STC) SA1460WE. This incident resulted in the left wing tip exploding, catching fire, and separating from the airplane. A leaking flexible fuel line, if not detected and corrected, could result in an airplane fire and possible passenger injury.

Met-Co-Aire has issued Service Bulletin (SB) No. 23-001, dated July 1992.

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS  
WASHINGTON, D.C. 20555

May 6, 1992

NRC INFORMATION NOTICE No. 92-34: NEW EXPOSURE LIMITS FOR AIRBORNE URANIUM  
AND THORIUM

Addressees:

All licensees whose operations can cause airborne concentrations of uranium and thorium.

Purpose:

The U.S. Nuclear Regulatory Commission is issuing this information notice to alert addressees of changes, in 10 CFR Part 20, governing airborne uranium and thorium exposures that may significantly affect exposure calculations and reporting requirements. It is expected that recipients will review this information for applicability to their facilities and consider actions, as appropriate, to avoid violations of the new Part 20. However, suggestions contained in this information notice are not new NRC requirements; therefore, no specific action or written response is required.

Description of Circumstances:

The major revision of 10 CFR Part 20 was published on May 21, 1991 (56 FR 23360). This revision adopted the dose-assessment methodology recommended by the International Commission on Radiation Protection (ICRP). The new methodology significantly changes the occupational exposure limits for airborne uranium and thorium compounds. The current regulation requires licensees to implement the new Part 20 by January 1, 1993. However, licensees should note that the Commission is proposing to extend the implementation date to January 1, 1994.

Discussion:

Because NRC has adopted the dose-assessment methodology of ICRP 26 and 30, the new Part 20 contains two changes that can impact greatly on licensees that experience airborne concentrations of uranium and thorium compounds. These are changes in occupational exposure limits, and equivalence of internal and external dose.

As shown in the table below, the new Part 20 includes a reduction in occupational airborne concentrations of certain thorium and uranium compounds. However, the allowed concentrations of other nuclides have been relaxed. Although most changes have been made to reflect radiological concern, 10 CFR 20.1201 (e) limits intakes of soluble uranium to 10 milligrams in a week, in consideration of chemical toxicity, which is likely to be controlling at enrichments of 5 percent or less.

Table 1: Old versus New Occupational Exposure Limits

Compound	Old Part 20 Appendix B, Table I, Col. 1	New Part 20 Appendix B, Table I, Col. 3
Th-234, class W	6E-8 $\mu\text{Ci/ml}$	8E-8 $\mu\text{Ci/ml}$
Th-234, class Y	3E-8 $\mu\text{Ci/ml}$	6E-8 $\mu\text{Ci/ml}$
Th-232, class W	3E-11 $\mu\text{Ci/ml}$	5E-13 $\mu\text{Ci/ml}$
Th-232, class Y	3E-11 $\mu\text{Ci/ml}$	1E-12 $\mu\text{Ci/ml}$
Th-231	1E-6 $\mu\text{Ci/ml}$	3E-6 $\mu\text{Ci/ml}$
Th-230, class W	2E-12 $\mu\text{Ci/ml}$	3E-12 $\mu\text{Ci/ml}$
Th-230, class Y	1E-11 $\mu\text{Ci/ml}$	6E-12 $\mu\text{Ci/ml}$
Th-228, class W	9E-12 $\mu\text{Ci/ml}$	4E-12 $\mu\text{Ci/ml}$
Th-228, class Y	6E-12 $\mu\text{Ci/ml}$	7E-12 $\mu\text{Ci/ml}$
Th-227	2E-10 $\mu\text{Ci/ml}$	1E-10 $\mu\text{Ci/ml}$
U-238, class D	7E-11 $\mu\text{Ci/ml}$	6E-10 $\mu\text{Ci/ml}$
U-238, class Y	1E-10 $\mu\text{Ci/ml}$	2E-11 $\mu\text{Ci/ml}$
U-235, class D	5E-10 $\mu\text{Ci/ml}$	6E-10 $\mu\text{Ci/ml}$
U-235, class Y	1E-10 $\mu\text{Ci/ml}$	2E-11 $\mu\text{Ci/ml}$
U-234, class D	6E-10 $\mu\text{Ci/ml}$	5E-10 $\mu\text{Ci/ml}$
U-234, class Y	1E-10 $\mu\text{Ci/ml}$	2E-11 $\mu\text{Ci/ml}$

The relative equivalence of internal and external dose means that exposures to airborne concentrations of radioactive particles must now be maintained as part of a worker's total occupational dose limit (10 CFR 20.1202). Under the old Part 20, internal and external doses had separate limits and were not combined. Section 20.1204 states, further, that internal exposure can be determined through air sampling in the work place or routine bioassay.

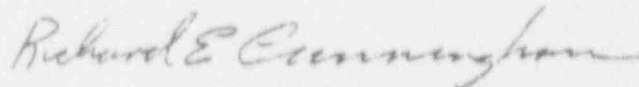
If air sampling is chosen as the most accurate means of tracking dose, compliance with the new limits may be demonstrated through precise solubility, isotopic, and particle-size classifications, pursuant to Appendix B to 10 CFR 20.1001-20.2401.



The new revision to NRC Regulatory Guide 8.25, "Air Sampling In The Workplace," gives guidance for setting up an air-sampling program that can be used to estimate internal dose from airborne activity. The associated NUREG-1400 explains acceptable implementation of methods described in Regulatory Guide 8.25.

In addition, Table 2 of Appendix B to 10 CFR 20.1001-20.2401 places much more stringent limits on effluent concentrations for soluble uranium and thorium in water, and for thorium and insoluble uranium in air. The reduction in the allowable effluent concentrations to about a hundredth of the former values may necessitate changes in procedures or monitoring methods, or may even necessitate installation of new effluent treatment systems requiring appreciable lead time to procure.

This information notice requires no specific action or written response. If you have any questions about the information in this notice, please call the technical contact listed below or the appropriate NRC regional office.



Richard E. Cunningham, Director  
Division of Industrial and  
Medical Nuclear Safety  
Office of Nuclear Material Safety  
and Safeguards

Technical contact: Edward Shum, NMSS  
(301) 504-2607

Attachments:

1. List of Recently Issued NMSS Information Notices
2. List of Recently Issued NRC Information Notices

LIST OF RECENTLY ISSUED  
NMSS INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
92-14	Uranium Oxide Fires at Fuel Cycle Facilities	02/21/92	All fuel cycle and uranium fuel research and development licensees.
92-11	Soil and Water Contamination at Fuel Cycle Facilities	02/05/92	All uranium fuel fabrication and conversion facilities.
92-10	Brachytherapy Incidents Involving Iridium-192 Wire Used in Endobronchial Treatments	01/31/92	All Nuclear Regulatory Commission (NRC) licensees authorized to use iridium-192 for brachytherapy; manufacturers and distributors of iridium-192 wire for use in brachytherapy.
92-08	Revised Protective Action Guidance for Nuclear Incidents	01/23/92	All fuel cycle and materials licensees authorized to possess large quantities of radioactive material.
91-86	New Reporting Requirements for Contamination Events at Medical Facilities (10 CFR 30.50)	12/27/91	All licensees authorized to use byproduct materials for human use.
91-84	Problems with Criticality Alarm Components/Systems	12/26/91	All Nuclear Regulatory Commission (NRC) fuel cycle licensees, interim spent fuel storage licensees, and critical mass licensees.
91-71	Training and Supervision of Individuals Supervised by an Authorized User	11/12/91	All NRC medical licensees.

LIST OF RECENTLY ISSUED  
NRC INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
92-33	Increased Instrument Response Time When Pressure Dampening Devices are Installed	04/30/92	All holders of OLs or CPs for nuclear power reactors.
92-32	Problems Identified with Emergency Ventilation Systems for Near-Site (Within 10 Miles) Emer- gency Operations Facili- ties and Technical Support Centers	04/29/92	All holders of OLs or CPs for nuclear power react
92-31	Electrical Connection Problem in Johnson Yokogawa Corporation XS-80 Programmable Indi- cating Controllers	04/27/92	All holders of OLs or CPs for nuclear power reactors.
92-30	Falsification of Plant Records	04/23/92	All holders of OLs or CPs for nuclear power reactors and all licensed operators and senior operators.
92-21, Supp. 1	Spent Fuel Pool Re- activity Calculations	04/22/92	All holders of OLs or CPs for nuclear power reactors.
92-29	Potential Breaker Mis- coordination Caused by Instantaneous Trip Circuitry	04/17/92	All holders of OLs or CPs for nuclear power reactors.
92-28	Inadequate Fire Suppres- sion System Testing	04/08/92	All holders of OLs or CPs for nuclear power reactors.

OL = Operating License  
CP = Construction Permit