170-133

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 22, 1994

Mr. Louis H. Weinstein, Esq.
Squire, Sanders & Dempsey
4900 Society Center
127 Public Square
Cleveland, OH 44114

Dear Mr. Weinstein:

I am writing to call to your attention a recent rulemaking action that could significantly affect the Nuclear Regulatory Commission's regulatory framework for removal of facilities from the Site Decommissioning Management Plan (SDMP).

On August 22, 1994, NRC proposed a rulemaking to establish radiological criteria for the decommissioning of former nuclear facilities affected by residual radioactive contamination (59 FR 43200). NRC has recognized that lack of defined radiological criteria for decommissioning has sometimes acted as a disincentive to site remediation for owners of sites listed on the SDMP. The intent of this rulemaking is to provide a clear and consistent regulatory basis for determining the extent to which lands and structures must be remediated before a site can be considered decontaminated and thereby eligible for release for unrestricted use. The rulemaking would establish specific criteria that would apply to residual radioactivity resulting from the possession or use of source, byproduct and special nuclear material at facilities currently or formerly licensed by NRC, including SDMP sites.

The proposed criteria would not apply to sites already covered by a decommissioning plan approved by the Commission before the effective date of the rule. Until the new criteria are in place, NRC intends to proceed with site decommissioning on a site-specific basis considering existing criteria coupled with the concept that residual radioactivity should be as low as reasonably achievable (ALARA). Decisions concerning residual radioactivity will continue to be made as necessary during the pendency of this rulemaking process. NRC is accepting comments on the proposed rule until January 20, 1995. The comment period has been extended from the date in the enclosed Federal Register notice to afford additional opportunity for public comment.

In order to ensure that all facilities listed on NRC's SDMP are aware of the promulgation of the proposed rule on decommissioning criteria, I am enclosing a copy of the Federal Register notice of August 22, 1994.

NM 1

delete: ACNW

Please review the proposed rule and, if you have any questions, contact me or the individual indicated in the Federal Register notice.

Sincerely,

original signed by

John J. Lentz, Project Manager
Materials Decommissioning Section
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 070-00133 (Terminated)
License No. SNM-183, C-3692,
C-3790, 34-000653-01/02 (Terminated)

Enclosure: As stated

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Docket No. 070-00133 (Terminated)
License No. SNM-183, C-3692,
C-3790, 34-000653-01/02 (Terminated)

Letter dated _____

Mr. Raymond J. Pierce
Neighborhood Progress, Inc.
504 East 105th Street
Cleveland, OH 44108

Mr. Daryl Rush
Neighborhood Progress, Inc.
504 East 105th Street
Cleveland, OH 44108

Mr. Louis D. Mattielli
Vice President, Secretary
and General Counsel
The Pullman Company
3 Werner Way, Suite 200
Lebanon, NJ 08833

Mr. Robert E. Owen
Radiological Health Program
Ohio Department of Health
246 North High Street
P.O. Box 118
Columbus, OH 43266-0118

Mr. Todd Brady
Cuyahoga County Board of Health
One Playhouse Square
1375 Euclid Avenue - 5th Floor
Cleveland, OH 44115

Mr. William Skoronski
Ohio Environmental Protection Agency
2110 East Aurora Road
Twinsburg, OH 44087-1969

Mr. Kim W. Lickfield,
Project Manager
Sevenson Environmental
Services, Inc.
2749 Lockport Road
Niagara Falls, NY 14302

40-861

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 22, 1994

Mr. Steve Petras, Esq.
Vorys, Sater, Seymour & Pease
2100 One Cleveland Center
1375 East Ninth Street
Cleveland, OH 44114-1724

Dear Mr. Petras:

I am writing to call to your attention a recent rulemaking action that could significantly affect the Nuclear Regulatory Commission's regulatory framework for removal of facilities from the Site Decommissioning Management Plan (SDMP).

On August 22, 1994, NRC proposed a rulemaking to establish radiological criteria for the decommissioning of former nuclear facilities affected by residual radioactive contamination (59 FR 43200). NRC has recognized that lack of defined radiological criteria for decommissioning has sometimes acted as a disincentive to site remediation for owners of sites listed on the SDMP. The intent of this rulemaking is to provide a clear and consistent regulatory basis for determining the extent to which lands and structures must be remediated before a site can be considered decontaminated and thereby eligible for release for unrestricted use. The rulemaking would establish specific criteria that would apply to residual radioactivity resulting from the possession or use of source, byproduct and special nuclear material at facilities currently or formerly licensed by NRC, including SDMP sites.

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Please review the proposed rule and, if you have any questions, contact me or the individual indicated in the Federal Register notice.

Sincerely,

original signed by

John J. Lentz, Project Manager
Materials Decommissioning Section
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 040-00861 (Terminated)
License Nos. C-2348, C-3496 (Terminated)

Enclosure: As stated

cc w/o encl: See Attached List

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Cleveland, OH 44104

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Pease
2100 One Cleveland Center
1375 East Ninth Street
Cleveland, OH 44114-1724

Dr. Alexander Williams
Office of Environmental
Restoration
U.S. Department of Energy
Washington, DC 20545

Mr. Warren E. Bergholz, Jr.
Chief Counsel
Savannah River Operations Office
U.S. Department of Energy
P.O. Box A
Aiken, SC 29802

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Radiological Health Program
Ohio Department of Health
246 North High Street
P.O. Box 118
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Cuyahoga County Board of
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One Playhouse Square
1375 Euclid Avenue - 5th Floor
Cleveland, OH 44115

Mr. William Skoronski
Ohio Environmental Protection
Agency
2110 East Aurora Road
Twinsburg, OH 44087-1969

Mr. James M. Friedman, Esq.
Benesch, Friedlander, Coplan
and Aronoff
2300 BP America Building
200 Public Square
Cleveland, OH 44114-2378

Mr. Herb Wainer
Horizons Incorporated
18531 South Miles Road
Cleveland, OH 44128

70-832
40-1020

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 22, 1994

Mr. Robert G. Wissink
Corporate Radiation Safety Officer
Health Physics Services
Minnesota Mining and Manufacturing Company
Building 220-3W-06, 3M Center
St. Paul, MN 55144-1000

Dear Mr. Wissink:

I am writing to call to your attention a recent rulemaking action that could significantly affect the Nuclear Regulatory Commission's regulatory framework for removal of facilities from the Site Decommissioning Management Plan (SDMP).

On August 22, 1994, NRC proposed a rulemaking to establish radiological criteria for the decommissioning of former nuclear facilities affected by residual radioactive contamination (59 FR 43200). NRC has recognized that lack of defined radiological criteria for decommissioning has sometimes acted as a disincentive to site remediation for owners of sites listed on the SDMP. The intent of this rulemaking is to provide a clear and consistent regulatory basis for determining the extent to which lands and structures must be remediated before a site can be considered decontaminated and thereby eligible for release for unrestricted use. The rulemaking would establish specific criteria that would apply to residual radioactivity resulting from the possession or use of source, byproduct and special nuclear material at facilities currently or formerly licensed by NRC, including SDMP sites.

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Sincerely,

original signed by

John J. Lentz, Project Manager
Materials Decommissioning Section
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No.: 070-00832
040-01020

Enclosure: As Stated

cc w/ encl: T.D. Donakowski, Minnesota Department of Health
D. Trippler, Minnesota Pollution Control Agency

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40-861

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 22, 1994

Mr. Herb Wainer
Horizons Incorporated
18531 South Miles Road
Cleveland, OH 44128

Dear Mr. Wainer:

I am writing to call to your attention a recent rulemaking action that could significantly affect the Nuclear Regulatory Commission's regulatory framework for removal of facilities from the Site Decommissioning Management Plan (SDMP).

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Please review the proposed rule and, if you have any questions, contact me or the individual indicated in the Federal Register notice.

Sincerely,

original signed by

John J. Lentz, Project Manager
Materials Decommissioning Section
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 040-00861 (Terminated)
License Nos. C-2348, C-3496 (Terminated)

Enclosure: As stated

cc w/o encl: See Attached List

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Horizons Distribution List for Letter dated 12/22/94

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2100 One Cleveland Center
1375 East Ninth Street
Cleveland, OH 44114-1724

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Office of Environmental Restoration
U.S. Department of Energy
Washington, DC 20545

Mr. Warren E. Bergholz, Jr.
Chief Counsel
Savannah River Operations Office
U.S. Department of Energy
P.O. Box A
Aiken, SC 29802

Mr. Robert E. Owen
Radiological Health Program
Ohio Department of Health
246 North High Street
P.O. Box 118
Columbus, OH 43266-0118

Mr. Todd Brady
Cuyahoga County Board of Health
One Playhouse Square
1375 Euclid Avenue - 5th Floor
Cleveland, OH 44115

Mr. William Skoronski
Ohio Environmental Protection Agency
2110 East Aurora Road
Twinsburg, OH 44087-1969

Mr. Steve Petras, Esq.
Vorys, Sater, Seymour & Pease
2100 One Cleveland Center
1375 East Ninth Street
Cleveland, OH 44114-1724

Mr. James M. Friedman, Esq.
Benesch, Friedlander, Coplan and Aronoff
2300 BP America Building
200 Public Square
Cleveland, OH 44114-2378

40-501

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 22, 1994

Aluminum Company of America
ATTN: Mr. Richard C. King, Jr.
Senior Staff Mechanical Engineer
1600 Harvard Avenue
Cleveland, OH 44105

Dear Mr. King:

I am writing to call to your attention a recent rulemaking action that could significantly affect the Nuclear Regulatory Commission's regulatory framework for removal of facilities from the Site Decommissioning Management Plan (SDMP).

On August 22, 1994, NRC proposed a rulemaking to establish radiological criteria for the decommissioning of former nuclear facilities affected by residual radioactive contamination (59 FR 43200). NRC has recognized that lack of defined radiological criteria for decommissioning has sometimes acted as a disincentive to site remediation for owners of sites listed on the SDMP. The intent of this rulemaking is to provide a clear and consistent regulatory basis for determining the extent to which lands and structures must be remediated before a site can be considered decontaminated and thereby eligible for release for unrestricted use. The rulemaking would establish specific criteria that would apply to residual radioactivity resulting from the possession or use of source, byproduct and special nuclear material at facilities currently or formerly licensed by NRC, including SDMP sites.

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Please review the proposed rule and, if you have any questions, contact me or the individual indicated in the Federal Register notice.

Sincerely,

original signed by

John J. Lentz, Project Manager
Materials Decommissioning Section
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No: 040-00501 (Terminated)
License No: C-5023 (Terminated)

Enclosure: As stated

cc w/o encl: See Attached List

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Docket No: 40-501 (Terminated)
License: C-5023 (Terminated)

Letter dated 12/22/94

Aluminum Company of America
ATTN: Mr. Mark Gradert
Environmental/Industrial Hygiene Specialist
1600 Harvard Avenue
Cleveland, OH 44105

Mr. Robert E. Owen, Administrator
Radiological Health Program
Ohio Department of Health
246 North High Street
P.O. Box 118
Columbus, OH 43266-0118

Mr. Donald Schregardus, Director
Ohio Environmental Protection Agency
1800 Watermark Street
Columbus, OH 43266-0149

Mr. John Watkins, Group Leader
Ohio Environmental Protection Agency
2110 E. Aurora Road
Twinsburg, OH 44087-1969

Mr. Todd Brady
Cuyahoga County Board of Health
One Playhouse Square
1375 Euclid Ave - 5th Floor
Cleveland, OH 44115

40-235

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 22, 1994

Frome Investment Company
ATTN: Mr. & Mrs. William Ellman
28000 Weymouth
Farmington Hills, MI 48334

Dear Mr. & Mrs. Ellman:

I am writing to call to your attention a recent rulemaking action that could significantly affect the Nuclear Regulatory Commission's regulatory framework for removal of facilities from the Site Decommissioning Management Plan (SDMP).

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Sincerely,

original signed by

John J. Lentz, Project Manager
Materials Decommissioning Section
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No: 040-00235 (Terminated)
License No: STB-0362 (Terminated)

Enclosure: As stated

cc w/o encl: L. Young, American Ecology Recycle Center
D. Minnaar, Michigan Dept. of Public Health

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40-861

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 22, 1994

Mr. James M. Friedman, Esq.
Benesch, Friedlander, Coplan
and Aronoff
2300 BP America Building
200 Public Square
Cleveland, OH 44114-2378

Dear Mr. Friedman:

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Original signed by

John J. Lentz, Project Manager
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Low-Level Waste and Decommissioning
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40-235

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

December 22, 1994

AAR Manufacturing, Inc.
ATTN: Mr. Howard A. Pulsifer
Vice President and General
Counsel
1111 Nicholas Boulevard
Elk Grove Village, IL 60007

Dear Mr. Pulsifer:

I am writing to call to your attention a recent rulemaking action that could significantly affect the Nuclear Regulatory Commission's regulatory framework for removal of facilities from the Site Decommissioning Management Plan (SDMP).

On August 22, 1994, NRC proposed a rulemaking to establish radiological criteria for the decommissioning of former nuclear facilities affected by residual radioactive contaminaton (59 FR 43200). NRC has recognized that lack of defined radiological criteria for decommissioning has sometimes acted as a disincentive to site remediation for owners of sites listed on the SDMP. The intent of this rulemaking is to provide a clear and consistent regulatory basis for determining the extent to which lands and structures must be remediated before a site can be considered decontaminated and thereby eligible for release for unrestricted use. The rulemaking would establish specific criteria that would apply to residual radioactivity resulting from the possession or use of source, byproduct and special nuclear material at facilities currently or formerly licensed by NRC, including SDMP sites.

The proposed criteria would not apply to sites already covered by a decommissioning plan approved by the Commission before the effective date of the rule. Until the new criteria are in place, NRC intends to proceed with site decommissioning on a site-specific basis considering existing criteria coupled with the concept that residual radioactivity should be as low as reasonably achievable (ALARA). Decisions concerning residual radioactivity will continue to be made as necessary during the pendency of this rulemaking process. NRC is accepting comments on the proposed rule until January 20, 1995. The comment period has been extended from the date in the enclosed Federal Register notice to afford additional opportunity for public comment.

In order to ensure that all facilities listed on NRC's SDMP are aware of the promulgation of the proposed rule on decommissioning criteria, I am enclosing a copy of the Federal Register notice of August 22, 1994.

Please review the proposed rule and, if you have any questions, contact me or the individual indicated in the Federal Register notice.

Sincerely,

original signed by

John J. Lentz, Project Manager
Materials Decommissioning Section
Low-Level Waste and Decommissioning
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No: 040-00235 (Terminated)
License No: STB-0362 (Terminated)

Enclosure: As stated

cc w/o encl: Mr. T. Adams, B. Koh and Associates, Inc.
Mr. D. Minnaar, Michigan Dept. of Public Health

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Monday
August 22, 1994

Part III

Nuclear Regulatory Commission

10 CFR Part 20, et al
Radiological Criteria for
Decommissioning; Proposed Rule

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 20, 30, 40, 50, 51, 70, and 72

RIN 3150–AD65

Radiological Criteria for Decommissioning

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is proposing to amend its regulations regarding decommissioning of licensed facilities to provide specific radiological criteria for the decommissioning of lands and structures.

The proposed criteria would apply to the decommissioning of all licensed facilities and facilities subject to the Commission's jurisdiction. The Commission expects to apply these criteria in determining the adequacy of remediation of residual radioactivity resulting from the possession or use of source, byproduct, and special nuclear material. For high-level and low-level waste disposal facilities, the criteria would apply only to ancillary surface facilities that support radioactive waste disposal activities because criteria for closure of the remainder of the facility and termination of the license are currently specified. For uranium mills, the criteria apply to decommissioning of the facility but not to soil cleanup and the disposal of uranium mill tailings. The criteria would apply to decommissioning of nuclear facilities that operate through their normal lifetime, as well as to those that may be shut down prematurely. However, they would not apply to sites already covered by a decommissioning plan approved by the Commission before the effective date of this rule, if it is adopted in final form.

The intent of this rulemaking is to provide a clear and consistent regulatory basis for determining the extent to which lands and structures must be remediated before a site can be considered decommissioned. The Commission believes that inclusion of criteria in the regulations would result in more efficient and consistent licensing actions related to the numerous and frequently complex site remediation and decommissioning activities anticipated in the future. The Commission has reassessed the basis for the residual contamination levels contained in existing guidance in light of changes in basic radiation protection standards, improvements in remediation and radiation detection technologies, decommissioning experience obtained during the past 15 years, and comments received from workshops held as part of this rulemaking effort.

The NRC presently allows decommissioning on a site-specific basis using existing guidance. However, the Commission believes that codifying radiological criteria for decommissioning in the regulations would allow the NRC to more effectively carry out its function of protecting public health and the environment at decommissioned sites by providing for more efficient use of NRC and licensee resources, consistent application across all types of licenses, and a predictable basis for decommissioning planning. In addition it would eliminate protracted delays in decommissioning which result as licensees wait for NRC to promulgate regulatory criteria before proceeding with decommissioning of their facilities.

DATES: Submit comments December 20, 1994. 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: Send comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Attn: Docketing and Service Branch.

Hand deliver comments to: 11555 Rockville Pike, Rockville, Maryland, between 7:45 a.m. and 4:15 p.m. Federal workdays.

Comments may be submitted electronically, in either ASCII text or Wordperfect format, by calling the NRC Enhanced Participatory Rulemaking on Radiological Criteria for Decommissioning Electronic Bulletin Board, 1–800–880–6091 (58 FR 37760; July 13, 1993). The bulletin board may be accessed using a personal computer, a modem, and most commonly available communications software packages. Communication software parameters should be set as follows: parity to none, data bits to 8, and stop bits to 1 (N,8,1). Use ANSI or VT–100 terminal emulation. Background documents on the rulemaking are also available for downloading and viewing on the bulletin board. For more information call Ms. Christine Daily, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Phone (301) 415–6026; FAX (301) 415–5385.

Documents related to this rulemaking may be examined at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Many of these documents may also be viewed and downloaded electronically via the Electronic Bulletin Board established by NRC for this rulemaking.

Single copies of the regulatory analysis may be obtained by written request from RPHEB Secretary, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Single copies of the draft generic environmental impact statement (NUREG–1496): "Background as a Residual Radioactivity Criterion for Decommissioning, Appendix A to the GEIS in Support of Radiological Criteria for Decommissioning Nuclear Facilities" (NUREG–1501); or the staff's working draft regulatory guidance (NUREG–1500) may be obtained by written request or telefax (301–504–2260) from: Distribution Services, Printing and Mail Services Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

The NRC requests public comment on the draft generic environmental impact statement (NUREG–1496). Comments on NUREG–1496 may be submitted to: Chief, Rules Review and Directives Branch, Division of Freedom of Information and Publication Services, Mail Stop T–6D59, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Hand deliver comments on NUREG–1496 to 11545 Rockville Pike, Maryland between 7:45 a.m. and 4:15 p.m. on Federal workdays. Comments on NUREG–1496 may be submitted electronically as indicated elsewhere under the ADDRESSES heading.

FOR FURTHER INFORMATION CONTACT: James C. Malaro, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415–6201.

SUPPLEMENTARY INFORMATION:

Introduction

The Nuclear Regulatory Commission is proposing to amend 10 CFR Part 20 of its regulations to provide specific radiological criteria for the decommissioning of lands and structures.

The NRC is using an enhanced participatory process for developing the criteria. This process included a series of seven workshops held from January through May 1993. The workshops were conducted at a very early stage of rulemaking to enhance participation of interested parties and the public with the following objectives: (a) To ensure that the relevant issues have been identified; (b) to exchange information on these issues; and (c) to identify underlying concerns and areas of disagreement, and, where possible,

approaches for resolution. In July 1993, the NRC staff also conducted eight scoping meetings for the development of the Generic Environmental Impact Statement (GEIS) supporting the rulemaking.

The proposed criteria would apply to the decommissioning of all facilities licensed under 10 CFR Parts 30, 40, 50, 60, 61, 70, and 72, as well as other facilities subject to the Commission's jurisdiction under the Atomic Energy Act of 1954, as amended, (AEA) and the Energy Reorganization Act of 1974. The Commission would apply these criteria in situations where remediation of radioactive material residues resulting from use or possession of Source, Byproduct, and Special Nuclear Material is undertaken. For high-level and low-level waste disposal facilities (10 CFR Parts 60 and 61), the criteria would apply only to ancillary surface facilities that support radioactive waste disposal activities because criteria for closure of the remainder of the facility and termination of the license are specified in 10 CFR Parts 60 and 61. For uranium mills, the criteria would apply to decommissioning of the facility but not to soil cleanup or the disposal of uranium mill tailings, which is covered in Appendix A of 10 CFR Part 40 and Environmental Protection Agency standards in 40 CFR Part 192. The criteria would apply to decommissioning of nuclear facilities that operate through their normal lifetime, as well as to those that may be shut down prematurely. However, they would not apply to sites currently covered by a decommissioning plan approved by the Commission before the effective date of this rule, if it is adopted as a final rule.

The purpose of the rulemaking is to ensure that decommissioning will be carried out without undue impact on public and occupational health and safety and the environment. The proposed amendments enhance the existing regulatory framework by providing a clear and consistent regulatory basis for determining the extent to which lands and structures must be remediated before a site can be decommissioned. The Commission believes that inclusion of criteria in the regulations would result in more efficient and consistent licensing actions related to the numerous and frequently complex site decontamination and decommissioning activities anticipated in the future. The Commission has developed the basis for the residual contamination levels in light of changes in basic radiation protection standards, improvements in remediation and radiation detection technologies, decommissioning experience obtained during the past 15 years, and comments received from workshops held as part of this rulemaking effort.

Current regulations do not explicitly address radiological criteria for decommissioning.[1] The NRC presently allows decommissioning on a site-specific basis using existing guidance.[2] However, the Commission believes that codifying radiological criteria for decommissioning in the regulations would allow the NRC to more effectively carry out its function of protecting public health and the environment at decommissioned sites by providing for more efficient use of NRC and licensee resources, consistent application across all types of licenses, and a predictable basis for decommissioning planning. In addition, it would eliminate protracted delays in decommissioning which result as licensees wait for NRC to promulgate regulatory criteria before proceeding with decommissioning of their facilities.

Background

The Nuclear Regulatory Commission (NRC) has the statutory responsibility for protection of health and safety and the environment related to the possession and use of source, byproduct, and special nuclear material under the AEA. One part of NRC's responsibility is to ensure safe and timely decommissioning of the nuclear facilities that it licenses and to provide guidance to licensees on how to plan for and prepare their sites for decommissioning. Decommissioning, as previously defined by the NRC, means to remove nuclear facilities safely from service and to reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of the license.[3]

Under the AEA and Reorganization Plan No. 3 of 1970, the Environmental Protection Agency (EPA) has the statutory responsibility to establish generally applicable standards for protection of the public from radioactive material (i.e., outside the NRC licensees site boundaries). The NRC is responsible for ensuring, through licensing requirements and other restrictions, that activities at facilities under NRC jurisdiction do not lead to radiation doses outside the facility boundaries that exceed EPA's generally applicable standards. For this reason, NRC has been coordinating closely with EPA in the development of the proposed decommissioning standards.

A Memorandum of Understanding (MOU) signed by NRC and EPA in March 1992 provides a basic framework within which NRC and EPA will endeavor to resolve issues of concern relating to the regulation of radionuclides in the environment. Under the guidelines of the MOU, EPA will make a determination as to whether the proposed decommissioning standards provide a sufficient level of protection for public health and safety and the environment. If EPA concludes that the NRC standards are sufficient, EPA will publish its findings in the **Federal Register** for notice and comment and propose that NRC licensees be exempt from the standards developed by EPA for non-NRC licensed facilities.

Decommissioning activities are initiated when a licensee decides to terminate licensed activities. Decommissioning activities do not include the removal and disposal of spent fuel, which is considered to be an operational activity or the removal and disposal of nonradioactive structures and materials beyond that necessary to terminate the NRC license. Disposal of nonradioactive hazardous waste not necessary for NRC license termination is not covered by these regulations but would be treated by other appropriate agencies having responsibility over these wastes. If nuclear facilities are to be reused for nuclear purposes, applications for license renewal or amendment, or for a new license are to be submitted according to the appropriate existing regulation. Reuse of a nuclear facility for other nuclear purposes is not considered decommissioning because the facility remains under license.

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[1] On June 27, 1988 (53 FR 24018), the Commission published a final rule on General Requirements for Decommissioning Nuclear Facilities. However, this rule did not specifically address radiological criteria for decommissioned sites.

[2] Regulatory guidance, criteria, and practices include the following with emphasis on contamination levels that are As Low as Reasonably Achievable (ALARA): "Disposal or On-site Storage of Thorium or Uranium from Past Operations" Branch Technical Position, October 23, 1981, 46 FR 52061; "Termination of Byproduct, Source, and Special Nuclear Materials Licenses," Policy and Guidance Directive FC 83-23, November 4, 1983; "Termination of Operating Licenses for Nuclear Reactors" Regulatory Guide 1.86, June 1974; letter to Stanford University from James R. Miller, Chief, Standardization and Special Projects Branch, Division of Licensing, Office of Nuclear Reactor Regulation, NRC, Docket No. 50-141, April 21, 1982; "National Primary Drinking Water Standards," 40 CFR 141; "Radiation Dose Guidelines for Protection Against Transuranium Elements Present in the Environment as a Result of Unplanned Contamination," 42 FR 60956, November 30, 1977. Guidance is specified in terms of acceptable levels of residual contamination at decommissioned sites.

[3] See, for example, 10 CFR 40.4

After licensed activities have ceased, licensees are required to decommission their facilities so that their licenses can be terminated. At present, this requires that radioactivity in land, groundwater, surface water, buildings, and equipment resulting from the licensed operation be reduced to levels that allow the property to be released for unrestricted use. Licensees must then demonstrate that all facilities have been properly decontaminated and that, except for any residual radiological contamination found to be acceptable to remain at the site, radioactive material has been transferred to authorized recipients. Confirmatory surveys are conducted by NRC, where appropriate, to verify that sites meet NRC radiological criteria for decommissioning.

There are currently about 22,000 licensees in the United States. About one-third of these are NRC licensees, while the remainder are licensed by Agreement States through agreements entered into under Section 274 of the AEA. Licensees include utilities, nuclear fuel fabricators, universities, medical institutions, radioactive source manufacturers, and companies that use radioisotopes for industrial purposes. About 75 percent of NRC's 6,700 materials licensees use either sealed radioactive sources or small amounts of short-lived radioactive materials. Sealed sources, including items such as check sources, do not pose a contamination problem unless the encapsulation is broken. Decommissioning of these facilities is typically simple because there is usually little or no residual radioactive contamination to be removed and disposed of.

Of the remaining 25 percent, certain types of facilities (e.g., radioactive source manufacturers, radiopharmaceutical producers, and radioactive ore processors) conduct operations which could produce substantial radioactive contamination in portions of the facilities. At these sites, lands, facilities, or equipment may become contaminated through the use of radioactive material in forms which have not been encapsulated to prevent the spread or dispersal of material. When radioactive material in unsealed forms is used, such as in the nuclear fuel fabrication industry, in production of radiopharmaceutical medicines, or in research, the equipment used to process and handle the material becomes contaminated by the small quantities of material that adhere to surfaces of valves, piping, etc. If material is spilled, then the area of the spill becomes contaminated. These facilities will have to be decontaminated to acceptable levels before they can be released for unrestricted use and their licenses terminated. The population of nuclear fuel cycle facilities which will require decommissioning includes approximately 100 nuclear power plants (at 70 sites); 50 non-power (research and test) reactors; 10 major fuel facilities (fuel fabrication and uranium hexafluoride production plants); 50 uranium mills; and 10 independent spent fuel storage installations. It is estimated that about 1,800 other NRC-licensed facilities could require significant remediation as part of decommissioning.

Essentially everything that comes in contact with radioactive material must be considered contaminated and checked for the presence of residual radioactive material. Areas surrounding facilities could become contaminated by the movement of materials, equipment, and people into and out of the areas containing the radioactive material. NRC requires that contamination control procedures be used to minimize or prevent the movement of radioactive materials into other areas. Nevertheless, some areas may become contaminated over the course of time due to breakdowns in the control procedures. Contamination may also be spread by the movement of water or other fluids containing the radioactive materials through or along piping, equipment, walls, floors, sumps, drains, etc. In some cases, this has resulted in the release of significant quantities of radioactive material into the ground under or around buildings and facilities.

In addition to contamination, some licensed operations can produce radioactive materials through the process of activation. In this process, materials become radioactive when they are bombarded by neutrons generated in certain nuclear operations. Examples of such operations include nuclear reactors, where metal reinforcing bars in concrete surrounding the reactor vessel may become radioactive through neutron bombardment. These activated materials may also need to be removed or disposed of during decommissioning.

Several hundred NRC and Agreement State licenses are terminated each year. The majority of these licenses involve limited operations, produce little or no radioactive contamination, and do not present complex decommissioning problems or potential risks to public health or the environment from residual contamination. However, as the nuclear industry matures, it is expected that more and more of the larger nuclear facilities that have been operating for a number of years will reach the end of their useful lives and have to be decommissioned. Thus, both the number and complexity of facilities that will require decommissioning are expected to increase.

The NRC has a program underway to effect timely decommissioning of about 50 sites, which warrant special NRC oversight either because they have not been decommissioned properly in the past or have been engaged in the decommissioning process for an extended period. The Commission has established a Site Decommissioning Management Plan (SDMP), NUREG-1444, October 1993) for effecting timely decommissioning of these problem facilities. Sites being handled under the SDMP vary in degree of radiologic hazard, cleanup complexity, and cost. Some sites comprise tens of acres that require assessment for radiological contamination, whereas other sites have contamination known to be limited to individual buildings or discrete piles of tailings or contaminated soil. Many sites involve active licenses, but some sites involve formerly licensed sites, or sites where the responsible party is unable or unwilling to perform cleanup. These sites also vary in degree of completion of decommissioning. At some sites, little or no decontamination work has been done; whereas at other sites, decommissioning is underway or license termination is in the offing.

The effort to have these SDMP sites remediated and decommissioned has been hampered in part because licensees view the absence of definitive radiological criteria as an incentive to defer decommissioning pending issuance of formal NRC requirements. The General Accounting Office (GAO), which has been critical of the Commission's inability to effect timely decommissioning of these sites, has recommended that the NRC enhance its decommissioning efforts by reconsidering its radiological criteria for decommissioning.[4]

Until new criteria are in place, the Commission intends to proceed with decommissioning nuclear facilities on a site-specific basis considering existing criteria coupled with the concept that residual radioactivity be as low as is reasonably achievable (ALARA). Case and activity-specific decisions concerning decommissioning of sites will continue to be made as necessary during the pendency of this rulemaking process. Because the SDMP sites could pose unnecessary environmental and public risks or financial burdens if they are not decommissioned in a timely manner, the Commission's effort to

[4] GAO Report to Congress, "NRC's Decommissioning Procedures and Criteria Need to Be Strengthened," GAO/RCED-89-119, May 1989.

effect timely decommissioning of these sites has been proposed in the Federal Register on January 13, 1993, (58 FR 4099). The NRC published an Action Plan to ensure timely remediation of sites listed in the SDMP in the Federal Register on April 16, 1992 (57 FR 13389). The NRC does not intend to require additional remediation of sites in response to criteria established in this rulemaking, provided that the licensee or responsible party has already remediated the site or was in the process of remediating the site in full accordance with an NRC-approved decommissioning plan at the time of promulgation.

Internationally, most efforts have been focused upon development of criteria for waste disposal and recycle of radioactively contaminated materials using guidance published by the International Atomic Energy Agency. Decommissioning criteria have generally been established on a case-specific basis. This approach is the same as the current approach employed in the United States pending the development of radiological criteria through formal requirements. The NRC staff is not aware of other international efforts similar to this rulemaking to define radiological criteria for decommissioning.

The Enhanced Participatory Rulemaking Process

The normal pattern for NRC rulemaking is the development of a proposed rule by the NRC staff for Commission consideration, publication of the proposed rule for public comment, consideration of the comments by the NRC staff, and preparation of a final rule, as appropriate, for Commission approval. As directed and approved by the Commission, the NRC staff has enhanced participation in the early stages of this rulemaking process through a series of workshops for affected interests. These workshops were held from January through May 1993 in Chicago, IL; San Francisco, CA; Boston, MA; Dallas, TX; Philadelphia, PA; Atlanta, GA; and Washington, DC. The workshops elicited informed discussions of options and approaches for developing radiological criteria, and the rationale for options and approaches. While these workshops were not designed to seek "consensus" in the sense that there is agreement on how each issue should be resolved, the workshops were conducted at a very early stage of rulemaking to enhance participation of interested parties and the public with the following objectives:

(a) To ensure that the relevant issues have been identified;

(b) To exchange information on these issues; and

(c) To identify underlying concerns and areas of disagreement, and, where possible, approaches for resolution.

The Commission hopes that the interactions among the participants in the workshop environment also fostered a clearer mutual understanding of the positions and concerns of all participants. These workshops provided a number of themes, such as consideration of restricted use options, increased public participation in the site decommissioning process, and a desire to return sites to levels indistinguishable from natural background, that form the basis upon which the Commission has developed the provisions of this rulemaking. Comments made at these "Scoping Meetings," the workshops, and related written comments were considered by the NRC staff in its preparation of a staff draft rule as described in the paragraph below. Comments were also used, as appropriate, in developing the Draft Generic Environmental Impact Statement (GEIS) for the rule.

The Commission approved an additional opportunity for enhanced participation at an early stage of the rule development. Copies of the NRC staff's draft rule and summaries of comments received from workshop participants, NUREG/CR–6156, were sent to NRC Agreement States, workshop participants, and other interested parties on January 27, 1994. A notice of availability of these documents was published in the Federal Register, and the documents were placed on the electronic bulletin board on February 2, 1994 (59 FR 4868). The intent of this informal comment period in advance of a proposed rule was to provide an opportunity for interested parties to comment on the adequacy of the draft criteria and the extent to which the criteria have considered the range of viewpoints expressed during the workshops and scoping meetings. The comment period ended on March 11, 1994.

Concurrent with the NRC rulemaking on radiological criteria for decommissioning, the EPA is proceeding to develop standards and guidance for Federal agencies in the area of radiation protection, including standards for the cleanup of contaminated sites. The EPA National Advisory Council on Environmental Policy and Technology and the Subcommittee on Residual Radioactivity held public meetings in October 1993, February 1994, and May 1994 to discuss the issues associated with the EPA rulemaking. The NRC and EPA have coordinated their efforts in this area in order to ensure that effective and consistent site cleanup standards are established while minimizing duplication of effort. Accordingly, the EPA was an important participant in the NRC rulemaking workshops and is a cooperating agency in the preparation of the GEIS for the rulemaking. The NRC has also consulted extensively with EPA throughout the rulemaking process. It is anticipated that the information gathered during the workshops on the NRC standards will also be relevant and useful to the EPA efforts in the area of site cleanup standards. The objective of the NRC and EPA cooperative efforts is to attempt to reach an agreement that the NRC standards established in the enhanced participatory rulemaking are sufficient to provide adequate protection to the public health and safety for NRC-licensed sites. The EPA efforts could then focus on the site clean-up standards for non-NRC licensed sites, such as DOE and DOD facilities. This is consistent with the principles and procedures set forth in a Memorandum of Understanding between the NRC and EPA published on November 16, 1992 (57 FR 54127), to guide each agency's actions in areas of mutual regulatory concern.

The next two sections of this notice summarize the comments from the workshops and the comments on the NRC staff draft rule. The purpose of these summaries is to document the public comments and the NRC response to these comments, and to show how the NRC approach to the rulemaking has evolved as a result of public participation in the rulemaking process.

Comments From Workshops

On December 11, 1992 (57 FR 58727), the Commission published in the Federal Register a notice that it was preparing to initiate rulemaking on establishing radiological criteria for the decommissioning of NRC-licensed facilities. The notice listed a schedule for seven workshops throughout the United States beginning in January 1993. The purpose of the workshops was to solicit commentary from affected interests on the fundamental approaches and issues that must be addressed in establishing radiological criteria for decommissioning. Written comments on approaches and issues also were solicited.

On June 18, 1993 (58 FR 33570), the Commission published in the Federal Register a notice of intent to prepare a Generic Environmental Impact Statement (GEIS) as part of the

rulemaking action on radiological criteria for decommissioning. The notice listed eight meetings throughout the United States to be held in July 1993 for the purpose of discussing and receiving public comment on what should be covered in the GEIS.

Overview of Comments

Over 7,000 comments were presented at the seven Workshops, eight scoping meetings, and in related letters. The NRC staff considered these comments in the development of the NRC staff's draft rule which was sent to NRC Agreement States, workshop participants, and other interested parties on January 27, 1994. Comments were also used, as appropriate, in developing the Draft GEIS for the rule.

NRC held rulemaking workshops in Chicago, IL; San Francisco, CA; Boston, MA; Dallas, TX; Philadelphia, PA; Atlanta, GA; and Washington, DC between January and May 1993. The workshop comments have been summarized in NUREG/CR–6156, "Summary of Comments Received from Workshops on Radiation Criteria for Decommissioning." This report summarizes 3,635 comments categorized from transcripts of the seven workshops and 1,677 comments from 100 NRC docketed letters from individuals and organizations. NUREG/CR–6156 merely catalogues the comments and viewpoints; no analysis or response to the comments is included.

The comments reflect a broad spectrum of viewpoints on the issues related to radiological criteria for decommissioning and associated subjects. The comments show little evidence of general agreement on issues except that most parties appear to agree that (1) the rulemaking should proceed and (2) the Commission's activities in decommissioning should recognize that it is not reasonable to expect all nuclear facilities to be remediated to a level that permits termination of the license and release of the facility for unrestricted use. While a number of additional themes emerged from the workshops, these themes cannot be characterized as having the general agreement of all of the workshop and meeting participants.

Transcripts of the workshops and scoping meetings and copies of related letters are available for inspection or copying for a fee in the NRC Public Document Room, 2120 L Street, NW (Lower Level), Washington, DC.

The NRC also held public meetings on the scope of the GEIS during July 1993 in Washington, DC; San Francisco, CA; Oklahoma City, OK; and Cleveland, OH. Comments from these meetings were reviewed and comments which differed substantially from those from the workshops are also summarized in the body of NUREG/CR–6156. A summary of all of the comments from the GEIS scoping meetings is included as Appendix E to the GEIS.

Summary and Discussion of Comments

1. Need For and Scope of Rule

Comment. Almost all commenters supported the NRC's plans to develop radiological decommissioning standards and recommended that the rulemaking go forward expeditiously. Some commenters recommended that the NRC consider and possibly establish both radiological and chemical decommissioning standards. Most commenters stated that the NRC should establish standards for both unrestricted and restricted release of sites.

Response. The NRC is proceeding with a rulemaking which will establish radiological criteria for decommissioning. NRC's schedule calls for issuance of a final rule by May 1995.

NRC's authority is limited by law primarily to ensuring protection of the public health and safety from radiological and nuclear hazards associated with source, special nuclear, and byproduct material. NRC has refrained from extending its reach to address non-radiological hazards except where specifically authorized by Congress (e.g., uranium mill tailings) or where these hazards would not otherwise be adequately controlled because of a regulatory void. Consequently, NRC is not proposing to include provisions in the radiological criteria to address non-radiological hazards. Although the rule would not establish criteria for disposition of nonradioactive hazardous and other wastes, licensees are reminded that they must continue to meet applicable Federal, State, and local standards for disposition of these wastes. The proposed rule provides for both unrestricted release and restricted termination of the license. If a licensee cannot satisfy the conditions for license termination, the license will not be terminated.

2. Basis for Radiological Criteria

Comment. Several commenters recommended that NRC decommissioning standards be based on and be consistent with the scientific information and advice of such organizations as the National Council on Radiation Protection and Measurements (NCRP) and the International Commission on Radiological Protection (ICRP). One commenter suggested that the NRC should determine whether the standards are to be technologically-based or politically-based; if the latter, do not waste time on technological input.

Response. It should be noted that the NRC and its predecessor agency, the Atomic Energy Commission, have generally followed the basic radiation protection recommendations of the ICRP; its U.S. counterpart, the NCRP; and the EPA Draft Federal Radiation Protection Guidance for Exposure to the General public in formulating basic radiation protection standards. Recommendations of the ICRP and the NCRP were relied on in the revised "Standards for Protection Against Radiation," which was published May 21, 1991 (56 FR 233360), and implemented by licensees on or before January 1, 1994. The proposed radiological criteria for decommissioning continues this practice but the proposed rule also recognizes the public's interest in and potential for contributing to the decommissioning process. The public's involvement through participating in the development of the criteria in this rulemaking, opportunities for review of decommissioning plans, as well as through participation on Site-Specific Advisory Boards as specified in this rule are expected to aid in the conduct of a decommissioning program that is understandable, technologically sound, and responsive to the concerns of affected parties.

Comment. Several commenters recommended that the NRC consider adopting a risk limit standard equating to a radiation dose of 25 to 100 millirem per year. According to two commenters, a 100 millirem per year limit would increase the cancer risk in the population only slightly above its normal incidence rate. One commenter believes that radiation damage per unit of exposure may increase at smaller doses. Other commenters stated that there may be a threshold for radiation effects and that there may be no adverse health effects at low radiation levels.

Response. In the Supplementary Information for the revised "Standards for Protection Against Radiation," the NRC stated that the standards are based upon the assumptions that:

(1) Within the range of exposure conditions usually encountered in radiation work, there is a linear relationship, without threshold, between dose and probability of occurrence of stochastic (random) health effects such as latent cancer and genetic effects;

(2) The severity of each type of stochastic health effect is independent of dose; and

(3) Nonstochastic (nonrandom) radiation-induced health effects can be prevented by limiting exposures so that doses are below the thresholds for their induction.

In the absence of convincing evidence that there is a dose threshold or that low levels of radiation are beneficial, the staff believes that the assumptions regarding a linear nonthreshold dose-effect model for cancers and genetic effects and the existence of thresholds only for certain nonstochastic effects are prudent for formulating radiation protection standards and planning radiation protection programs.

The NRC staff believes the dose limits and ALARA requirements of the proposed radiological criteria for decommissioning provide a reasonable basis for protection of public health and safety and the environment. However, the staff has also determined that decommissioning activities should not be allowed the entire dose limit of 100 mrem/y for members of the public. The staff has selected a value which is a relatively small fraction of the limit, consistent with other decisions of both the EPA and NRC for unrestricted access to areas.

Comment. Many commenters recommended that the NRC establish a risk/dose limit on the order of the variability of natural background radiation occurring across the United States as its decommissioning standard. The reasons given were that no health risks are attributable to background radiation variations and studies show that there is no increase in cancer incidence over a wide range of background radiation in the U.S.

Response. The NRC staff believes that the overall objective for decommissioning should be the return of the facility to levels approximating background. However, the NRC staff recognizes that demonstrating that radioisotope levels at a site are indistinguishable from background will be a complex task involving sophisticated sampling, measuring, and statistical analysis techniques. The NRC staff also recognizes that the difficulty of the task can vary substantially depending on a number of factors including the radionuclide in question, the background level for that and other radionuclides at the site, and the temporal and spatial variations in background radiation at the site.

Therefore, in the draft rule, the NRC staff proposed as a goal of the ALARA process that the Total Effective Dose Equivalent (TEDE) to the average member of the Critical Group from all radionuclides that could contribute to residual radioactivity and are distinguishable from background not exceed 3 mrem (0.03 mSv) per year. Demonstration of achieving this dose criterion would be considered as the only demonstration necessary to meet the proposed ALARA requirements of the rule. One of the reasons 3 millirem per year was selected is because variations of this magnitude typically are not distinguishable from the variation of dose from background radiation. Three mrem/y is well within the variability of natural background radiation across the U.S. and also within those variations experienced seasonally at particular sites. Based upon comments received on the NRC staff draft, the Commission has decided to remove the 3 millirem per year value from the proposed rule (see discussion under "Comments on NRC Staff Draft").

3. Individual vs Collective Doses.

Comment. Several comments were made concerning how risk standards should be applied to the population who may be exposed to residual radioactivity at a released site. Most commenters favored applying a risk limit to individuals and believed it unnecessary to specify a collective dose limit (i.e., a limit on the cumulative dose in person-rem/y to the entire exposed population). One commenter remarked that if collective dose is used, it should be applied in a comprehensive manner. For example, in evaluating an appropriate cleanup standard, the doses to the public from transporting material off site for disposal should be evaluated against the doses received by the public around the site if the material is left in place.

Response. The NRC has considered both the collective doses to populations and the individual doses to the average member of the most highly exposed group of individuals (Critical Group). These considerations are reflected in the calculations presented in the GEIS prepared in support of this rulemaking. In the scenarios considered, the annual collective dose is quite small. Therefore, the staff concludes that limiting individual dose to the levels specified in the criteria will assure that collective doses will be small and that the public health will be adequately protected. This is consistent with past Commission practice in establishing radiological criteria.

4. Statement of Radiological Criteria

In developing the staff's draft rule, attention was focused on four approaches: (1) establish an annual risk or dose limit for an individual, (2) establish an annual risk or dose goal, (3) require use of best available technology, and (4) require return of the site to background radioactivity.

Comment. Most commenters from State governments, the nuclear utilities, the fuel cycle industry, the medical community and non-fuel cycle industry, cleanup contractors, and professional society/standard setting organizations favored a risk-based or dose-based standard over a standard based on best available technology or return to background. Most commenters from citizen/environmental organizations and some from other organizations favored a return-to-background standard. Many commenters objected to a best effort/best available technology standard for various reasons including the belief that it would be extremely subjective.

Response. The proposed rule would establish a dose limit for release of the site of 15 millirem per year (mrem/y) TEDE for residual radioactivity distinguishable from background and require that the licensee reduce this residual radioactivity to ALARA. Sites meeting this criterion would be considered acceptable for release for unrestricted use and termination of the license. Fifteen mrem/y TEDE is consistent in terms of risk with the NRC release limits for low-level waste facilities (10 CFR 61.41), is consistent with the individual dose protection limit in the EPA Environmental Radiation Protection Standards for the Management and Disposal of Spent Nuclear Fuel, High-level and Transuranic Wastes, 40 CFR Part 191 (December 20, 1993; 58 FR 66398), and provides a substantial safety margin below the NRC's 100 mrem/y dose limit for individual members of the public. Use of a dose limit is consistent with long standing NRC (and AEC) regulatory practices for protecting radiation workers and the public. The use of a limit also provides a clear measure for determining the acceptability of a site and a clear basis for determinations of compliance with the regulations.

The NRC staff agrees that the objective of decommissioning should be to reduce residual radioactivity at a site to levels that are indistinguishable from background. Therefore, the draft rule proposed to establish the following goal for decommissioning within the structure of reducing exposure below the limit to as low as reasonably achievable:

(1) Reduce the concentration of individual radionuclides which could contribute to residual radioactivity at the site to a level which is indistinguishable from background;

(2) Release the site for unrestricted use; and

(3) Terminate the license.

For purposes of determining when further ALARA efforts need not be further analyzed and documented, the Commission would consider that the ALARA requirement has been met if the TEDE to the average member of the critical group from all radionuclides that could contribute to residual radioactivity and are distinguishable from background does not exceed 3 mrem (0.03 mSv) per year. Three millirem per year is a small fraction of the NRC's 100 mrem/y dose limit for individual members of the public, typically is not distinguishable from variations in local and national radiation background levels, and is consistent with the 10^{-4} level of lifetime risk used by EPA for Superfund. Dose based criteria were selected over risk based criteria for ease of implementation. Based upon comments received on the NRC staff draft, the Commission has decided to remove the numerical values of 3 millirem per year from the proposed rule. However, the Commission remains committed to the objective of decommissioning to levels that are indistinguishable from background.

5. Consistency and Compatibility

Comment. Many commenters urged that all regulatory agencies (EPA, NRC, State and local governments, etc.) use the same radiological criteria for decommissioning and that the agencies be consistent in how they apply the criteria. Some commenters said that the NRC's adoption of a risk/dose limit of 100 millirem per year, with a proper application of ALARA, would result in a 10^{-6} annual risk and a 10^{-4} lifetime risk, which would be consistent with the EPA's Superfund remediation goals. Other commenters recommended that State and local governments be at liberty to adopt more stringent requirements.

Response. The NRC is hopeful that the proposed criteria developed through the enhanced participatory rulemaking process will be acceptable to all regulatory agencies and will be consistent and compatible with the requirements of other regulatory agencies. The EPA and NRC have overlapping authority in the area of developing radiological criteria for decommissioning for nuclear sites. In addition, decommissioned sites, if not remediated properly, could later be subject to remedial action under EPA Superfund requirements. This is an outcome which is viewed as undesirable by both the EPA and NRC and is considered unlikely because the proposed NRC criteria are designed to be consistent with the risk range incorporated in EPA's Superfund requirements. NRC and EPA are developing decommissioning criteria in parallel rulemaking efforts. The NRC and EPA are coordinating their efforts in this area to ensure that effective and consistent site decommissioning standards are established while minimizing duplication of effort. Accordingly, the EPA was an important participant in the NRC rulemaking workshops and is a cooperating agency in the preparation of the GEIS for the rulemaking. The NRC has also consulted extensively with EPA throughout the rulemaking process. The objective is that EPA will be able to make a finding that NRC decommissioning criteria provide adequate protection for the public and the environment and will exclude NRC licensees from the EPA cleanup standards. In addition, State and local governments will have opportunities to participate in certain individual decommissioning actions carried out under the proposed regulation. Further discussion on participation may be found in item 7, below. Agreement State compatibility is discussed briefly in a separate section near the end of this supplementary information.

6. Finality

Comment. Several commenters stated that the NRC's decommissioning standard should be long-lasting and provide a final solution for decommissioning sites that are contaminated with radioactive material. The NRC's standard should be consistent with EPA rules to assure that a site remediated under NRC's rules will not require further remediation under EPA rules.

Some commenters questioned whether it is possible to have finality in decommissioning standards because of likely new information and improved technology in the future. They stated that sites should continue to be remediated as necessary to meet new standards. Those opposed stated that rules should be changed only if a substantial increase in public safety can be demonstrated.

Response. The NRC staff believes that actions taken under the criteria in this rule need not be revisited unless, based on new information, there is reason to believe that residual radioactivity remaining at the site could result in significant public risk. Therefore, once a site has been decommissioned and the license terminated in accordance with the criteria in the rule, the Commission would require additional cleanup only if, based on new information, it determines the level of residual radioactivity at the site substantially violates these criteria.

Based on the NRC's experience in the SDMP and other decommissioning programs, it is important to provide a high level of assurance that decommissioning actions conducted under the current criteria will not need to be revisited in the future under potentially more restrictive criteria. Licensees have indicated a genuine reluctance to commit the large financial and corporate resources necessary for complex decommissioning projects without these assurances. Uncertainty with future criteria and the potential need for additional remediation introduces havoc in the planning and conduct of effective decommissioning. Without some degree of finality in the criteria, licensees may be motivated to forestall decommissioning actions pending development of more favorable criteria or less expensive decommissioning technologies and waste disposal options. This approach manifests itself in extended administrative appeals and litigation, which often redirects licensee resources away from efforts to reduce levels of contamination.

At the same time, the NRC recognizes that there may be legitimate needs for additional remedial actions in the future if significant additional contamination is discovered at a site or if the technical basis on which the criteria are founded changes significantly, indicating that potential future residents of the sites may be at significantly greater risk than previously anticipated. Therefore, the proposed criteria allow for additional remediation, if necessary, if additional significant contamination is identified or if changes in the risk or health basis for the criteria indicate the remediation is necessary to protect the public against significant radiological risks.

As noted in item 5, the EPA and NRC are working together closely in this rulemaking. Upon completion, the EPA will determine through a formal notice and comment rulemaking whether the NRC's rule provides adequate protection for public health and the environment. This should minimize the risk that in the future the EPA would require additional cleanup of a site which has been decommissioned in accordance with the criteria in this rule.

7. Community Involvement

Comment. Many commenters recommended that the rulemaking should provide for and ensure local citizen group participation in overseeing the decommissioning of contaminated

sites and the enforcement of requirements. Also, the role of tribal authorities should be addressed. Some commenters stated that the NRC should ensure citizen participation in decommissioning from the earliest stage of cleanup.

Response. The NRC staff believes it is important for the public to not only be fully informed of the decommissioning actions at a particular site but also to be able to effectively participate in site decommissioning decisions. The proposed rule provides specific mechanisms for public participation in the decommissioning process, where participation is important to ensuring that the public is adequately informed about proposed decommissioning activities or that the public and environment are adequately protected in conjunction with reliance on institutional controls to restrict site access after license termination. These activities are in addition to whatever hearing opportunities are provided for a particular category of site by the Commission's existing requirements.

Upon the receipt of a decommissioning plan from the licensee, or a proposal by the licensee for restricted release of a site, or whenever the Commission deems such a notice to be in the public interest, the Commission will:

(1) Notify local and State governments in the vicinity of the site and Indian Nation or other indigenous people that have treaty or statutory rights that could be affected by the decommissioning;

(2) Publish a notice in the **Federal Register** as well as in other media, such as local newspapers, which are readily accessible to individuals in the vicinity of the site; and

(3) Solicit public comment on the proposed decommissioning action.

For decommissioning actions where the licensee proposes to request license termination with land use restrictions, the licensee will be required to convene a Site Specific Advisory Board (SSAB) for the purpose of obtaining advice from affected parties regarding the proposed decommissioning. The SSAB will function at the planning stages of decommissioning, at the time the licensee is developing the decommissioning plan for the facility. The purpose of the SSAB is to provide recommendations to the licensee on:

(1) Whether there are ways to reduce residual radioactivity to the levels that will permit release for unrestricted use which are technically achievable, will not be prohibitively expensive, and will not result in net public or environmental harm;

(2) Whether provisions for institutional controls proposed by the licensee will:

(a) Provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the Critical Group will not exceed 15 mrem (0.15 mSv) TEDE per year,

(b) Be enforceable,

(c) Impose undue burdens on the local community or other affected parties; and

(3) Whether the licensee has provided sufficient financial assurance to enable an independent third party to assume and carry out responsibilities for any necessary control and maintenance of the site.

The licensee will be responsible for establishing the SSAB and developing appropriate ground rules and operating procedures with the SSAB's advice.

SSAB membership, to the extent that representatives are willing to participate, will have to:

(1) Reflect the full range of interests in the affected community and region and be composed of individuals who could be directly affected by residual radioactivity at the decommissioned site, and

(2) Include representatives from the licensee; local and State governments; workers; persons residing in the vicinity of the site; citizen, environmental, environmental justice, and other public interest groups; and Indian Nation or other indigenous people that have treaty or statutory rights that could be affected.

SSAB meetings will be open to the public. The licensee will be required to provide adequate public notice of the location, time, date, and agenda for the meetings at least two weeks in advance of each meeting. All records generated or reviewed by the SSAB will become part of the decommissioning docket and be available for public inspection.

8. Stability and Flexibility

Comment. Several commenters stated that NRC decommissioning standards are needed to facilitate long-term planning by the nuclear industry and to provide stability against constantly changing criteria over the years. Some commenters stated that even generic standards may not be completely stable because they will need to be changed as a result of newly perceived health effects and improvements in technology.

Many commenters indicated that the rule must be flexible enough to accommodate site differences, e.g., types of radionuclides present, the geology and environmental surroundings, individuals who may be exposed, and possible exposure patterns.

Most commenters favored a generic standard over site-specific standards. While supporting the establishment of a generic standard, some urged the NRC to permit site-specific considerations and site-specific modeling for licensees to demonstrate compliance and to ensure participation by local communities. One commenter stated it would be a mistake to use a generic ALARA evaluation for all sites. Several commenters recommended site-specific ALARA assessments. Some commenters, particularly in the GEIS scoping meetings, suggested that the rule only provide the process for establishing site-specific criteria.

Response. The staff agrees that there is a need for consistent and stable radiological criteria for the decommissioning of licensed nuclear facilities throughout the United States. Therefore, this rulemaking would establish a single set of radiological criteria that would apply to the decommissioning of all sites. However, the staff also recognizes the need for flexibility in applying these criteria because of constraints posed by site specific conditions (e.g. geology, hydrology, meteorology, and radiation background levels) and to provide opportunity for meaningful participation by local communities in individual decommissioning actions. Therefore, the rule proposed by the staff provides for site-specific implementation of the generic criteria. The Commission would also publish regulatory guidance along with the rule that describes methods for site-specific implementation of the criteria. This guidance includes conduct of site characterization and surveys, specific radionuclide concentration and surface activities that would be considered by the NRC staff to meet the decommissioning limit, and modeling acceptable to the NRC staff to develop more site-specific values of concentration or surface activity based upon the factors unique to the activity being decommissioned. In this regard, the NRC is working with the EPA and the DOE to develop a Federal Government manual for the conduct of surveys to determine compliance with decommissioning criteria. When completed, this effort will assist in the consistent treatment of all sites requiring remediation.

The NRC staff believes that generic criteria should be established for decommissioning and that codifying radiological criteria for decommissioning in the regulations would:

(1) Allow the NRC to more effectively assure protection of public health and

the environment at decommissioned sites;

(2) Result in more efficient use of NRC and licensee resources;

(3) Lead to more consistent and uniform application across all types of licenses;

(4) Provide a more stable basis for decommissioning planning; and

(5) Eliminate protracted delays in decommissioning that result as licensees wait for generic regulatory criteria before proceeding with decommissioning of their facilities.

The NRC does not favor the option suggested of providing a process based rule whereby the criteria codified would only be for the process to be used in establishing site-specific radiological criteria. This approach would be essentially the same as the option of remaining with the current *status quo*. In general, a site-specific approach can lead to considerable delays and increased uncertainty on the part of all parties associated with the decommissioning. Further, this approach would be inappropriate and burdensome for the large number of licensees using sealed sources or radionuclides with relatively short half-lives.

9. ALARA Considerations

Comment. Under the ALARA concept, decommissioning activities are continued beyond meeting applicable risk/dose limits in efforts to reduce radiation exposures As Low As Reasonably Achievable (ALARA). Most commenters recommended that the NRC's radiological criteria should incorporate this principle. Several commenters stated that State and local governments should be involved in ALARA determinations. However, other commenters expressed distrust of the licensees' and regulatory agencies' application of the ALARA process because it involves financial tradeoffs and licensees are motivated to maximize their profits.

Response. The proposed rule requires application of the ALARA concept, provided that potential doses are constrained within limiting doses under a range of conditions. NRC anticipates that many licensees, particularly sealed source users or those who use relatively short-lived radioactive materials, will be able to satisfy the ALARA criteria with an analysis of projected dose levels. In these cases, extensive additional documentation to support an ALARA determination would not be required. State and local governments and other affected parties will be involved in ALARA determinations through opportunities to comment on decommissioning proposals and participation on the Site-Specific Advisory Board in those cases where the licensee is seeking license termination under restricted conditions. This level of involvement provides for transparent application of the ALARA considerations and safeguards against excessive licensee attention to cutting costs to maintain profit margins.

Comment. Many commenters stated that for the most effective use of resources and fairness, the NRC must consider in the risk-benefit balance not only radiological risks to workers and the public but, also, non-radiological risks and indirect risks associated with the regulation of decommissioning activities.

Response. The staff agrees that all significant public and environmental risks should be considered. The GEIS for this rulemaking assesses both radiological and non-radiological impacts for the proposed rule and several alternative actions, including the alternative of no remedial action. In addition, the proposed rule would require that the licensee, when determining ALARA for a specific decommissioning, consider all significant radiological and non-radiological risks resulting from residual radioactivity and from the decommissioning process itself (including transportation and disposal of radioactive wastes generated in the process).

In some cases, the necessary ALARA analysis will go beyond the relatively simple cost-benefit analysis that has typically been applied in the nuclear industry in limiting worker exposures because the types of risks being considered are not things that can be easily quantified or compared. For example, transportation poses immediate risks in terms of fatalities due to highway accidents in hauling the radioactive contamination to appropriate disposal sites. Some individuals and organizations have suggested that these anticipated fatalities should not be considered as having the same seriousness or likelihood as the potential deaths at some point in the future of individuals that may inhabit former nuclear sites after license termination. ALARA, or perceptions of what should be considered as ALARA, may also vary because of values placed on minimizing the number of new disposal sites, preserving existing resources, or preserving viable industries for jobs. Each of these factors were discussed in the workshops, and the staff believes that these same factors may need to be considered in determining the ALARA level for remediation at a particular site. The NRC is developing guidance on how the ALARA process could be applied in evaluating alternative radiological criteria for decommissioning on a site-specific basis.

Comment. Another commenter stated that, "there is no ecological or conservation basis for establishing radiation protection standards different from those * * * involved in any other health issue for which benefits are weighed against costs."

Response. The NRC staff agrees with this stated conclusion that, as a guiding principle, radiation protection standards do not warrant different treatment than those for other health issues. In this regard, the staff has carefully considered both the criteria and the implementation of those criteria in other environmental remediation programs (e.g., the EPA Superfund program). The staff believes the criteria proposed in this rulemaking are generally consistent with those used in other environmental remediation programs.

Comment. Several commenters stated that cleaning up to any specified level is technically achievable and is simply a matter of how much it will cost. Some believed that decommissioning costs to return sites to unrestricted use could be so high that the sites should be kept under continued control and maintained as a restricted area. Some commenters suggested that money saved on unnecessary decommissioning activities might be used in other activities more beneficial to the public. Other commenters stated that money saved on decommissioning costs would not necessarily be available for societal betterment.

Response. The proposed rule recognizes that it may not be reasonable to remediate some sites to a level that permits release for unrestricted use. The costs involved, either in dollars or in potential harm to the environment or people, may be prohibitive. In these cases, the proposed rule provides for termination of the license under restricted conditions. The staff is also aware that in some unusual cases sites may have to remain under license indefinitely. For example, the NRC is aware of certain sites that are so contaminated by elevated levels of the naturally occurring radionuclides uranium, thorium, and their decay products that it would be extremely difficult and costly to satisfy the proposed criteria for unrestricted or restricted release. In these cases, the staff anticipates that the sites would have to remain under a license indefinitely until new, more efficient

technologies are developed or the financial resources become available to pay for more complete remediation. The Commission has no authority over expenditure of funds that might be saved by avoiding what were termed "unnecessary decommissioning activities."

10. Site Remediation

Comment. Several commenters stated that, although the cost of decommissioning could be high, remediation technologies are available for achieving whatever level is set by the NRC. The NRC should describe acceptable methodologies for remediation and measurement to reduce subjective judgments and should ensure that workers who perform remediation are appropriately trained and protected.

Response. Before the effective date of the final rule, the NRC will provide interim guidance for use and comment on acceptable methodologies for demonstrating compliance with the Commission's residual radioactivity criteria. After one to two years' implementation experience is gained from use of the interim guidance, the collected comments will be addressed and the final guidance will be issued. However, the NRC staff does not believe that it would be appropriate to prescribe, a priori, the methods to be used. Licensees must be able to take advantage of whatever safe methodologies may be available for achieving remediation that complies with the criteria for decommissioning.

Workers performing decommissioning must receive training in radiation protection according to the requirements of the Commission's requirements in 10 CFR 19.12, "Instructions to Workers." Likewise, workers participating in decommissioning activities will be subject to all of the provisions of 10 CFR Part 20, including requirements related to personnel monitoring, respiratory protection, occupational dose limits, and ALARA. In this regard, the staff does not view the conduct of decommissioning activities to be any different from other operational activities licensed by the Commission.

11. Demonstrating Compliance

Comment. Several commenters stated that demonstration of compliance with NRC decommissioning rules and applicable radiological limits is a major issue. The commenters believe the NRC must provide clear guidelines with respect to the kinds of measurements that are necessary and the models that are acceptable to demonstrate compliance. With respect to measurements, guidance should cover:

(1) Acceptable measurement methods;
(2) Extent of measurements needed;
(3) Use of field instruments versus laboratory instruments;
(4) Statistical sampling; and
(5) Calibration standards and measurement certification.

With respect to models and methodologies, guidance should be provided on their use, uncertainties, and how to apply site-specific characteristics. The NRC must make sufficient confirmatory measurements to check that the standards have been met and NRC should enforce the standards.

Several commenters pointed out that, whatever risk standard the NRC may adopt, compliance will likely need to be determined by a computer model except for small operations when contamination levels are within specified generic criteria. Other commenters stated that decontamination limits should be established and dose modeling should not be relied on to demonstrate compliance. Comments were split on whether risk limits might be needed for different exposure pathways.

Response. Before the effective date of the final rule, NRC plans to issue specific guidance that includes conservative radiation levels, surface contamination limits, and radioactivity concentrations for use by licensees who elect to apply a generic model to demonstrate compliance. Guidance on measurements covering the above listed five subjects will also be provided. The NRC appreciates that guidance is essential especially where the licensee must demonstrate compliance with criteria that require reduction of residual radioactivity to near background levels. The NRC expects to make sufficient confirmatory measurements to ensure compliance with the criteria.

The proposed rule limits the total exposure from all pathways and, except for the purpose of groundwater protection, does not set limits for individual pathways. The groundwater protection requirement has been included at the request of the EPA to ensure conformance with EPA groundwater protection requirements. Because exposure pathways vary in importance to public dose depending on the radioisotope involved, site-specific parameters, and the circumstances under which the site might be used after decommissioning, the staff believes that, as a general rule, no useful purpose would be served by placing limits on individual pathways. In the selection of conservative default values for use by licensees who do not wish to utilize site-specific modeling, the most critical pathways and scenarios of exposure are assumed to be dominant. The absence of limits on individual pathways provides the licensee with more flexibility in limiting radiation exposures while at the same time providing adequate overall public protection.

12. Sites Which Cannot Be Released for Unrestricted Use

Comment. Many commenters stated that the NRC should establish standards for both unrestricted and restricted release of sites while others recommended that the NRC require all sites to be remediated suitably for unrestricted use. Some commenters stated that sites should continue to be licensed by the NRC if they cannot be reasonably decontaminated. Also, commenters stated that the NRC should consider the option of restricted future use of decommissioned facilities only after a rigorous public participation process. Many commenters stated that unrestricted release should be the goal, but that realistically, some sites cannot be remediated suitably for unrestricted release.

Response. The proposed rule provides for both unrestricted release and restricted termination of the license under prescribed conditions. The requirement that the licensee convene a Site-Specific Advisory Board early in the development of proposed decommissioning plans should help ensure substantive public participation in decisions concerning possible restricted termination of the license. As previously discussed, the staff is aware of sites, such as sites with significant volumes of thorium contamination, that will require extensively remedial efforts to achieve the proposed requirements for restricted or unrestricted release. If these sites cannot be remediated to achieve at least the restricted release criteria, then the site license will remain in effect indefinitely until technology or resources become available to achieve compliance with the criteria. In the interim period, NRC will ensure appropriate control of the licensed site on a site-specific basis, including access restrictions, environmental monitoring, personnel monitoring, posting, mitigative actions, and other measures directed at ensuring the stability of the radioactive material and protection of the public health and the environment.

13. Waste Disposal

Comment. Several commenters questioned whether there is enough space at a regional disposal facility for the voluminous soils and other materials that are expected from

decommissioned sites. Other commenters stated that irrespective of where or how wastes are disposed, the costs of nuclear waste management will be high. Some commenters suggested that the option of leaving radioactive wastes on-site should be considered as a temporary or intermediate option to permit decay of radioactive wastes and allow time for resolving long-term waste disposal problems.

Response. The NRC staff recognizes that decommissioning to radiation levels approaching background may produce large volumes of low-level waste which could affect the availability of regional disposal capacity. However, the proposed rule would require the licensee to consider significant radiation doses and risks resulting from transportation and disposal of radioactive wastes generated in the decommissioning process when determining ALARA for a specific decommissioning action. If disposal capacity were to become temporarily limited, on-site storage and containment of wastes may be necessary until a disposal site becomes available. However, any temporary onsite storage and containment of radioactive wastes be done under the provisions of an existing NRC license, and the site would not be decommissioned until this waste had been removed from the site. The radiological and non-radiological impacts associated with disposal of the types of radioactive waste generated in decommissioning were considered in NRC's development of the Environmental Impact Statement in support of the low-level waste disposal requirements in 10 CFR Part 61. Impacts associated with extended storage of waste onsite or at a centralized storage facility would typically be considered as part of environmental analysis in support of issuing or renewing facility licenses or of approving decommissioning actions at a licensed facility.

14. Minimizing Generation of Waste

Comment. Many commenters recommended that the NRC discourage or stop licensing nuclear operations that generate nuclear wastes. Several commenters stated that environmental organizations would be willing to talk about ways to decommission nuclear operations and to dispose of radioactive materials only if power plants were no longer permitted to operate. Other commenters supported the continuation of nuclear power. One commenter urged the NRC not to take sides for or against nuclear power and stated that the policy debate on the relative merits of various power-generating options should be held in another forum (e.g., Congress). Some commenters observed that high costs of decommissioning and waste disposal could help to minimize waste generation. Some commenters recommended that the rulemaking should deal with source reduction of nuclear wastes. Some commenters suggested that decommissioning proposals should be submitted and approved at the design stage and, consequently, newer facilities should be easier to decommission.

Response. The NRC agrees that newly licensed facilities should be encouraged in designing and operating nuclear facilities to minimize the generation of radioactive waste and facility contamination. The proposed rule would require applicants for licenses, other than renewals, after the effective date of the rule to describe in the application how facility design and procedures for operation will minimize contamination of the facility and the environment, facilitate eventual decommissioning, and minimize the generation of radioactive waste.

15. Radon

Comment. Many commenters recommended that the NRC should impose limits to control exposure from radon emissions at decommissioned sites because radon exposures could be a significant health problem. Commenters in favor of NRC setting a radon standard stated it should be possible to make a good estimate of how much radon comes from licensed material. Commenters not supporting the NRC's setting a radon standard stated that the need to deal with radon at licensed sites should be considered site-to-site and that radon control should be left to local zoning boards and housing authorities.

Response. The NRC staff believes that it is not possible to measure or distinguish concentrations of radon which will produce radiation doses of a few mrem TEDE/y above background using current technology. This belief is based on:

(1) Recognition of the ubiquitous nature of radon in the general environment;

(2) Large uncertainties in the models used to project radon concentrations in indoor air based on soil concentrations of precursors; and

(3) Limitations of existing measurement techniques in distinguishing between elevated radon concentrations and radon attributed to natural sources. Therefore, the staff does not propose to establish a separate standard for radon. Instead, [illegible] to radon at decommissioned sites would be controlled by requiring the licensee to reduce the residual concentrations of radon precursors like uranium, thorium, and radium to levels within the limit for unrestricted use and, using the ALARA principle, toward levels which are indistinguishable from background levels.

16. Environmental and Social Considerations

Comment. Many commenters recommended that the NRC develop standards for protecting natural ecosystems in addition to standards protecting humans. Others expressed concern for environmental protection without recommending for or against establishing separate environmental standards. A large number of commenters recommended that protection of human health is sufficient to protect any known ecological system. Therefore, only a standard for protecting humans is needed. Commenters stated that this is the view of the International Commission on Radiological Protection.

Many commenters recommended that case-by-case consideration should be given for special environmental and social/cultural issues associated with homeland, historical sites, and Native American lands because they contain religious sites and sacred areas.

Several commenters cautioned against establishment of unnecessarily restrictive decommissioning standards that could cause severe environmental damage trying to clean up soil and vegetation to background levels because these actions could totally change a site's ecology.

Response. The NRC considered the possible need for radiation standards specifically designed to protect the environment. This analysis is reflected in the draft GEIS. Based on this analysis, the staff concludes that the radiological criteria in the proposed rule which are designed to protect public health should also provide adequate environmental protection.

However, the NRC staff recognizes there may be environmental or cultural issues associated with a particular decommissioning action which require special consideration. These issues can best be handled on a site-by-site basis as part on the decommissioning plan review process and as part of the Commission's environmental review under the National Environmental Policy Act (NEPA). Where necessary, opportunity for public comment and use of the Site-Specific Advisory Board will provide a mechanism for local citizens and other affected parties to be directly involved in addressing these issues.

17. Recycle

Comment. Comments were offered for and against whether NRC should permit recycling of contaminated materials. Those in favor recommended recycling to save resources. Those opposed recommended against recycling to limit public risk. Other commenters stated that the International Atomic Energy Agency (IAEA) has recommended that the maximum dose to any individual from recycled material not exceed one millirem per year.

Response. Although the proposed rule does not specifically address recycle, the NRC staff believes the radiological criteria in the proposed rule provide reasonable assurance that future inadvertent recycle of soils or structures following decommissioning of a site will not adversely affect public health. The analysis which supports the rule, although it does not specifically take recycle into account, is based on prudently conservative scenarios which tend to overestimate expected public doses.

In cases where the licensee achieves residual radioactivity levels that are indistinguishable from background, the potential doses from inadvertent recycle are expected to be insignificant. In cases where the residual radioactivity cannot be reduced to the point that it is indistinguishable from background, the licensee will have to consider inadvertent recycle when conducting the ALARA analysis for the site. Therefore, steps can be taken on a site-specific basis to impose additional restrictions if inadvertent recycle appears to pose a significant potential problem at that site.

The Commission plans to consider separately the issues of how to deal with cases where the licensee proposes to release material containing residual radioactivity intentionally for reuse or recycle either as a part of decommissioning or ongoing operations. In the interim the Commission will continue to be review these actions on a case-by-case basis.

Comments on the NRC Staff Draft

Overview of Comments

There were 1685 comments from the 89 docketed letters received on the NRC staff draft. These comments were similar to those from the workshops with respect to the wide range of expressed views. Two subjects on which the commenters were in general agreement were (1) the appropriateness of the rulemaking process, and (2) the significance of not having the GEIS and the guidance documents available for review. The commenters strongly favor the enhanced participatory rulemaking process but said that the GEIS and the guidance documents are needed in order to understand the basis for the rule and how it would be implemented. The NRC staff considered these comments in the development of the proposed rule.

Summary and Discussion of Comments

1. Need for and Scope of Rule

Comment. Commenters supported the NRC's efforts to develop radiological decommissioning standards. However, some questioned whether the NRC should defer to the EPA and suggested that the NRC await the EPA's efforts to develop these standards. Several commenters urged that the NRC reconsider and delete the exclusion of previously approved decommissioning plans from the new requirements. Others recommended retention of this exclusion and its expansion to cover decommissioning plans already in the final stages of NRC review and approval. A comment reported often was that the NRC should issue its proposed radiological criteria for final public review and comment only after the NRC has completed and issued the companion GEIS and other guidance documents needed to facilitate understanding of the proposed rulemaking.

Response. With respect to the question of whether the NRC should let the EPA take the lead in developing radiological decommissioning standards, the NRC will have to proceed with rulemaking in any case. If EPA develops standards, the NRC will have to promulgate a regulation to implement the EPA standard. Therefore, it was jointly decided that parallel NRC/EPA efforts would be the best approach. The NRC has worked closely with the EPA and will continue to do so. As a result of this interactive cooperation, progress has been made that would have been unlikely otherwise. It is believed important that both agencies continue to work on this effort (see discussion under Item 4, Consistency and Compatibility). With respect to previously approved decommissioning plans, the Commission believes it is important to encourage licensees to take timely decommissioning actions. Accordingly, the Commission is retaining the exclusion of previously approved decommissioning plans in the new requirements and is expanding the provisions to include plans under final stages of NRC review. Regarding the need for public review of the GEIS and other guidance documents, the Commission fully agrees. The GEIS, a regulatory analysis (RA), and an NRC staff working draft regulatory guide will be issued concurrently with publication of the proposed rulemaking. The formal comment period for the rulemaking will commence with this **Federal Register** Notice. Further opportunity for enhanced public participation and comment will be provided in a workshop to be held during the latter part of the formal comment period for the proposed rule and the NRC staff draft regulatory guide. Notification of the workshop will be placed in the **Federal Register** and posted on the electronic board.

2. Radiological Criteria

Comment. Comments were divided concerning whether NRC decommissioning standards should be based on the recommendations of recognized national and international bodies such as the ICRP and NCRP. Many citizen/environmental organizations continued to recommend that the NRC should require decontaminating to a level indistinguishable from background. They opposed setting any acceptable risk level or radiation dose for decommissioning because they believe that any incremental increase over background dose is unacceptable. Most industry and other commenters recommended that the decommissioning standard be based on technically supportable risk/dose criteria. Some commenters urged that the proposed level be decided only after analyzing the costs and benefits of alternative proposals.

Many commenters objected to inclusion of a quantitative goal in the rulemaking because it could be interpreted by some as the standard that should be achieved in most cases. Other commenters agreed on inclusion of both a quantitative goal and a quantitative limit. Some want these to be lower than the levels specified—TEDEs of 3 mrem and 15 mrem per year. Many citizen/environmental organization commenters stated that, instead of specifying a numerical goal and a limit, the regulatory objective should be to reduce contamination to a level that is not distinguishable from background. Other commenters stated that doses in the range of 3 mrem to 15 mrem per year are indistinguishable from background. Most of these commenters recommended that the dose limit should be increased to a level between 25 and 100 mrem per year, or possibly higher. Reasons for recommending a higher dose limit included (1) the criteria should conform to recommendations of national and international scientific

consensus organizations; (2) a cost-benefit analysis would support a higher limit; (3) the criteria should be based on scientific analyses and not based on intuitive feelings; (4) there are no practical means to demonstrate compliance with TEDEs of 3 and 15 mrem per year; and (5) efforts to comply with such levels would waste large resources in remediating small risks with no real gain in benefits.

Several commenters recommended that the goal be dropped from the rule. Some of these commenters suggested the goal instead be incorporated into the guidance that would accompany the rule. A principal concern was that the goal would become a de facto limit. In particular, the EPA, in presenting their comments on the goal, indicated concern over the perception that the specification of any value, such as 3 mrem/yr, would be construed as the actual requirement for the decommissioning. The EPA has verbally continued to express concerns regarding the NRC staff proposal of presenting acceptable staff positions for ALARA documentation in the Regulatory Guide.

Some commenters requested that, because of possible failure of institutional controls, the NRC should not place a dose restriction of 100 mrem per year on sites subject to restricted release. Commenters were divided on the requirement that licensees base their estimates of greatest TEDE dose on the first 1000 years. Some stated that this time is unrealistically long while others stated that it is unrealistically short.

Several commenters compared the proposed limits of 15 mrem/y and 3 mrem/y to risk limits/goals attributed to the EPA and suggested that these comparisons are complicated by differences in scenarios for exposure used by the EPA and the NRC, and by a basic difference between a limit and a goal. A limit must always be reached. A goal is not always reached.

Commenters requested that the NRC include alternative radiological criteria for licensees who possess radioactive materials of a kind and form not requiring extensive decontamination at the time of decommissioning. They suggested that demonstration of compliance should be possible through direct radiation measurements and not require the use of modeling and consultants.

Response. The following responses are provided.

a. Appropriateness of 15 mrem/y TEDE.

The Commission has considered the comments in light of information presented in the Generic Environmental Impact Statement (GEIS) and the Regulatory Analysis (RA). These studies show that residual radioactivity can be reduced to levels which will result in an annual TEDE of 15 mrem without unreasonable effort or expense for most radionuclides and most facilities. A summary of this analysis can be found in Sections 5 through 7 of the GEIS and Sections 4 and 6 of the RA. In those few cases where reducing the residual radioactivity to the levels required to comply with the 15 mrem/y TEDE limit for unrestricted use are either not technically achievable, would be prohibitively expensive, or would result in net public or environmental harm, § 20.1405 of the proposed rule provides the licensee with the option of requesting release of the site with restrictions placed on its use.

Several commenters have argued that a 15 mrem/y limit for unrestricted release is not consistent with the recommendations of the ICRP and NCRP and that the limit should be raised to as high as 100 mrem/y. The Commission believes that an additional margin of safety below 100 mrem/yr is necessary because the 100 mrem/y limit is intended to apply to doses to the public resulting from *all* radiation sources (NCRP Report No. 116, Section 15; ICRP Publication 60, Section 5.5). Therefore, allocation of the entire 100 mrem/y dose to residual radioactivity from the decommissioning of a single facility would be inappropriate. Using a safety margin to limit the dose from a single source to avoid a summation of exposures approaching the dose limit is consistent with the recommendations of both the ICRP and the NCRP.

b. Removal of Goal from the NRC staff Draft Rule.

As formulated in the NRC staff draft rule, the goal was designed to serve two principal objectives. First, and foremost, it would clearly articulate the NRC's objective for decommissioned sites. Second, it would establish a dose level well below the limit at which licensees who have little or no site contamination (e.g., licensees that use only sealed sources or short lived radioisotopes) would be relieved of much of the burden of analysis associated with the ALARA requirement.

The NRC staff has reexamined the goal concept based on the comments received, and has concluded that having both a limit and a goal in the rule can lead to confusion concerning the Commission's intent. Therefore, in order to clarify the Commission's intent and to make it clear that 15 mrem/y TEDE is the only limit, the Commission has dropped the term "goal" from the rule. Instead the Commission has substituted the following:

First, in order to clearly articulate the Commission's continued commitment to the objective for decommissioned sites, the following statement of objective has been included in § 20.1402 of the proposed rule:

> The objective of decommissioning is to reduce the residual radioactivity in structures, materials, soils, groundwater, and other media at the site so that the concentration of each radionuclide that could contribute to residual radioactivity is indistinguishable from the background radiation concentration for that radionuclide. The Commission realizes that, as a practical matter, it would be extremely difficult to demonstrate that such an objective has been met. Therefore, the Commission has established a site release limit and is requiring that licensees demonstrate that the residual radioactivity at a site is as far below this limit as reasonably achievable.

Second, in order to provide administrative relief to licensees who have little or no site contamination, the Commission has revised § 20.1404 of the rule to read as follows:

A site will be considered acceptable for unrestricted use if:

(a) the residual radioactivity that is distinguishable from background radiation results in a TEDE to the average member of the critical group that does not exceed 15 mrem (0.15 mSv) per year; and

(b) the residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA).

Depending on the site-specific ALARA analysis, any dose level less than or equal to 15 mrem/y may be considered ALARA. However, in many situations, licensees who have little or no site contamination should be able to readily achieve a dose level well below the limit. The NRC will provide guidance as to how such licensees can demonstrate compliance with Section 20.1404(b) without having to perform sophisticated analyses to demonstrate that residual radioactivity levels at their sites are ALARA. This should substantially reduce the administrative burden on licensees who have little or no site contamination (e.g., licensees that use only sealed sources or short lived radioisotopes). There are approximately 17,000 NRC and Agreement State licensees, many of which are small businesses, that are expected to benefit from this guidance without any compromise to public health and safety.

c. Time Frame.

For the reasons stated in the rationale for the proposed rule, the Commission believes the 1000 year time frame proposed by the NRC staff is reasonable for estimating annual doses from

residual radioactivity from decommissioned sites.

When predicting thousands of years into the future, uncertainties become very large because of major potential changes in the hydrogeologic regime at the site over these long periods of time. When the potential consequences of exposure to the radioactive source are great; e.g., as in the case of a high level waste repository, distant future calculations may provide some insight concerning the relative magnitude of consequences. However, the consequences of exposure to residual radioactivity at levels near background are small and considering the large uncertainties, long term modeling of near background doses may be virtually meaningless. Thus, the Commission does not believe it would serve any useful purpose to attempt to estimate radiation doses from residual radioactivity thousands of years into the future.

3. Individual vs Collective Doses

Comment. Several commenters stated that collective dose should be used by the NRC to evaluate costs and benefits of alternative radiological criteria. The Department of Energy suggested that an ALARA analysis, based on collective dose and competing risks for certain sites with low population exposure, might indicate that the criteria proposed by the NRC may not be justifiable. Most commenters favored using dose to individuals to ensure protection of the public health. Many citizen/environmental groups disagreed with the proposal to limit individual dose to the "average member of the Critical Group." They recommended that the goal and limit as described in the staff's draft rule be applied to the maximally exposed individual in the exposure group.

Response. The Commission agrees with the commenters that collective dose should be used by the NRC to evaluate the costs and benefits of alternative radiological criteria. In fact, this has been incorporated in the assessment of the total risk for the respective alternatives in the GEIS and the RA. Although these documents were unavailable for review by the commenters, the technical analyses in the GEIS and the RA support the criteria in the proposed rule.

The Commission considers the use of TEDE to the average member of the Critical Group to be a more useful concept for the purposes of decommissioning for the reasons discussed in the Rationale for the Proposed Rule. The discussion of "Critical Group" in the Rationale has been revised to make it clear that the critical group must be reasonably homogeneous. This clarifies that the licensee cannot average doses over a group whose members may be expected to get widely differing doses for the purpose of "averaging down" expected doses to highly exposed individuals.

4. Consistency and Compatibility

Comment. As was the case at the earlier workshops, commenters urged that the NRC and the EPA work together to develop consistent standards. Conservation of Federal resources and avoidance of imposing different standards on regulated parties were considered to be important. However, the NRC was advised not to lower its risk limit simply to accommodate the EPA.

The commenters recommended that the degree of consistency that the NRC will require between NRC standards and Agreement State standards be clearly stated. One commenter suggested that the Federal standard be set to ensure adequate protection of the public and that if a State or local community requires a licensee to decommission to a lower standard that does not provide a significant benefit, then the State or local community should fund this extra effort. Agreement State commenters requested that the statement of considerations for the proposed rulemaking discuss the extent to which they must implement specific provisions of the rule to maintain continued regulatory compatibility with NRC regulations.

Response. In response to the comments concerning the relationship between NRC and EPA standards, NRC and EPA are developing decommissioning criteria in parallel rulemaking efforts. The NRC and EPA are coordinating their efforts in this area to ensure that effective and consistent site decommissioning standards are established, while minimizing duplication of effort. Accordingly, the EPA was an important participant in the NRC rulemaking workshops and is a cooperating agency in the preparation of the GEIS for the rulemaking. The NRC has also consulted extensively with EPA throughout the rulemaking process. The objective is that EPA will be able to make a finding that NRC decommissioning criteria provide adequate protection for the public and the environment and will exclude NRC licensees from the EPA cleanup standards.

In response to the question of NRC/Agreement State compatibility, the Commission is developing a new policy on Agreement State compatibility which will be issued for public comment in the near future. Because the compatibility determination for this proposed rule will be considered in light of the new compatibility policy, the Commission believes it would be premature to propose a compatibility determination at this time. However, to facilitate ultimate resolution of the compatibility determination for this rule, if adopted as a final rule, the Commission is requesting comments on whether, to what extent, and under what circumstances, an Agreement State should be authorized to establish more stringent requirements than those set forth in this proposed rule.

5. Finality

Comment. Finality of decommissioning was a major issue among commenters. Various commenters stated (1) that revisiting sites should be based on new site-specific information and not on new evaluation methods and (2) that the criteria for revisiting sites are too subjective and require clarification or refinement.

Response. The Commission agrees that the wording in the NRC staff draft was ambiguous. Therefore, § 20.1401(c) has been revised to make it clear that the Commission would require additional cleanup only if, based on new information, it determined that residual radioactivity remaining at the site could result in significant public risk.

6. Community Involvement

Comment. The NRC staff draft specified that the Commission will inform the public of each receipt of a decommissioning plan from a licensee and of each proposal for restricted release of a site. In addition, it specified that licensees who propose to release sites under stipulated conditions of restricted release must convene a Site-Specific Advisory Board (SSAB) for purpose of providing advice to the licensee.

Several industry commenters questioned the need for these additional requirements on the grounds that:

(1) Present procedures for public participation in licensing procedures are adequate and provide an appropriate way to deal with the concerns of those affected by decommissioning;

(2) There is no demonstrated need; and

(3) The provisions of SSABs would put managerial, regulatory, and financial matters of licensees in the hands of people who have no responsibility for the consequences of their recommendations.

Most other commenters supported the proposed new community involvement proposals and some commenters additionally urged the NRC to require establishment of an SSAB for all decommissioning cases, including sites suitable for unrestricted release. Others recommended that an SSAB should be used in cases involving Native American lands, sites surrounded by high density residential uses, ocean or waterfront sites, or sensitive ecosystems unless the three (3) millirem per year decommissioning goal would be met.

Additional comments on the use of SSABs included:

(1) The rulemaking should delimit SSAB roles and responsibilities;

(2) Guidelines are needed with respect to SSAB staffing and activities;

(3) SSABs should not report to licensees or be funded by licensees because this could compromise their effective use;

(4) Membership should be restricted to "citizen, environmental, environmental justice, and other public interest groups" who reside in the local community; and

(5) The membership should include a representative of the site to which wastes are expected to be sent.

Response. With respect to the need for additional community involvement, the Commission believes that the noticing requirements and the requirements to establish and use SSABs should be implemented as proposed in the NRC staff draft. The proposed termination of licenses and release of sites under conditions of restricted release involve issues (e.g., land restrictions) which could have unanticipated adverse effects on the local community. The Commission wants to be sure it has considered the views of affected members of the local community on these issues before making a decision on the licensee's request. These proposed provisions will provide an effective means to inform the affected licensees, local and state governments, and the NRC of these views. However, the Commission believes that an extension of the SSAB requirement to apply to cases involving unrestricted release is unnecessary and would impose an undue burden with little or no public benefit on a large number of licensees, many of which are small businesses.

With respect to delimiting the role and responsibilities of SSABs and providing guidance on SSAB staffing and activities, the Commission specifically requests further comment on these issues. After gaining experience with the formation and use of SSABs, it might be appropriate to reconsider the need for this guidance at a later date. Regarding the funding and control of SSABs, the Commission believes that licensees should provide the necessary funding as proposed. The proposed rule contains safeguards to ensure that the SSABs are not subject to licensee control. The licensee would be required to provide reasonable opportunity for all local affected parties to be represented on the SSAB. Meetings of the SSAB must be open to the public. The licensee must provide adequate public notice of the location, time, date, and agenda for the meetings at least two weeks in advance of each meeting. All records generated or reviewed by the SSAB become part of the licensing docket and will be available for public inspection.

With respect to restriction of the SSAB membership to the local community, the intent of the provisions in § 20.1407(c) is such a restriction. Regarding the proposal to expand memberships of the SSAB to include a representative of the designated offsite disposal site, the Commission believes that the offsite disposal site is not relevant for consideration by the SSAB, because siting of the waste disposal facility involves a separate public process that, in part, recognizes that wastes will be transported to the waste facility.

7. Stability and Flexibility

Comment. Most of those who commented on stability or flexibility provided in the draft rule said that a generic standard should be written to provide enough flexibility to account for actual risks associated with conditions peculiar to specific sites in protecting the public and the environment, and to select appropriate site-specific remediation methods. Some commenters said that the imposition of strict generic standards without flexibility might not provide an optimum protection strategy across the range of categories of licensees. Other commenters noted that the adequacy of flexibility provided under the draft proposed rule cannot be decided without the necessary guidance documents.

Response. The Commission also recognizes the need for flexibility in applying these criteria because of constraints posed by site-specific conditions (e.g., geology, hydrology, meteorology, and radiation background levels) and to provide opportunity for meaningful participation by local communities in individual decommissioning actions. Therefore, the proposed rule provides for site-specific implementation of the generic criteria. The Commission is publishing the NRC staff's working draft regulatory guidance along with the proposed rule which describes methods for site-specific implementation of the criteria. This working draft guidance includes conduct of site characterization and surveys, specific radionuclide concentration and surface activities that would be considered by the NRC staff to meet the 15 mrem/y TEDE limit, and modeling acceptable to the staff to develop more site-specific values of concentration or surface activity based upon the factors unique to the activity being decommissioned.

8. ALARA Considerations

Comment. Comments on the ALARA concept were much the same as provided at the earlier workshops. Most public/environmental organization commenters stated that they do not trust licensees to make ALARA determinations. Industry and other commenters stated that they support the NRC's permitting them to make ALARA determinations and urged the NRC to continue to permit licensees to use site specific factors in making these determinations.

Response. The Commission believes that ALARA is a fundamental concept of radiation protection and is an important part of its decommissioning criteria. NRC guidance being issued in support of the rulemaking provides for the use of site-specific factors in deciding what levels should be achieved below the stipulated radiological limit. This guidance will be described in NUREG–1500 "Working Draft Regulatory Guide on Release Criteria for Decommissioning; Staff Draft for Comment."

9. Demonstrating Compliance

Comment. Many submitting written comments urged the NRC to complete its guidance on acceptable methodologies criteria as soon as possible and to publish this guidance for comment before the rulemaking is issued for final public comment. Many commenters questioned the technical ability to demonstrate compliance with the proposed dose goals or limits in the staff's draft, or questioned the technical justification for such requirements, or said that there are no standards for demonstrations of compliance. Several others said that demonstrating compliance to the proposed dose goals or limits is impractical and will unnecessarily increase costs and volumes of low-level wastes generated during decommissioning.

Many commenters said that there must be practical or objective guidance for demonstrating compliance. Some

said that this guidance should be issued for review before the rule is promulgated. Some commenters raised questions on who makes the final decisions on demonstrating of compliance and by what means.

Some commenters suggested that simplified guidance (not requiring the use of modeling or consultants) should be provided for designated licensees who have only low levels of contamination or "uncomplicated situations" in their operations. Some commenters said that the public might more easily understand demonstration of compliance if alternative limits to the ones proposed were used. Several commenters said that compliance should be demonstrated by actual measurements and not just by modeling. Some commenters also suggested specific methodologies for demonstrating compliance.

Response. The capabilities for demonstrating compliance are considered in the GEIS and the RA which provide the technical basis for the radiological criteria in the rule. Guidance that is being issued for public comment in conjunction with the publication of the proposed rule will cover acceptable methods for demonstrating compliance, the use of simplified methods or practical derived measurements and measurements units, and verification by practical measurement techniques not necessarily requiring modeling.

In response to the question concerning who makes the final decisions on whether the licensee has demonstrated compliance with the rule, the NRC or, as appropriate, the Agreement State will make this determination. Where necessary the NRC or Agreement State will conduct independent confirmatory surveys to ensure that the appropriate criteria have been met.

10. Sites That Cannot Be Released for Unrestricted Use

Comment. Many public/environmental organization commenters stated that licensees should not be permitted to walk away from a contaminated site and that contamination should be removed to the extent that radioactive materials and radiation are indistinguishable from background. Many voiced opposition to any release of sites under restricted use conditions. This opposition was based largely on concern about the long term effectiveness of institutional controls to ensure compliance with the conditions for restricted release.

Other commenters generally endorsed both the unrestricted and restricted release of sites. With respect to restricted release of sites, commenters:

(1) Stated that the NRC should better define the circumstances which could qualify a site for restricted release;

(2) Recommended that the NRC give examples of acceptable institutional controls for providing reasonable assurance that specified dose limits are not exceeded; and

(3) Requested that the NRC publish guidance on determination of necessary financial assurance for proper control and maintenance of a site.

Some commenters recommended that the NRC adopt a dose level below 100 mrem per year as the upper dose limit in the event of failure of the applied institutional controls. Still other commenters stated that the 100 mrem per year restriction could foreclose onsite disposal of wastes as presently permitted at uranium mill tailings sites and that this restriction should be deleted. Several commenters requested that the NRC better address the issue of consolidation and long-term care of wastes at sites not suitable for restricted release.

One commenter said that engineered disposal cells might be the best solution for sites with large quantities of slightly contaminated soils, while another said that large volumes of slightly contaminated soil with a few "hot spots" should be regarded as homogeneously contaminated.

Response. The NRC believes that the rule should provide for both unrestricted release and for restricted release of sites. Additionally, there may be sites that will have to continue under license. The NRC is issuing guidance, first in draft form for comment, on how it expects to implement the provision for restricted release.

The 100 mrem/y restriction is designed to establish an upper bound on the risk in the unlikely event of failure of institutional controls or restrictions at the site. This restriction is also designed to ensure that license termination under restricted conditions does not result in a proliferation of *de facto* disposal sites. The Commission believes that 100 mrem/y is an adequately conservative upper bound. This dose corresponds to the maximum annual dose during the first 1000 years following decommissioning. In many cases, the peak dose occurs during the first year following decommissioning. For these cases, the predicted dose levels will be reduced by radioactive decay so that if institutional controls or restrictions at the site were to fail some time in the future the actual public dose would be substantially below 100 mrem/y in most cases. In cases where buildup of radioactive daughter products or other conditions cause the peak dose to fall other than in the first year after decommissioning, the predicted dose levels are significantly below 100 mrem/y for the large majority of the first 1000 years after decommissioning.

The issue of an appropriate value for the dose in the unlikely event of failure of institutional controls has been a key point of the ongoing discussions between the EPA and the NRC. As noted in section entitled "Rationale for the Proposed Rule" of this Statement of Considerations, the Commission is specifically soliciting comment on the appropriateness of this value, and the impacts associated with the selection of other values such as 75 mrem/yr.

Disposal of tailings and soil cleanup at milling sites is regulated under the Uranium Mill Tailings Radiation Control Act of 1978 (UMTRCA). The impact of the dose limit on unique practices at uranium mill tailings sites may require case-by-case consideration in the interest of consistency with current regulation of tailings under UMTRCA.

11. Waste Disposal

Comment. A commenter stated that waste disposal issues must be discussed in the EIS. Some commenters stated that the criteria do not seem to recognize and should more adequately consider the non-linear increase in waste volumes at low concentrations of radioactive materials.

Several commenters stated that the NRC should consider allowing for some decommissioning under restricted conditions with on-site emplacement, storage, and monitoring of radioactive wastes. Several commenters stated that previously-buried wastes should be cleaned up at the time of decommissioning consistent with the generic cleanup standard. Several others disagreed, saying that it is "unfair" or unnecessary to include these previously-buried wastes.

Agreement State commenters were concerned over the adequacy of the space at regional disposal facilities for the large amount of material to be generated from the decommissioned sites. The concern was enforced by the lack of a GEIS to review and assertion that data used in the EIS for 10 CFR Part 61 is over 10 years old.

Response. Waste disposal issues, including matters of the relationships between waste volumes and cleanup levels, are discussed in the GEIS. The Commission maintains its position that public and environmental risk is an overriding factor that requires the consideration of the removal of

previously-buried wastes as a part of decommissioning. Even though a previous burial was carried out within the regulatory requirements at an operating site, the potential differences in conditions between the site as operated and as decommissioned require such consideration. The requirements for previously-buried wastes are consistent with the Commission's established regulatory practice for decommissioning under the Site Decommissioning Management Plan (SDMP). The proposed rule requires an analysis of site-specific overall risks, costs, and benefits in deciding, for individual sites, whether or not the exhumation and removal of previously-buried wastes is required.

12. Minimizing Generation of Waste

Comment. The NRC staff draft contained a section on minimization of contamination. Most commenters supported the concept of minimization of contamination, but several industry commenters preferred not to include the proposed provisions in the rulemaking on radiological criteria for decommissioning. Industry commenters stated that these concepts do not need to be put in regulations because waste minimization and hence, minimization of contamination, is commonplace in the nuclear industry and is driven by such economic incentives as reduction of disposal costs. Some commenters recommended that the NRC publish guidelines for public comment on the actions that licensees are expected to take in minimizing the production or release of contamination, and that the NRC should similarly publish for public comment the criteria it will use to determine if licensee proposals are acceptable.

Response. The Commission agrees that existing ALARA programs and the cost of radioactive waste disposal provide sufficient incentive to minimize radioactive waste. Therefore, requiring licensees to redesign existing facilities or amend already approved radiation protection procedures is unnecessary and would not result in any substantial improvement in public safety. Therefore, § 20.1408 (b) and (c) have been deleted from the proposed rule. However, the Commission believes that there may be substantial potential to reduce contamination, facilitate eventual decommissioning, and minimize generation of radioactive waste if special consideration is given to these issues when designing new facilities. Therefore, § 20.1408(a) has been retained.

13. Radon

Comment. Those submitting written comments mostly agreed with not establishing a separate standard for radon. Commenters noted, however, that sites contaminated with radon-bearing-or-producing materials may have great difficulty meeting the proposed dose goal and limit in the staff's draft.

Response. The Commission believes that a separate standard for radon is not needed and that NRC guidance being issued in support of the rulemaking will provide licensees with sufficient information concerning measurement problems that are associated with background radon. Additional comments are invited with respect to the problem of determining compliance with the NRC's radiological criteria at sites contaminated with processed radon-bearing-or-producing materials.

14. Recycle

Comment. One commenter said that all "radioactivity" from licensed use should be contained and not recycled. Another said that recycling should be considered on a case-by-case basis.

Response. The Commission believes the radiological criteria for recycling is outside the intended scope of this rule but will be addressed in a future rule. In the interim, the Commission will continue to review this action on a case-by-case basis.

15. Comments Related to Definitions

Comment. There were a number of questions concerning definition of terms used in the draft rule. There were also several suggestions for additions, deletions, or revisions to existing definitions in the draft rule, and there were some suggested new definitions. Questions were raised concerning the use of terms such as, "affected parties," "significant," "average member," "cumulative TEDE," "decommissioning goal," "unrestricted use," and "net public or environmental harm."

Some commenters objected to including fallout in the definition of background radiation. Others agreed with the proposed definition or proposed various additions, revisions, or deletions to the definition, e.g., to change the wording starting with the current words "global fallout" to "global fallout from the testing of nuclear explosive devices or from past nuclear accidents."

Several commenters said that the term "residual radioactivity" needs clarification with respect to materials discharged from the site in accordance with other provisions of the regulations in 10 CFR Part 20.

Response. The practical implication of these terms and others in the proposed rule have been clarified in the guidance which accompanies the proposed rule.

With regard to "background radiation," the new definition is the same as the existing definition except for the addition of the words "or from past nuclear accidents like Chernobyl which contribute to background radiation and are not under the control of the licensee" after "explosive devices" in order to explicitly recognize that radioactivity from past nuclear accidents contributes to background radiation. Because the remaining wording has been adequate in the past, the Commission sees no reason to further revise the definition at this time.

The Commission agrees that the proposed definition of "residual radioactivity" in § 20.1003 was not clear with respect to materials discharged at the site in accordance with other provisions of 10 CFR Part 20. The definition has been revised to clarify the Commission's intent.

Rationale for the Proposed Rule

Conceptual Basis

The overall conceptual basis for decommissioning, as proposed in this rulemaking, consists of an objective to reduce the residual radioactivity at the site so that it is indistinguishable from the background, a limit on the dose considered acceptable for release of a site with a stipulation that dose be as far below this limit as reasonably achievable (i.e., ALARA), provisions in regulatory guidance for administrative relief from performing sophisticated ALARA analyses for licensees who have little or no site contamination, provisions for restricted termination of a license when physical remediation activities cannot achieve the limit, and enhanced provisions for public participation.

The limit for release of a site is 15 mrem/y (0.15 mSv/y) TEDE for residual radioactivity distinguishable from background. If doses from residual radioactivity are less than 15 mrem/y TEDE, the Commission will terminate the license and authorize release of the site for unrestricted use following the licensee's demonstration that the residual radioactivity at the site is ALARA.

The Commission expects the licensee to make every reasonable effort to reduce residual radioactivity to levels that will allow unrestricted release of the site. However, the Commission will consider terminating a license in cases where restrictions must be imposed on

the use of the site to ensure that public doses are maintained below the 15 mrem/y (0.15 mSv/y) TEDE limit, provided the licensee:

(1) Can demonstrate that further reductions in residual radioactivity necessary to comply with the 15 mrem/y TEDE limit for unrestricted use are not technically achievable, would be prohibitively expensive, or would result in net public or environmental harm;

(2) Has made adequate provisions for institutional controls to reduce annual TEDE from residual radioactivity distinguishable from background to the average member of the appropriate critical group to 15 mrem (0.15 mSv) TEDE;

(3) Has provided sufficient financial assurance to enable an independent third party to assume and carry out responsibilities for any necessary control and maintenance of the site; and

(4) Has reduced the residual radioactivity at the site so that the TEDE from residual radioactivity would not exceed 100 mrem (1 mSv) per year even if the restrictions applied in the termination were no longer effective in limiting the possible scenarios or pathways of exposure.

The Commission estimates that there may be several existing licensed sites (no more than a few tens) containing large quantities of materials contaminated with low level radioactivity where health and environment may best be protected by onsite stabilization and disposal. The contamination was generated over the last several decades using practices that generally would not be found satisfactory today without adequate plans and financial assurance for decommissioning. In some cases, a responsible public or private entity may no longer exist or be viable for discharging its responsibility for ensuring protection of the public and the environment. In other cases, the contamination may have been generated through research or development contracts with the Federal government or given special consideration in Federal law. Due to the unique characteristics of these sites when compared with the much larger population of licensed nuclear facilities, the Commission contemplates that the owners and operators of these facilities may seek exemptions from the decommissioning criteria under the general provisions in 10 CFR 20.2301.

Such sites, and the considerations associated with them, are not unlike disposal sites for uranium mill tailings, and may need to be provided with equivalent types of controls to ensure sufficient protection. At a minimum, the Commission would require that the public health and environmental protection requirements developed for these unique cases be consistent with other appropriate regulatory requirements for disposal of radioactive waste, including those in 10 CFR Part 61 "Licensing Requirements for Land Disposal of Radioactive Waste" or 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."

Any Commission decision on such exemption requests and the disposition of these sites would be made on the basis of a comprehensive analysis of the risks and benefits of all viable alternatives including remediation of the site to meet the criteria in this rule. Proper disposition of these sites may require some type of durable institutional control, such as placing the site under the custody of a State or Federal agency, to ensure long-term protection of the public and environment. For example, for a former licensed site in West Virginia, the final disposition included action by Congress that provided for transfer of the site to Federal custody and ongoing DOE oversight. Such an analysis would have to consider all significant risks to humans and the environment resulting from the decommissioning process (including transportation and disposal of radioactive wastes generated in the process) and from residual radioactivity remaining at the site following termination of the license. The Commission specifically solicits comments on this approach to the handling of these unique cases, including proposals for alternative strategies which could be used to assure adequate protection of public health and the environment.

The Commission envisions that the scope of the exemption request would be limited to the radiological criteria for unrestricted or restricted release. Due to the unique nature of these sites and the comprehensive evaluation necessary to support such an exemption request, the Commission would require that a meaningful and substantial process be used by the licensee or the NRC itself for informing and involving the public in the decision. Consequently, the Commission would not favorably entertain exemption requests unless they were developed through a process consistent with the public involvement processes required in this rule.

For any process conducted by the NRC, the Commission would solicit participation from: the Environmental Protection Agency; local and State governments; persons residing in the vicinity of the site; citizen, environmental, environmental justice, and other public interest groups; Indian Nation or other indigenous people that have treaty or statutory rights that could be affected; and other affected parties. For example, in reviewing proposed decommissioning actions at two licensed sites in Ohio and New Jersey, the Commission has initiated development of Environmental Impact Statements (EISs) for both sites and recently held public meetings on the scope of the EISs with the intent to fully explore the alternatives and potential impacts associated with the disposal of the contaminated material. As a part of this process, NRC is working closely with EPA, State, local representatives, and members of the public to develop acceptable alternatives. The site-specific process applied at these sites by the NRC is attempting to include participation by all affected parties to assure continued protection of public health and safety through a viable and effective decommissioning approach.

Although the Commission recognizes there may be existing sites where public health and the environment may best be protected by onsite stabilization and disposal, the Commission does not believe that future activities should result in additional sites that would not be able to meet the criteria in this rule. Therefore, the Commission is proposing to add a new § 20.1408 to its regulations which would require that applicants for licenses, other than renewals, describe in the application how facility design and procedures for operation will minimize contamination of the facility and the environment, facilitate eventual decommissioning, and minimize the generation of radioactive waste.

Definitions

The following definitions already present in the regulations would be revised:

The definition of Background Radiation (10 CFR 20.1003) would be revised so that fallout from past nuclear accidents like Chernobyl which contribute to background radiation and are not under the control of the licensee are included in the definition. The Commission does not believe it is reasonable for licensees to be required to remediate material over which they have no control and which is present at comparable levels in the environment both on and off of the site.

The definition of Decommission would be revised to also provide for termination of a license and release of property under restricted conditions. This revision was requested by a large number of commenters at the workshops on decommissioning. Those commenters felt that the NRC should recognize that it may not be feasible to decontaminate some sites to a level appropriate for unrestricted use and that restrictions on the subsequent use of such sites could be used to provide an additional measure of public protection.

The following new definitions would be added:

The Critical Group would be defined as the group of individuals reasonably expected to receive the greatest exposure to residual radioactivity given the circumstances under which the analysis would be carried out. For example, if the site were to be released for unrestricted use the Critical Group would be the group of individuals reasonably expected to be the most highly exposed considering all reasonable potential future uses of the site. This would include renovation of structures, water use, and industrial, residential, and agricultural uses of the land and structures. If the site were to be released with restrictions, the licensee would have to assess both the dose to the average member of the group of individuals reasonably expected to be the most highly exposed assuming that the proposed restrictions were successfully imposed and adhered to (the "Critical Group" appropriate to this set of circumstances) and the dose to the average member of the group of individuals reasonably expected to be the most highly exposed if the proposed restrictions were to fail (in essence the "Critical Group" for unrestricted termination of the license).

The Critical Group, for purposes of screening dose calculations, is defined for each scenario described in NUREG/CR-5512, Volume 1. In each scenario, the Critical Group is an individual or relatively homogeneous group of individuals expected to receive the highest exposure within the assumptions of the particular scenario. The average member of the Critical Group is that individual who is assumed to represent the most likely exposure situation based on prudently conservative exposure assumptions and parameter values within the model calculations. For example, the Critical Group for the building occupancy scenario is the group of workers occupying a building that has been decontaminated. The average member of that group is assumed to spend 2000 hours per year working in the building and is exposed to residual contamination via the external, inhalation, and inadvertent ingestion pathways. A more detailed discussion of acceptable methods for selecting the critical group and estimating the dose to the average member of the group can be found in Section III.G. of the draft regulatory guide.

This is a departure from the requirement in § 20.1302 where, for licensed activities, the licensee is required to assess the dose to "the individual likely to receive the highest dose." However, in contrast to licensed facilities where public doses normally result from activities that are carefully prescribed and controlled, the public doses from residual radioactivity at decommissioned sites may result from a variety of activities for which the maximally exposed individual is much more difficult to precisely define. Furthermore, in ongoing operations licensed by the Commission, it is possible to update or keep track of who might be likely to receive the highest exposure. In decommissioning, there will be no ongoing mechanism that would allow for adjustments of imposition of additional controls. Therefore, the Commission believes it is more prudent to use the average member of the critical group for assessing TEDE from residual radioactivity after the license is terminated because this provides a reasonably conservative estimate of public risk without attempting to speculate on which specific individual may be expected to receive the highest dose.

The practice of defining and using a Critical Group when assessing individual public dose from low levels of radioactivity similar to those expected from a decommissioned site is proposed in Section 5.5.1 of the 1990 recommendations of the International Commission on Radiological Protection (ICRP 60) and has been adopted in the current draft of the Environmental Protection Agency (EPA) Draft Federal Radiation Protection Guidance for Exposure of the General Public. For the purpose of this Subpart, the licensee would be required to estimate the dose to the average member of the critical group from residual radioactivity remaining at the site.

Indistinguishable from background would mean that the detectable concentration of the radionuclide is not statistically different from the background concentration of that radionuclide in the vicinity of the site, or in the case of structures, in similar materials using adequate measurement technology, survey methodology, and statistical techniques.

Readily removable would refer to residual radioactivity, as defined below, which is removable using non-destructive, common, housekeeping techniques (e.g., washing with detergent and water) that do not generate large volumes of radioactive waste requiring subsequent disposal. This would not include techniques that produce chemical wastes that are expected to adversely affect public health or the environment. Readily removable would also not refer to residual contamination dispersed in soil under conditions where removal of the residual radioactivity could only be accomplished by moving large volumes of soil.

Residual Radioactivity would include radioactivity in structures, materials, soils, groundwater, and other media at the site resulting from licensed activities at the site. This would include radioactivity from all licensed and unlicensed sources used by the licensee but would exclude background radiation. This term should not be confused with the term "residual radioactive material" which appears in 10 CFR 40.4.

Site-Specific Advisory Board (SSAB) would be a committee constituted by the licensee to provide advice to the licensee on decommissioning.

Scope

The proposed rule would apply to the decommissioning of all facilities licensed by the Commission except for facilities or portions thereof (e.g., waste disposal sites and uranium mill tailings) that are already specifically covered in the regulations. It provides for both unrestricted and restricted release of sites. The proposed rule would not apply to sites already covered by a Commission approved decommissioning plan if the plan was approved before the effective date of the rule. This provision is designed to encourage licensees to continue with ongoing and planned decommissioning.

After a site has been decommissioned and the license terminated in accordance with the criteria in this proposed rule, the Commission would require additional cleanup only if, based on new information, it determines that residual radioactivity remaining at the site could result in significant public or environmental harm.

The Commission recognizes there may be existing sites containing large quantities of materials contaminated with low level radioactivity where public health and the environment may best be protected by onsite stabilization

and disposal with proper restriction of the site to prevent human disruption of the site and exposure to the radioactive contamination. There are precedents for these cases in the stabilization of uranium mill tailings under the Uranium Mill Tailings Remediation Control Act of 1978 (UMTRCA) and the DOE Formerly Utilized Sites Remedial Action Program (FUSRAP). In these cases, some type of durable institutional control, such as placing the site under the custody of a State or Federal agency, may be necessary to ensure long-term protection of the public and the environment. However, consideration of these actions would require extensive site-specific safety and environmental analyses. In addition, input from affected parties in the vicinity of the site would be desirable to determine whether there are other local impacts that must be considered in determining the best course of action and to ensure the long-term effectiveness of the institutional controls. For these reasons, the Commission has determined that these actions fall outside the scope of this rulemaking in the sense that there may be site-specific determinations using criteria other than those proposed in this rulemaking. If, in the future, general criteria to evaluate these actions can be developed, the Commission will consider additional rulemaking to establish the criteria for general application.

The proposed rule would also require that all new applicants for licenses, other than renewals, describe in the application how facility design and procedures for operation will minimize contamination of the facility and the environment, facilitate eventual decommissioning, and minimize the generation of radioactive waste.

Radiological Criteria

The proposed rule would establish a dose limit for release of a decommissioned site of 15 millirem per year (mrem/y) TEDE for residual radioactivity distinguishable from background. The 15 mrem/y TEDE dose limit was selected to provide both a substantial margin of safety below the NRC's dose limit for members of the public and an appropriate limit for the acceptability of release of a facility which would no longer be subject to regulatory control.

The estimated lifetime risk associated with an annual TEDE of 15 mrem/y is approximately 6E–4. This estimate was arrived at by using a risk coefficient of 4E–4 per rem and assuming an exposure lifetime of 70 years. The 4E–4 risk factor is roughly equivalent to the 3.9ZE–4 risk factor in Table 6.6 of the EPA NESHAPS Background Information Document (EPA89). Use of this value is consistent with the calculational methods of the Environmental Protection Agency which is also promulgating regulations in this area. The 70-year exposure lifetime provides a conservative estimate of lifetime exposure. The Environmental Protection Agency is using a 30-year lifetime exposure in estimating lifetime risk from residual radioactivity at decommissioned sites. This is based on the assumption that it is unlikely that an individual will continue to live or work in the same area for more than 30 years. Using a 30-year exposure lifetime the estimated lifetime risk associated with an annual TEDE of 15 mrem/y would be approximately 2E–4. A more detailed discussion of estimating lifetime risk can be found in appendix B of the GEIS.

In selecting this limit, the NRC staff took into account recommendations of the ICRP and NCRP and those criteria promulgated by EPA and NRC which provide acceptance criteria for areas where unrestricted access in the vicinity of facilities is permitted, such as generally applicable environmental standards established by EPA and the criteria used for remediation of contaminated sites under the Superfund (CERCLA) program. The dose value of 15 mrem/y TEDE is generally consistent with the risks implied by those criteria and with the remediations which have been achieved.

Several commenters have argued that a 15 mrem/y limit for unrestricted release is not consistent with the recommendations of the ICRP and NCRP and that the limit should be raised to as high as 100 mrem/y. The Commission believes that an additional margin of safety below 100 mrem/yr is necessary because the 100 mrem/y limit is intended to apply to doses to the public resulting from *all* radiation sources (NCRP Report No. 116, Section 15; ICRP Publication 60, Section 5.5). Therefore, allocation of the entire 100 mrem/y dose to residual radioactivity from the decommissioning of a single facility would be inappropriate. Using a safety margin to limit the dose from a single source to avoid a summation of exposures approaching the dose limit is consistent with the recommendations of both the ICRP and the NCRP.

In addition, the cost/benefit impact analysis in the GEIS (Chapters 5 and 6 and Figures 7–1 through 7–11) indicate that costs of achieving a 15 mrem/yr limit would not be unduly burdensome on licensees. In those few cases where remediation to achieve 15 mrem/yr may present an unreasonable burden, release of the site with restrictions placed on its use provides an alternative means for achieving this level of protection.

The proposed rule would also require that the licensee reduce any residual radioactivity to as close to indistinguishable from background as reasonably achievable. ALARA considerations are to include all significant risks to humans and the environment resulting from the decommissioning process, and licensees are to demonstrate why further reductions below the limit are not reasonably achievable. Depending on the site-specific ALARA analysis, any dose level less than or equal to 15 mrem/y may be considered ALARA.

However, in many situations, licensees who have little or no site contamination should be able to readily achieve a dose level well below the limit. The NRC will provide guidance as to how such licensees can demonstrate compliance with § 20.1404(a)(ii) without having to perform sophisticated analyses to demonstrate that residual radioactivity levels at their sites are ALARA. This should substantially reduce the administrative burden on licensees who have little or no site contamination (e.g., licensees that use only sealed sources or short lived radioisotopes). There are approximately 17,000 NRC and Agreement State licensees, many of which are small businesses, that are expected to benefit from this guidance without any compromise to public health and safety.

The Commission recognizes that demonstrating that radionuclide levels at a site are indistinguishable from background is a complex task involving sophisticated sampling, measuring, and statistical analysis techniques. The difficulty of the task can vary substantially depending on a number of factors including the radionuclide in question, the background level for that and other radionuclides at the site, and the temporal and spatial variations in background radiation at the site. Therefore, in order to assist the licensee in making these determinations, the Commission will publish specific guidance on acceptable methods which can be used by the licensee to demonstrate that the concentrations of specific isotopes at the site are indistinguishable from background. The Commission will also publish guidance on acceptable methods for estimating annual TEDE to the average member of the Critical Group. This guidance will include a discussion of the type of scenarios and exposure pathways which should be considered, and computer models for estimating the annual TEDE to the average member of the critical group. The computer models will be

screening models that employ generically derived conservative assumptions and factors. However, licensees will be able to substitute assumptions and factors more appropriate to a particular site if they can demonstrate that these factors and assumptions reasonably reflect the existing and projected conditions at the site. Licensees may also use other models or methods for estimating TEDE, provided they can demonstrate to the Commission that these models or methods provide reasonable estimates for the site to be decommissioned. This guidance is described in NUREG–1500 "Working Draft Regulatory Guide on Release Criteria for Decommissioning; Staff Draft for Comment." The Commission requests comment on the appropriateness of the approach and the methodology described in NUREG–1500.

As can be seen from Figures 7–1 through 7–11 of the GEIS, it appears reasonable to expect that a number of licensees will be able to remediate their sites to dose levels below the 15 mrem/yr limit at reasonable cost. However, these same analyses indicate that in most cases there are large incremental costs associated with reductions below 3 mrem/yr, and that the incremental costs are due primarily to the cost of demonstrating compliance rather than the cost of additional remediation. Therefore, when attempting to achieve doses below 3 mrem/y, costs can increase substantially with little or no additional reduction in risk to public health or the environment. Section 7–5 of the GEIS also indicates that levels of residual radioactivity which produces a dose of 3 mrem/yr are generally difficult to distinguish from natural background because they are comparable to local variations in background radiation and substantially smaller than national variations in background radiation. As a result, the staff draft regulatory guide (NUREG–1500) proposes that, in order to minimize the burden of documentation and analysis in such cases, the Commission would consider documentation that the TEDE to the average member of the critical group from all radionuclides distinguishable from background does not exceed 3 mrem/y as sufficient for demonstrating compliance with the ALARA requirement. The Commission invites comment on this provision in the guide.

The proposed rule would broaden the definition of decommissioning to include release for restricted use in addition to release for unrestricted use. The underlying approach for restricted release is that the risk for a member of the public should be limited to acceptable levels, irrespective of whether that individual is exposed during the conduct of some occupation or in residential or recreational activities. Thus, the conditions for restricted release are premised on restricting the use of the site so that average individual doses do not exceed the 15 mrem/yr dose limit. While the circumstances of the exposure (i.e., the duration or pathway) may thus be varied, the underlying risk limit remains respected for any critical group of individuals.

Licensees unable to meet the requirements for unrestricted use would be allowed to request permission to release sites for restricted use with subsequent termination of the license if they can demonstrate that the following conditions have been met:

(1) Further reductions in residual radioactivity are not technically achievable, the cost of achieving further reductions would be prohibitively expensive, or further reductions would directly produce environmental or public harm that is clearly excessive compared to the health or environmental benefits achieved through these reductions now or in the future.

The Commission has proposed this provision as the fundamental basis for determining when a restricted termination of a license will be appropriate. Technical achievability, prohibitive expenses, and excessive environmental or public harm are the three areas in which the Commission believes that alternative considerations should be examined as part of the overall process of determining the most appropriate action for a site. Clearly, if remediation is simply not possible given the technological capabilities in existence at the time of decommissioning, some other types of alternatives must be appropriate.

In terms of excessive costs, the Commission recognizes that there may be situations where removal and disposal of large quantities of material is simply not reasonable from a cost standpoint. An example of this type of situation that has already been addressed is the disposal of mill tailings, where a separate set of standards has been developed, including provisions for institutional control. The third condition, excessive environmental or public harm, has been included in recognition that although remediations may be technically possible and within the overall resources of society, the net damage, through removal and disposal of materials, alteration of ecosystems, or displacement of populations, could be too great to not be undertaken. Considerations of this nature are best determined through public participation, which is provided through provisions for a Site-Specific Advisory Board.

The third condition also provides for the possibility that the net environmental impact of completely remediating a site and then constructing an entirely new site to perform a similar activity may be inappropriate. An example of this could be the continued use of a site for electrical power generation, where a number of existing facilities, such as the turbine and electrical distribution system could be used with a different energy source. This approach would need to be examined on a case-by-case basis, and a determination made regarding the appropriateness of remediating the site for unrestricted use vs some type of restricted use in order to conserve environmental resources.

(2) There are adequate provisions for institutional and/or other passive controls to provide reasonable assurance that the TEDE from residual radioactivity to the average member of the critical group will not exceed 15 mrem (0.15 mSv) per year. Institutional controls would have to be enforceable by a responsible Government entity or in a court of law in response to suits by affected parties.

This provision specifies the fundamental dose limit for considerations of restricted termination. The core requirement is that an individual should not be exposed to a greater level of risk than that established for unrestricted use releases. Thus, the application of restrictions must be able to reduce the average dose to the appropriate critical group to the same 15 mrem/year value used as the limit for unrestricted use. However, in the restricted use situation, the critical group will be different from the critical group that would need to be considered in the unrestricted situation. For example, a restriction might be imposed that would prevent residential applications or agricultural uses of the facility. These restrictions would mean that critical group would have different exposure characteristics (e.g., 8 hours per day while working in a building) and thus, a larger quantity of radioactivity could be allowed to remain onsite for the same dose.

(3) There is sufficient financial assurance to enable an independent third party to assume and carry out responsibilities for any necessary control and maintenance of the site. Acceptable financial assurance mechanisms will include:

(i) Prepayment as described § 30.35(f)(1);

(ii) Surety method, insurance, or other guarantee method as described in § 30.35(f)(2); or

(iii) Statement of intent in the case of Federal, State, or local government licensees, as described in § 30.35(f)(4).

This provision has been included to assure that mechanisms have been established as necessary to ensure the continued effectiveness of the controls that may be used to meet the dose limit. The ongoing effectiveness of the restrictions will not necessarily be the responsibility of the former licensee but could be vested in other organizations, local governments, etc., which would continue cognizance of the action. This responsibility could include periodic monitoring, overviews of site access restrictions, or other activities that might be necessary to support the proposed controls. Under this provision, the amount of financial assurance that would be needed will be determined on a site-specific basis, taking into account the proposed restrictions, and the recommendations of the Site-Specific Advisory Board.

(4) Residual radioactivity at the site has been reduced so that if the site were released for unrestricted use, the TEDE from residual radioactivity to the average member of the critical group is as low as reasonably achievable and would not reasonably be expected to exceed 100 mrem (1 mSv) per year. This limit coincides with the NRC dose limit for public exposure in 10 CFR Part 20.

This final condition is premised on the assumption that circumstances could develop under which the restrictions, such as land use or deed restrictions, might no longer be effective in limiting the exposure scenarios. If, for example, a restriction against residential or agricultural use were no longer effective in preventing those uses of the land, then the assumptions about the exposure of the critical group would no longer be valid. While this is not assumed to occur for planning purposes, the Commission believes it is appropriate to have a "safety net" to prevent exposures in excess of the public dose limits.

The development of this provision also has the effect of requiring that some remediation be conducted at the site, rather than simply allowing a licensee to develop a series of restrictions. The Commission believes it appropriate that basic measures be taken to reduce the risk and dose that could result from a site and that the public dose limits form the minimum acceptable level of protection that should be provided in the unlikely event that restrictions are not effective in reducing the magnitude and scenarios of exposure.

The Commission specifically solicits public comment on the adequacy of the 100 mrem (1 mSv) per year value as the "safety net" to prevent exposures in excess of the public dose limits in the event that all site restrictions fail. The recommendations of the ICRP and NCRP, as well as Draft Federal Guidance being developed by the EPA, suggest constraining the dose to members of the public from any single source to less than 100 mrem/y as a way to ensure that the total public dose from all sources does not exceed 100 mrem/y. The Commission has followed this principle in establishing the dose limit for decommissioning. However, in the case of the "safety net", the Commission does not believe that fractionation would be necessary for the following reasons:

(1) The 100 mrem/y cap, although being equivalent to the dose limit for members of the public, represents a small fraction of the 500 mrem/y dose that the Draft Federal Guidance suggests is acceptable for members of the public in unusual circumstances. The Commission believes that failure of all site restrictions at decommissioned sites is a highly unlikely event.

(2) The 100 mrem/y value applies to the peak dose during the first 1000 years. For most radioisotopes, this peak dose occurs in the first year and diminishes over time due to radioactive decay. This decay provides an additional margin of safety which is equivalent to an *a priori* fractionation of the limit.

(3) The 100 mrem/y value is less than the value selected for controlling intruder scenarios for other types of facilities where some type on institutional control (e.g. government ownership) is contemplated.

However, the Commission is soliciting suggestions for alternatives to the proposed safety net, including the use of some fraction of 100 mrem/y (e.g., 75 mrem/y) as the safety net. The Commission is particularly interested in the relative merits of selecting a fraction of the routine public dose limit in light of the required conservatism in the calculation of the dose, and the rationale for selecting some particular fraction. The Commission is also soliciting comments on the relative benefits and impacts of the Commission's proposed safety net and proposed options, including comments on the number of facilities that could be impacted by selection of alternative values.

The Commission recognizes there may be unusual circumstances in which the licensee may wish to seek an exemption from one or more of the provisions of this subpart. For example, the licensee may feel it is unnecessary to clean up a site to the requirements for unrestricted release because the site is contained within a larger area where use will be restricted for the foreseeable future. The Commission believes these rare circumstances can adequately be handled under existing provisions in § 20.2301 which provides opportunity for the licensee to request an exemption from any of the provisions of 10 CFR Part 20.

The Commission also recognizes there may be special environmental or cultural issues associated with a particular decommissioning action which would require more stringent implementation of the requirements in this subpart. For example, there may be social or cultural issues that have to be considered because the site is on or contiguous to historical sites or Native American lands which contain religious or sacred areas. However, the Commission believes these issues can best be handled on a site-by-site basis as part of the licensing process and, in most cases, would be taken into consideration when establishing ALARA residual radioactivity levels for a site. The Commission does not believe that further reductions in dose would be necessary to meet social or cultural issues if the limit for unrestricted use is achieved and ALARA has been applied. Where necessary, the provisions for public comment and for a Site-Specific Advisory Board will provide a mechanism for local citizens and other affected parties to be directly involved in addressing these issues.

Public Participation in the Decommissioning Process

The Commission believes it is important for the public to not only be fully informed of the decommissioning actions at a particular site but also to be able to effectively participate in site decommissioning decisions. The proposed rule will provide for public participation in the decommissioning process through three mechanisms in addition to the relevant NRC requirements regarding hearing opportunities for a particular site.

Upon the receipt of a decommissioning plan from the licensee, or a proposal by the licensee for restricted release of a site pursuant to § 20.1405, or whenever the Commission deems such notice to be in the public interest, the Commission shall:

(1) Notify and solicit comments from local and State governments in the

vicinity of the site and Indian Nation or other indigenous people that have treaty or statutory rights that could be affected by the decommissioning;

(2) Publish a notice in the **Federal Register** as well as in other media, such as local newspapers, which are readily accessible to individuals in the vicinity of the site; and

(3) Solicit public comment on the proposed decommissioning action.

These provisions are designed to provide affected individuals and organizations with both information about the proposed decommissioning and an opportunity to provide comments on the licensee's proposal. The Commission believes it is particularly important to provide notice in a forum that is accessible to local individuals. This forum may vary from site to site but would usually include providing notice to local media for publication.

For decommissioning where the licensee does not propose to meet the conditions for unrestricted release, the proposed rule would require that the licensee convene a Site-Specific Advisory Board (SSAB) as described in § 20.1407 for the purpose of obtaining advice from affected parties regarding the proposed decommissioning. The purpose of the SSAB would be to provide recommendations to the licensee on:

(1) Whether there are ways to reduce residual radioactivity to a level necessary to comply with the provisions of § 20.1404 which are technically achievable, would not be prohibitively expensive, and would not result in net public or environmental harm;

(2) Whether provisions for institutional controls proposed by the licensee will:

(a) Provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 15 mrem (0.15 mSv) TEDE per year;

(b) Be enforceable; and

(c) Impose undue burdens on the local community or other affected parties.

(3) Whether the licensee has provided sufficient financial assurance to enable an independent third party to assume and carry out responsibilities for any necessary control and maintenance of the site.

The areas in which the SSAB would be expected to provide recommendations parallel the areas that a licensee must address as part of its proposal for a restricted termination of license. The intent of the provision is to provide a mechanism for early public involvement in the development of the decommissioning plan for the site. To the extent that local public involvement may be vital to the successful implementation of land use restrictions, involvement of representatives of local government, affected citizens, Native Americans, and other interested parties in the Site-Specific Advisory Board is important to the long-term effectiveness of the decommissioning action. In order for the participation to be most effective, it should come during the development of the plan, rather than as comment after the licensee has spent significant resources to develop its proposal. Hence, the recommendations of the SSAB are to be included in the decommissioning plan along with the licensee's disposition of those recommendations. It is important to note that the opportunity for comment provisions would still be applicable even when a SSAB had been used in the development of the decommissioning plan.

Site-Specific Advisory Board

The SSAB has been patterned after the recommendations contained in the Interim Report of the Federal Facilities Environmental Restoration Dialog Committee (FFERDC) entitled "Recommendations For Improving the Federal Facilities Environmental Restoration Decision-Making and Priority Setting Processes, February 1993," which is a consensus document developed by over 40 members of a committee chartered by the U. S. Environmental Protection Agency (EPA). The diverse members of the FFERDC represented Federal, Tribal, State, environmental, labor, and citizen interests. It is designed to respond to the desire expressed by many workshop commenters that local affected parties have early and substantive input into the decommissioning process on a site-specific basis. The SSAB would supplement and not supplant existing NRC procedures that provide for public input into the regulatory process. The Commission believes that increasing the opportunity for early public involvement in the decommissioning process is an effective way to provide an information exchange and to ensure credible and defensible licensing decisions, especially when the long-term effectiveness of the land use restrictions may depend on community knowledge and involvement in their development and application. The Commission would emphasize that the operation of the SSAB is not intended to usurp the traditional land use authority of the local or State government. In fact, many of the institutional controls that may be recommended by an SSAB to ensure the restricted use of a site will depend on the exercise of this traditional authority by the local or State government.

Licensee notification to the Commission of intent to decommission in accordance with §§ 30.36(b), 40.42(b), 50.82(a), 70.38(b) or 72.54 would have to specify whether the licensee intends to reduce residual radioactivity at the site to levels which would allow the site to be released for unrestricted use. If not, the licensee would be required to submit a plan for establishing and supporting an SSAB with the notification.

The licensee would be responsible for establishing the SSAB and developing appropriate ground rules and operating procedures for the SSAB with the advice of the SSAB. The SSAB would consist of about 10 members plus an ex officio representative from the Commission. This number of members is expected to allow for adequate representation of affected parties without allowing the group to become so large that it cannot perform its function effectively. The licensee would be required to provide adequate administrative support for SSAB activities and provide the SSAB access to studies and analyses pertinent to the proposed decommissioning.

Membership of the SSAB, to the extent that representatives are willing to participate, would have to:

(1) Reflect the fullest practical range of interests in the affected community and region and be composed primarily of individuals who could be directly affected by residual radioactivity at the decommissioned site, and

(2) Include representatives from the licensee; local and State governments; workers; persons residing in the vicinity of the site; citizen, environmental, environmental justice, and public interest groups; and Indian Nation or other indigenous people that have treaty of statutory rights that could be affected.

Meetings of the SSAB would be open to the public. The licensee would be required to provide adequate public notice of the location, time, date, and agenda for the meetings at least 2 weeks in advance of each meeting. All records generated or reviewed by the SSAB would become part of the decommissioning docket, and would be available for public inspection.

In most cases it is expected that the work of the SSAB would be completed after it had formally submitted its advice to the licensee. However, there may be some cases (e.g., where the licensee's plan is substantially altered following NRC review) in which the SSAB may have a continuing role in

providing advice to the licensee. In any case, it is anticipated that the SSAB would be dissolved after the license has been terminated.

The Commission is seeking comment on whether there are situations where it might be inappropriate or infeasible to establish an SSAB under conditions set forth in § 20.1406(b). For example, are there situations where establishment of an SSAB would be inconsistent with other governmental regulations and statutes, or are there circumstances in which local government officials may not be allowed to participate in privately funded advisory groups. If so, what alternatives would be available to satisfy the objectives of public participation and input? Should criteria be incorporated in the regulation for granting exemptions to the requirements of § 20.1406(b) for good cause. If so, what criteria might be appropriate?

The Commission is also seeking comment on what the content of descriptive information on membership, size, operating procedures, administrative support, and distribution of agendas should include, and whether this information should be included in the rule or in a regulatory guide or other document.

General Provisions

Readily Removable Residual Radioactivity

It is clear that some structures can easily be decontaminated to levels well below those necessary to reduce individual doses from residual radioactivity at a decommissioned site to a few mrem TEDE/y above background. Past decommissioning practice has been based on the premise that "the licensee should make a reasonable effort to eliminate residual radioactivity." See Regulatory Guide 1.86, "Termination of Operating Licenses for Nuclear Reactors," June 1974, pg. 3. Some previously released structures have been decontaminated to levels below those specified in Regulatory Guide 1.86 for some nuclides. Therefore, the Commission proposes to require that all readily removable residual radioactivity be removed from a site before it is decommissioned. This is considered a necessary and reasonable step toward ensuring that doses to the public from residual radioactivity are ALARA. For the purpose of this proposed regulation, the Commission has defined readily removable to mean removable using non-destructive, common, housekeeping techniques (e.g., washing with moderate amounts of detergent and water) that do not generate large volumes of radioactive waste requiring subsequent disposal. This would not include techniques that produce chemical wastes that are expected to adversely affect public health or the environment. It would also not include removal and transport of soil except when small discreet areas of contamination can be removed by digging up a few shovelfuls of soil.

The intent of these proposed provisions is to define the basic types of remediation that should be undertaken as a matter of good practice regardless of whether the site meets the NRC residual radioactivity criteria. However, it is not the Commission's intent to require more substantive remediation without the benefit of careful planning and ALARA considerations. The Commission specifically solicits comments on how to best define the activities that should be included under this provision.

Radioactive Materials Previously Disposed of at the Site

Under NRC regulations, licensees may dispose of radioactive wastes on their own property. Before 1981, NRC regulations (10 CFR 20.304) allowed disposal without prior approval of limited quantities of specified nuclides under prescribed conditions. On July 28, 1981, § 20.304 was revoked because the Commission did not have sufficient assurance that these disposals would be adequately protective. However, onsite disposal can still be undertaken by individual licensees under 10 CFR 20.2002 (previously § 20.302), provided the disposal is specifically approved by the NRC or an Agreement State. If this buried radioactive material is considered to be part of the licensee's total site inventory for decommissioning purposes, some licensees will likely be required to remove all or part of this material before decommissioning the site. This position may be controversial because it can be argued that materials already disposed of in accordance with existing NRC requirements should no longer be considered part of the licensees inventory of radioactive material. Nevertheless, removal of the previous burials may be necessary to achieve the proposed radiological criteria and ensure sufficient protection of the public and environment.

In this proposed rulemaking, the Commission takes the position that public and environmental risk is the overriding factor. Therefore all residual radioactivity at the site, including that previously disposed of in accordance with NRC requirements in §§ 20.304, 20.302, and 20.2002 must be included in determining whether the licensee meets the radiological criteria in the proposed rule. However, the Commission is aware that the balancing of risks, costs, and benefits may be substantially different for exhuming buried material than they would be for decontamination of surface soils and structures. Therefore, it is expected that before any decision is made to exhume radioactive material previously disposed of at a site, the licensee will perform a site-specific analysis of the overall risks, costs, and benefits of this action.

This position is consistent with positions already taken by the NRC on this issue. In the Supplementary Information to the Final Rule "General Requirements for Decommissioning Nuclear Facilities" (published on June 27, 1988, 53 FR 24021), the Commission states it will "take a hard look at the extent to which the site has been used to dispose of low level radioactive wastes by land burial, and will decide what remedial measures including removal of such wastes offsite, are appropriate before the site can be released for unrestricted use." In the Site Decommissioning Management Plan (SDMP) the NRC staff notes that "disposals performed under 10 CFR 20.304 have at several sites required exhumation during the decommissioning and takes the position that acceptability of these burials will be assessed in future decommissioning procedures." See SECY–91–096, Enclosure 1 "Site Decommissioning Management Program, Revision 1 (January 1991)" p. 16. See also, the draft Regulatory Guide on "Standard Format and Content for Decommissioning Plans for Nuclear Reactors," which states that the licensee's plan should indicate the extent of waste burial onsite and the remedial measures appropriate before the site can be released for unrestricted use.

Use of Actual Measurements

Although the Commission recognizes that it will be necessary in many cases for the licensee to use modeling to estimate the TEDE to the average member of the critical group from residual radioactivity at the site, the proposed rule would require that estimates of the site specific source term (i.e., residual radioactivity remaining at the site) be substantiated using actual measurements to the maximum extent practical. The reason for this substantiation of estimates is that using actual measurements reduces the uncertainty associated with the estimates and provides a greater measure of assurance that radiological requirements are being met. It is

expected that substantiation would be carried out in accordance with the survey requirements in 10 CFR 20.1501. Information and guidance related to surveys and use of measurement techniques have been published in draft form for public comment as NUREG/CR-5849. An NRC staff working draft regulatory guide is being published with this proposed rulemaking which specifically addresses these topics. The Commission plans to publish further guidance in draft form before the effective date of the final rule.

Time Frame

There is some difference of opinion on how far into the future calculations should be carried out for the purpose of establishing acceptable residual radioactivity levels for decommissioned sites. Current NRC staff practice is to calculate projected doses out to 1,000 years in the future in evaluating radiological impacts associated with residual radioactivity. This is consistent with current DOE practice. See, Order DOE 5400.5 "Radiation Protection of the Public and Environment." EPA's high level waste regulations require that cumulative releases to the environment be calculated out to 10,000 years. See, 40 CFR part 191 (Note: 40 CFR part 191 was remanded by the U.S. Court of Appeals for the First Circuit in July 1987, and is being reconsidered by EPA.) However, there are some who think such calculations should be carried out to provide estimates of potential contamination of groundwater for tens or even hundreds of thousands of years into the future.

When predicting thousands of years into the future, uncertainties become very large because of major potential changes in the hydrogeologic regime at the site over these long periods of time. When the potential consequences of exposure to the radioactive source are great; e.g., as in the case of a high-level waste repository, distant future calculations may provide some insight concerning the relative magnitude of consequences. However, the consequences of exposure to residual radioactivity at levels near background are small, and considering the large uncertainties, long term modeling of near background doses may be virtually meaningless. In light of this, the Commission does not believe it would serve any useful purpose to attempt to estimate radiation doses from residual radioactivity thousands of years into the future.

Although theoretical maximum doses for a few isotopic decay chains do not occur for hundreds or thousands of years, for most radionuclides of interest in decommissioning the peak dose occurs in less than 1,000 years. Therefore, the Commission proposes to require that TEDE estimates be based on the greatest annual dose expected within the first 1000 years after decommissioning. This annual dose must be interpreted as the TEDE delivered in that year, including the committed dose equivalent from radionuclides taken into the body during that year. The Commission notes that a time frame of 1,000 years is also being considered by the EPA, as indicated in the draft regulatory language, discussed during the NACEPT Meeting in May 1994.

Risk Considerations in ALARA Calculations

A number of commenters at the workshops on decommissioning stated that all risks should be taken into account when setting requirements for decommissioning a site. A principal concern was that the Commission, in an attempt to reduce residual radioactivity levels at a site, would establish cleanup requirements which could result in an overall risk increase, or in risk transference, rather than risk reduction. For example, in an attempt to clean up a site for decommissioning, the licensee may increase risk to persons along transportation routes and at the site where the material is finally disposed by transporting large volumes of debris from the site. In addition, disposal of large quantities of low-level radioactive debris at licensed low-level waste disposal sites could deplete the capacity of existing sites and ultimately result in a proliferation of licensed disposal sites for low-level radioactive waste.

The Commission, recognizing the validity of these concerns, proposes to require that the licensee, when determining ALARA, consider all significant radiation doses and risks resulting from residual radioactivity and the decommissioning process itself, including transportation and disposal of radioactive wastes generated in the process. This analysis would be part of the decommissioning plan and would be available for comment by interested parties under the public participation provisions described earlier in this notice.

In order to ensure compatibility with EPA groundwater standards, the proposed rule requires licensees to remediate their sites so there is a reasonable expectation that residual radioactivity from the site will not cause the level of radioactivity in any groundwater that is a current or potential source of drinking water to exceed the limits specified in 40 CFR Part 141 as they exist on the effective date of this regulation.

Groundwater Protection

Section 20.1404(d) of the proposed rule would require that licensees demonstrate a reasonable expectation that residual radioactivity from a decommissioned site will not cause the level of radioactivity in any groundwater that is a current or potential source of drinking water to exceed the limits specified in 40 CFR Part 141. This provision is in addition to the overall radiological criterion for unrestricted release in 10 CFR 20.1404(a)(i) that the residual radioactivity that is distinguishable from background radiation results in a TEDE to the average member of the critical group that does not exceed 15 mrem (0.15 mSv) per year.

The Commission is soliciting comments on the proposed groundwater protection requirement. In particular, the Commission solicits comments on the following:

1. Is a separate standard needed for groundwater when the overall radiological criterion of 15 mrem applies to all pathways,

2. Given that natural background is included in 40 CFR 141, and given that for pathways of exposure covered by this rule, background is excluded, what alternatives exist for reconciling this difference in approach?

3. Is it appropriate to apply a drinking water standard ("at the tap") to groundwater in all cases.

Minimization of Contamination

Many commenters at the workshops on decommissioning expressed the opinion that the Commission should be placing more emphasis on ensuring that licensed facilities are designed and operated in a way that would minimize the amount of radioactive contamination generated at the site during its operating lifetime. The Commission is sympathetic with this view. Therefore, the Commission proposes to require that applicants for licenses, except for renewals, describe in their applications how facility design and procedures for operation will minimize contamination of the facility and the environment, facilitate eventual decommissioning, and minimize the generation of radioactive waste. This provision is a prospective requirement for new licensees to examine contamination and waste minimization early in the process of facility design and license approval.

The Commission considers that under existing regulations it is reasonable to expect new licensees, other than

renewals, to provide for ease of decommissioning and minimization of waste when designing and operating facilities. However, given past experience, the Commission believes that this new requirement is necessary to focus applicant's attention on the type of facility design and good housekeeping practices needed to minimize the types of problems the Commission has had to face with problem sites like those addressed in the Commission's Site Decommissioning Management Plan (NUREG–1444, October 1993).

Timeliness

The Commission does not want to create a situation where time requirements for completing decommissioning would make it difficult or impossible for licensees to safely and properly remediate large, complex, or otherwise difficult to decommission facilities. Therefore, the Commission is requesting comments on whether the criteria contained in this proposed rule can be met within the time frames that were specified in the final rule on "Timeliness in Decommissioning of Materials Facilities."

In particular, the Commission is soliciting comments on whether licensees that anticipate having to establish an SSAB should be exempted from the generic timeliness requirements. If so, what alternative provisions could be made to assure timely decommissioning of the site? For example, could licensees be required to provide site-specific decommissioning schedules during the earliest stages of decommissioning, or during preparation for decommissioning, e.g., in the decommissioning plan.

Relationship Between the Generic Environmental Impact Statement and Site-Specific Decommissioning Actions

The Generic Environmental Impact Statement prepared by the Commission on this rulemaking evaluates the environmental impacts associated with the remediation of several types of NRC-licensed facilities to residual radioactivity levels ranging from 100 mrem/yr TEDE down to 0 mrem TEDE (background). The Commission believes that the generic analysis will encompass the impacts that will occur in any Commission decision to decommission an individual site. Therefore, the Commission plans to rely on the GEIS to satisfy its obligations under the National Environmental Policy Act in regard to individual decommissioning decisions that meet the 15 mrem/yr criterion for unrestricted use. However, the Commission will still initiate a preliminary environmental review in regard to any particular site to determine if the generic analysis encompasses the range of environmental impacts at that particular site.

The proposed rule would also provide for the termination of the license and the release of a site under restricted conditions if the licensee can demonstrate that the use of land use restrictions or other types of institutional controls will provide reasonable assurance that the 15 mrem/yr limit can be met. The types of controls and their contribution to providing reasonable assurance that the 15 mrem/yr limit can be met for a particular site will differ for each site in this category. Therefore, the environmental impacts cannot be analyzed on a generic basis and the Commission will conduct an independent environmental review for each site-specific decommissioning decision where land use restrictions or institutional controls are relied on by the licensee.

The GEIS indicates that the decommissioning of certain classes of licensees (e.g., licensees using only sealed sources) will not individually or cumulatively have a significant effect on the human environment. Therefore, for these categories of licensees, the Commission is proposing to amend 10 CFR Part 51.22 of the Commission's regulations to specify that the decommissioning of these types of licenses are actions eligible for categorical exclusion from the Commission's environmental review process.

Use of Land Use Restrictions or Other Types of Institutional Controls To Allow Termination of the License and Release of the Site Under Restricted Conditions

Although the Commission anticipates that most licenses can be terminated for unrestricted use, the Commission also anticipates that there may be situations where the site radiological criteria can only be met through the use of land use or other types of institutional controls which will restrict the site to specific uses. For example, there may be some sites where unrestricted use for agricultural purposes or residential uses would cause the proposed criteria to be exceeded. However, restricting the same site to industrial or commercial uses would enable the site to meet the 15 mrem/y TEDE dose limit because the exposure pathways would be limited. The licensee, with the advice of the Site Specific Advisory Board, would propose certain types of land use or institutional controls in the decommissioning plan submitted for Commission approval, to provide reasonable assurance that the site would be limited to the types of uses that would enable the proposed criteria to be met.

Examples of these controls include traditional zoning controls to restrict the use of the site to specific uses, the imposition of deed restrictions such as restrictive covenants or equitable servitudes to restrict the land to certain uses, negative easements where the licensee-landowner agrees to restrict the use of the land to specified uses, licensee agreements to restrict the use of certain portions of the land (for example, restricting access to a particular building), or even some type of government ownership of the property. Whatever type of controls are proposed by the licensee, the licensee must demonstrate that the controls proposed have a reasonable expectation of enforcement. A decommissioning plan that is dependent on land use or institutional controls whose enforcement are speculative would not be approved.

Implementation

The Commission recognizes that demonstrating that radioisotope levels at a site are indistinguishable from background may be a complex task involving sophisticated sampling, measuring, and statistical analysis techniques. The difficulty of the task can vary substantially depending on a number of factors that include the radionuclide in question, the background level for that and other radionuclides at the site, and the temporal and spatial variations in background radiation at the site. Therefore, in order to assist the licensee in making these determinations, the Commission will publish specific guidance on acceptable methods which can be used by the licensee to demonstrate that the concentrations of specific radionuclides at the site are indistinguishable from background. The Commission will also publish specific guidance on acceptable methods for estimating annual TEDE to the average member of the Critical Group. This guidance will include a discussion of the type of scenarios and exposure pathways which should be considered, and computer models for estimating the annual TEDE to the average member of the critical group. The computer models will include screening models which employ generically derived conservative assumptions and factors.

However, licensees will be able to substitute assumptions and factors more appropriate to a particular site if they

can demonstrate that these factors and assumptions reasonably reflect the conditions at the site. Licensees may also use other models or methods for estimating TEDE provided they can demonstrate to the Commission that these models or methods provide reasonable estimates for the site to be decommissioned. When using modeling to estimate doses from radioactivity remaining at the site, the licensee will be able to use site specific parameters wherever practical. In the absence of site-specific information, the licensee must use parameters which provide a sufficient margin of safety that the Commission can make a finding that there is reasonable assurance the TEDE criteria in this part will be met.

An NRC staff working draft regulatory guide will be published simultaneously with the proposed rule as NUREG–1500, "Working Draft Regulatory Guide on Release Criteria for Decommissioning: NRC Staff's Draft for Comment." This publication allows licensees and interested members of the public to provide early comment during the developmental process. The draft regulatory guide has no official regulatory standing. The NRC staff anticipates that the draft regulatory guide will be published with the final rule and will incorporate public comments and the results of continued technical development activities. The draft regulatory guide published with the final rule will be for interim use and comment to fulfill the rule requirements and test implementation options. The final regulatory guide will be published approximately 1 to 2 years after publication of the final rule and would take into consideration comments on the draft guide as well as information regarding experience in implementing the draft guidance.

The draft regulatory guide provides guidance on methods that are acceptable to the NRC staff for determining the predicted dose level (PDL) from any residual contamination remaining at a facility, that should be compared to the numerical dose criteria specified in the regulation. It describes the basic features of the calculational models and the associated default assumptions and parameter values that the NRC staff would find acceptable in calculating PDLs. Appendices to the guide provide numerical values that are used to estimate the dose from various residual radioactivity levels remaining at a facility. Also included are the considerations inherent in the ALARA process for decommissioning. Because the proposed 10 CFR Part 20, Subpart E introduces several new concepts, a regulatory position concepts section containing definitions and discussions is included to assist licensees in understanding some of the philosophy underlying the rule. The regulatory position concepts section is followed by the regulatory position procedures section that describes actions the licensee can take to implement the requirements of the decommissioning rule.

The Commission has also issued the following supporting documents to provide guidance on implementation of the residual contamination criteria in the proposed rule:

(1) "Guidance Manual for Conducting Radiological Surveys in Support of License Termination" (NUREG/CR–5849), and

(2) Technical Basis Document, "Residual Radioactive Contamination from Decommissioning: Technical Basis for Translating Contamination Levels to Annual TEDE" (NUREG/CR–5512).

The Guidance Manual for Conducting Radiological Surveys is intended to provide licensees with specific guidance on planning, conducting, and documenting site surveys which could be used to demonstrate that the site has been decontaminated to a level consistent with the Commission's criteria. The Technical Basis Document would provide an acceptable method for translating residual radioactivity levels (measurable quantities) to doses to individuals. Generic dose rate conversion factors are being developed for screening. In addition, the technical basis is expected to include a computer model which can be used for conducting a screening scenario/pathway analyses with site-specific parameters so that site-specific dose rate conversion factors can be calculated. The NRC anticipates that in most cases these dose rate conversion factors could be used to determine compliance with criteria resulting from the rulemaking action.

The NRC staff is continuing to work with the EPA and the DOE in the development of coordinated Federal Agency guidance on site surveys. The Commission anticipates endorsing such guidance for use in demonstrating compliance with the requirements of this rulemaking when it becomes available.

Agreement State Compatibility

The Commission currently is developing a new policy on Agreement State compatibility which will be issued for public comment in the near future. The compatibility determination for the radiological criteria for decommissioning will be considered in regard to the implementation of the new compatibility policy. Therefore, the Commission believes that it would be premature to make a proposed compatibility determination on the radiological criteria for decommissioning at this time. However, for the purpose of facilitating the ultimate resolution of the compatibility determination for the radiological criteria for decommissioning, the Commission welcomes any comments on this issue. In particular, the Commission invites comments on to what extent and under what circumstances should an Agreement State be authorized to establish more stringent requirements than those set forth in NRC radiological criteria for decommissioning.

Draft Generic Environmental Impact Statement: Availability

As required by the National Environmental Policy Act of 1969, as amended, and the Commission's regulations in Subpart A of 10 CFR Part 51, the NRC has prepared a draft generic environmental impact statement (NUREG–1496) on this proposed rule. For informational purposes and ease of distribution, Appendix A of the draft generic environmental impact statement has been published as a separate report, "Background as a Residual Radioactivity Criterion for Decommissioning: Appendix A of the Draft Environmental Impact Statement in Support of Radiological Criteria for Rulemaking on Decommissioning" NUREG–1501.

The draft generic environmental impact statement is available for inspection in the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Single copies of the draft generic environmental impact statement (NUREG–1496) or Appendix A of the draft generic environmental impact statement (NUREG–1501) may be obtained by written request or telefax (301–504–2260) from: Distribution Services, Printing and Mail Services Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Background documents on the rulemaking, including the text of the proposed rule, the Draft GEIS, Appendix A of the Draft GEIS, the Regulatory Analysis, and the staff's working draft Regulatory Guide are also available for downloading and viewing on the NRC Enhanced Participatory Rulemaking on Radiological Criteria for Decommissioning Electronic Bulletin Board, 1–800–880–6091. (See 58 FR 37780 (July 13, 1993)). The bulletin board may be accessed using a personal computer, a modem, and most

commonly available communications software packages. The communications software should have parity set to none, data bits to 8, and stop bits to 1 (N,8,1) and use ANSI or VT–100 terminal emulation. For more information call Ms. Christine Daily, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Phone (301) 415–6026; FAX (301) 415–5385.

The NRC requests public comment on the draft generic environmental impact statement. Comments on the draft statement may be submitted to the NRC as indicated under the **ADDRESSES** heading.

Paperwork Reduction Act Statement

This proposed rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq). This rule has been submitted to the Office of Management and Budget for review and approval of the information collection requirements.

The public reporting burden for this collection of information is estimated to average 31.6 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Information and Records Management Branch (T–6F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB–10202, (3150–0014), Office of Management and Budget, Washington, DC 20503.

Regulatory Analysis

The Commission has prepared a draft regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The draft analysis is available for inspection in the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Single copies of the analysis may be obtained by written request from RPHEB Secretary, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

Background documents on the rulemaking, including the text of the proposed rule, the Draft GEIS, Appendix A of the Draft GEIS, the Regulatory Analysis, and the NRC staff working draft Regulatory Guide are also available for downloading and viewing on the NRC Enhanced Participatory Rulemaking on Radiological Criteria for Decommissioning Electronic Bulletin Board, 1–800–880–6091. (See 58 FR 37760 (July 13, 1993)). The bulletin board may be accessed using a personal computer, a modem, and most commonly available communications software packages. The communications software should have parity set to none, data bits to 8, and stop bits to 1 (N,8,1) and use ANSI or VT–100 terminal emulation. For more information call Ms. Christine Daily, U.S. Nuclear Regulatory Commission, Washington, DC 20555. Phone (301) 415–6026; FAX (301) 415–5385.

The Commission requests public comment on the draft analysis. Comments on the draft analysis may be submitted to the NRC as indicated under the **ADDRESSES** heading.

Regulatory Flexibility Certification

As required by the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission certifies that this rule, if adopted, will not have a significant economic impact upon a substantial number of small entities. Although the proposed rule would cover all 22,000 licensees regulated by the NRC and Agreement States, small entities covered by this rule are primarily licensees that possess and use only materials with short half-lives or materials only in sealed sources. Decommissioning efforts for these licensees are simple and require only that sealed sources are properly disposed of or that short-lived materials are allowed to decay. Complete details of the cost analysis are contained in Section 4.5 of the Regulatory Analysis.

Although there is no indication that this proposed rule would significantly impact a substantial number of small entities, the NRC is seeking comments from small entities that may be impacted by the rule. Any small entity subject to this regulation which determines that, because of its size, it is likely to bear a disproportionate adverse economic impact should notify the Commission of this in a comment that indicates the following:

(a) The licensee's size and how the proposed regulation would result in a significant economic burden upon the licensee as compared to the economic burden on a larger licensee;

(b) How the proposed regulations could be modified to take into account the licensee's differing needs or capabilities;

(c) The benefits that would accrue, or the detriments that would be avoided, if the proposed regulations were modified as suggested by the licensee;

(d) How the proposed regulation, as modified, would more closely equalize the impact of NRC regulations or create more equal access to the benefits of Federal programs as opposed to providing special advantages to any individual or group; and

(e) How the proposed regulation, as modified, would still adequately protect public health and safety.

Backfit Analysis

The NRC has determined that the backfit rule, 10 CFR 50.109, does not apply to this proposed rule and therefore, that a backfit analysis is not required for this proposed rule because these amendments do not involve any provisions which would impose backfits as defined in 10 CFR 50.109(a)(1).

List of Subjects

10 CFR Part 20

Byproduct material, Criminal penalties, Licensed material, Nuclear materials, Nuclear power plants and reactors, Occupational and public dose limits, Occupational safety and health, Packaging and containers, Permissible doses, Radiation protection, Reporting and recordkeeping requirements, Respiratory protection, Special nuclear material, Source material, Surveys and monitoring, Waste treatment and disposal.

10 CFR Part 30

Byproduct material, Criminal penalties, Government contracts, Intergovernmental relations, Isotopes, Nuclear materials, Radiation protection, Reporting and recordkeeping requirements.

10 CFR Part 40

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

10 CFR Part 50

Antitrust, Classified information, Criminal penalties, Fire protection, Incorporation by reference, Intergovernmental relations, Nuclear power plants and reactors, Radiation protection, Reactor siting criteria, Reporting and recordkeeping requirements.

10 CFR Part 51

Administrative practice and procedure, Environmental impact statements, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements.

10 CFR Part 70

Criminal penalties, Hazardous materials transportation, Material control and accounting, Nuclear materials, Packaging and containers, Radiation protection, Reporting and recordkeeping requirements, Scientific equipment, Security measures, Special nuclear material.

10 CFR Part 72

Manpower training programs, Nuclear materials, Occupational safety and health, Reporting and recordkeeping requirements, Security measures, Spent fuel.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 553; the NRC is proposing to adopt the following amendments to 10 CFR Parts 20, 30, 40, 50, 51, 70 and 72.

PART 20—STANDARDS FOR PROTECTION AGAINST RADIATION

1. The authority citation for Part 20 continues to read as follows:

Authority: Secs. 53, 63, 65, 81, 103, 104, 161, 182, 186, 68 stat. 930, 933, 935, 936, 937, 948, 953, 955, as amended (2 U.S.C. 2073, 2093, 2095, 2111, 2133, 2134, 2201, 2232, 2236), secs. 201, as amended, 202, 206, 88 stat. 1242, as amended, 1244, 1246, (42 U.S.C. 5841, 5842, 5846).

2. In 10 CFR 20.1003, "Definitions," the definition of background radiation is revised and new definitions *Critical Group, Decommissioning, Indistinguishable from background, Readily removable, Residual Radioactivity,* and *Site-Specific Advisory Board* are added in alphabetical order to read as follows:

§ 20.1003 Definitions.

* * * * *

Background radiation means radiation from cosmic sources; naturally occurring radioactive material, including radon (except as a decay product of source or special nuclear material); and global fallout as it exists in the environment from the testing of nuclear explosive devices or from past nuclear accidents like Chernobyl which contribute to background radiation and are not under the control of the licensee. "Background radiation" does not include radiation from source, byproduct, or special nuclear materials regulated by the Commission.

* * * * *

Critical Group means the group of individuals reasonably expected to receive the greatest exposure to residual radioactivity for any applicable set of circumstances.

* * * * *

Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license, or (2) release of the property under restricted conditions and termination of the license.

* * * * *

Indistinguishable from background means that the detectable concentration of a radionuclide is not statistically different from the background concentration of that radionuclide in the vicinity of the site or, in the case of structures, in similar materials using adequate measurement technology, survey, and statistical techniques.

* * * * *

Readily removable means removable using non-destructive, common, housekeeping techniques (e.g., washing with moderate amounts of detergent and water) that do not generate large volumes of radioactive waste requiring subsequent disposal or produce chemical wastes that are expected to adversely affect public health or the environment.

* * * * *

Residual radioactivity means radioactivity in structures, materials, soils, groundwater, and other media at a site resulting from activities under the licensee's control. This includes radioactivity from all licensed and unlicensed sources used by the licensee, but excludes background radiation. It also includes radioactive materials remaining at the site as a result of routine or accidental releases of radioactive material at the site and previous burials at the site, even if those burials were made in accordance with the provisions of 10 CFR Part 20.

* * * * *

Site-Specific Advisory Board (SSAB) means a committee constituted by the licensee to provide advice to the licensee on decommissioning.

* * * * *

3. In § 20.1009, paragraph (b) is revised to read as follows:

§ 20.1009 Information collection requirements: OMB approval.

* * * * * *

(b) The approved information collection requirements contained in this part appear in §§ 20.1101, 20.1202, 20.1204, 20.1206, 20.1301, 20.1302, 20.1403, 20.1405, 20.1407, 20.1408, 20.1501, 20.1601, 20.1703, 20.1901, 20.1902, 20.1904, 20.1905, 20.1906, 20.2002, 20.2004, 20.2006, 20.2102, 20.2103, 20.2104, 20.2105, 20.2106, 20.2107, 20.2108, 20.2110, 20.2201, 20.2202, 20.2203, 20.2204, 20.2206, and Appendix F.

4. A new Subpart E entitled "Radiological Criteria for Decommissioning," is added to 10 CFR Part 20 to read as follows:

Subpart E—Radiological Criteria for Decommissioning

Sec.

§ 20.1401 Scope.

(a) The criteria in this subpart apply to the decommissioning of facilities licensed under Parts 30, 40, 50, 60, 61, 70, and 72 of this chapter, as well as other facilities subject to the Commission's jurisdiction under the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended. For high-level and low-level waste disposal facilities (10 CFR Parts 60 and 61), the criteria apply only to ancillary surface facilities that support radioactive waste disposal activities. For uranium mills, the criteria apply to decommissioning of the facility but not to the disposal of uranium mill tailings or to soil cleanup. (See Appendix A of 10 CFR Part 40).

(b) The criteria in this subpart do not apply to sites already covered by a decommissioning plan approved by the Commission before [insert effective date of rule] and in accordance with the criteria identified in the Site Decommissioning Management Plan Action Plan of April 16, 1992 (57 FR 13389).

(c) After a site has been decommissioned and the license terminated in accordance with the criteria in this proposed rule, the Commission will require additional cleanup only if, based on new information, it determined that residual radioactivity remaining at the site could result in significant public risk.

(d) This subpart also requires that, after the effective date of rule, applicants for licenses, other than renewals, describe in the application how facility design and procedures for operation will minimize contamination of the facility and the environment, facilitate eventual decommissioning,

and minimize the generation of radioactive waste.

§ 20.1402 Concepts.

(a) The objective of decommissioning is to reduce the residual radioactivity in structures, materials, soils, groundwater, and other media at the site so that the concentration of each radionuclide that could contribute to residual radioactivity is indistinguishable from the background radiation concentration for that radionuclide. The Commission realizes that, as a practical matter, it would be extremely difficult to demonstrate that such an objective has been met. Therefore, the Commission has established a site release limit and is requiring that licensees demonstrate that the residual radioactivity at a site is as far below this limit as reasonably achievable.

(b) The limit for release of a site is 15 mrem/y (0.15 mSv/y) Total Effective Dose Equivalent (TEDE) to an average member of the Critical Group for residual radioactivity distinguishable from background. If doses from residual radioactivity are less than 15 mrem/y TEDE, the Commission will terminate the license and authorize release of the site for unrestricted use following the licensee's demonstration that the residual radioactivity at the site has been reduced to As Low As Reasonably Achievable (ALARA).

(c) ALARA considerations must include all significant risks to humans and the environment resulting from the decommissioning process. Licensees shall demonstrate why further reductions below the limit are not reasonably achievable. Depending on the site-specific ALARA analysis, any dose level less than or equal to 15 mrem/y may be considered ALARA. However, in many situations, licensees may have little or no site contamination and should be able to readily achieve the overall objective for decommissioning (e.g., licensees that use only sealed sources or short-lived radioisotopes).

(d) The Commission expects the licensee to make every reasonable effort to reduce residual radioactivity to levels that will allow unrestricted release of the site. However, the Commission will consider terminating a license in cases where restrictions must be imposed on the use of the site to ensure that public doses are maintained below the 15 mrem/y (0.15 mSv/y) TEDE limit, provided the licensee:

(1) Can demonstrate by analysis of the benefits and risks of further reduction that residual radioactivity at the site is ALARA and that further reductions in residual radioactivity necessary to comply with the 15 mrem/y TEDE limit for unrestricted use are not technically achievable, would be prohibitively expensive, or would result in net public or environmental harm;

(2) Has made adequate provisions for institutional controls to reduce annual TEDE from residual radioactivity distinguishable from background to the average member of the appropriate critical group to 15 mrem (0.15 mSv) TEDE;

(3) Has provided sufficient financial assurance to enable an independent third party to assume and carry out responsibilities for any necessary control and maintenance of the site; and

(4) Has reduced the residual radioactivity at the site so that the TEDE from residual radioactivity would not exceed 100 mrem (1 mSv) per year even if the restrictions applied in the termination were no longer effective in limiting the possible scenarios or pathways of exposure.

§ 20.1403 General provisions.

(a) When calculating TEDE, the licensee shall base estimates on the greatest annual TEDE dose expected within the first 1000 years after decommissioning. Estimates must be substantiated using actual measurements to the maximum extent practical.

(b) When determining ALARA, the licensee shall consider all significant risks to humans and the environment resulting from the decommissioning process (including transportation and disposal of radioactive wastes generated in the process) and from residual radioactivity remaining at the site following termination of the license.

(c) During decommissioning, the licensee shall take reasonable steps to remove all readily removable residual radioactivity from the site.

(d) The licensee shall demonstrate a reasonable expectation that residual radioactivity from the site will not cause the level of radioactivity in any groundwater that is a current or potential source of drinking water to exceed the limits specified in 40 CFR Part 141 as they exist on [insert effective date of this regulation].

(e) Licensee notification to the Commission of intent to decommission in accordance with §§ 30.36(b), 40.42(b), 50.82(a), 70.38(b) or 72.54 of this chapter shall specify whether the licensee intends to decommission in accordance with § 20.1405. Licensees proposing to decommission in accordance with § 20.1405 shall submit a plan for establishing and supporting a Site Specific Advisory Board (SSAB).

(f) Licensees proposing to decommission in accordance with § 20.1405, shall submit a decommissioning plan to the Commission. This plan shall include the recommendations of the SSAB and the licensee's proposed analysis and disposition of this advice.

§ 20.1404 Radiological criteria for unrestricted release.

A site will be considered acceptable for unrestricted use if:

(a) The residual radioactivity that is distinguishable from background radiation results in a TEDE to the average member of the critical group that does not exceed 15 mrem (0.15 mSv) per year; and

(b) The residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA).

§ 20.1405 Criteria for license termination under restricted conditions.

A site will be considered acceptable for license termination under restricted conditions if:

(a) The licensee can demonstrate that further reductions in residual radioactivity necessary to comply with the provisions of § 20.1404 are not technically achievable, would be prohibitively expensive, or would result in net public or environmental harm; and

(b) The licensee has made provisions for institutional controls that provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 15 mrem (0.15 mSv) TEDE per year. Institutional controls must be enforceable by a responsible government entity or in a court of law in response to suits by affected parties; and

(c) The licensee has provided sufficient financial assurance to enable an independent third party to assume and carry out responsibilities for any necessary control and maintenance of the site. Acceptable financial assurance mechanisms are:

(1) Funds placed into an account segregated from the licensee's assets and outside the licensee's administrative control as described in § 30.35(f)(1) of this chapter;

(2) Surety method, insurance, or other guarantee method as described in § 30.35(f)(2) of this chapter; or

(3) A statement of intent in the case of Federal, State, or local government licensees, as described in § 30.35(f)(4) of this chapter.

(d) Residual radioactivity at the site has been reduced so that if the

institutional controls were no longer in effect, there is reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group would not exceed 100 mrem (1 mSv) per year, and is as low as reasonably achievable. Calculations used to show compliance with this provision may not assume any benefits from earthen cover or other earthen barriers unless specifically authorized by the Commission.

§ 20.1406 Public notification and public participation.

(a) Upon the receipt of a decommissioning plan from the licensee, or a proposal by the licensee for restricted release of a site pursuant to § 20.1405, or whenever the Commission deems such notice to be in the public interest, the Commission shall:

(1) Notify and solicit comments from local and State governments in the vicinity of the site and any Indian Nation or other indigenous people that have treaty or statutory rights that could be affected by the decommissioning; and

(2) Publish a notice in the **Federal Register** and in a forum, such as local newspapers, which is readily accessible to individuals in the vicinity of the site and solicit comments from affected parties.

(b) For decommissioning where the licensee does not propose to meet the conditions for unrestricted release pursuant to § 20.1404 of this part, the licensee shall convene a Site Specific Advisory Board (SSAB) as described in § 20.1407 for the purpose of obtaining advice from affected parties regarding the proposed decommissioning.

§ 20.1407 Site Specific Advisory Board.

(a) The SSAB should provide advice to the licensee, as appropriate, on:

(1) Whether there are ways to reduce residual radioactivity to a level necessary to comply with the provisions of § 20.1404 which are technically achievable, would not be prohibitively expensive and would not result in net public or environmental harm;

(2) Whether provisions for institutional controls proposed by the licensee:

(i) Will provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 15 mrem (0.15 mSv) TEDE per year;

(ii) Will be enforceable; and

(iii) Will impose undue burdens on the local community or other affected parties.

(3) Whether the licensee has provided sufficient financial assurance to enable an independent third party to assume and carry out responsibilities for any necessary control and maintenance of the site.

(b) Membership of the SSAB shall to the extent that representatives are willing to participate:

(1) Reflect the full range of interests in the affected community and region, and be composed of individuals who could be directly affected by residual radioactivity at the decommissioned site;

(2) Be selected from individuals nominated by organizations which represent these interests; and

(3) Include representatives from the licensee; local and state governments; persons residing in the vicinity of the site; citizen, environmental, environmental justice, and other public interest groups; and Indian Nation or other indigenous people that have treaty or statutory rights that could be affected.

(c) The SSAB shall consist of approximately 10 members plus an *ex officio* representative selected by the Commission.

(d) The licensee shall be responsible for establishing the SSAB and the developing of appropriate SSAB operating procedures with the advice of the SSAB.

(e) The licensee shall provide adequate administrative support for SSAB activities and shall provide the SSAB access to studies and analyses that are readily available to the licensee and are pertinent to the proposed decommissioning.

(f) Meetings of the SSAB are open to the public. The licensee shall provide adequate public notice of the location, time, date, and agenda for the meetings at least 2 weeks in advance of each meeting. All records generated or reviewed by the SSAB become part of the docket, must be retained by the licensee until the license is terminated, and must be available for public inspection.

§ 20.1408 Minimization of contamination.

Applicants for licenses, other than renewals, after [insert effective date of rule], shall describe in the application how facility design and procedures for operation will minimize, to the extent practicable, contamination of the facility and the environment, facilitate eventual decommissioning, and minimize, to the extent practicable, the generation of radioactive waste.

PART 30—RULES OF GENERAL APPLICABILITY TO DOMESTIC LICENSING OF BYPRODUCT MATERIAL

5. The authority citation for Part 30 continues to read as follows:

Authority: Secs. 81, 82, 161, 182, 183, 186, 68 Stat. 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat 444, as amended (42 U.S.C. 2111, 2112, 2201, 2232, 2233, 2236, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246, (42 U.S.C. 5841, 5842, 5846).

Section 30.7 also issued under Pub. L. 95–601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102–486, sec. 2902, 106 Stat 3123, (42 U.S.C. 5851). Section 30.34(b) also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 30.61 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

6. In § 30.4, "Definitions," the definition of *decommission* is revised to read as follows:

§ 30.4 Definitions.

* * * * *

Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license, or (2) release of the property under restricted conditions and termination of the license.

* * * * *

7. In § 30.35, paragraph (g)(3)(iv) is revised to read as follows:

§ 30.35 Financial assurance and record keeping for decommissioning.

* * * * *

(g) * * *

(3) * * *

(iv) All areas outside of restricted areas that contain material such that, if the license expired, the licensee would be required to either decontaminate the area to meet the criteria for decommissioning in 10 CFR 20, subpart E, or apply for approval for disposal under 10 CFR 20.2002.

* * * * *

8. In § 30.36, paragraphs (c)(1)(v),(d), and (f)(3) are revised to read as follows:

§ 30.36 Expiration and termination of licenses.

* * * * *

(c)(1) * * *

(v) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey, unless the licensee demonstrates that the premises are suitable for release in accordance with NRC requirements in some other manner.

* * * * *

(d) If the information submitted under paragraphs (c)(1)(v) or (c)(3) of this section does not adequately demonstrate that the premises are suitable for release in accordance with NRC requirements, the Commission will inform the licensee of the appropriate further actions required for termination of license.

* * * * *

(f) * * *

(3) (i) A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with NRC requirements; or

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with NRC requirements.

PART 40—DOMESTIC LICENSING OF SOURCE MATERIAL

9. The authority citation for Part 40 continues to read as follows:

Authority: Secs. 62, 63, 64, 65, 81, 161, 182, 183, 186, 68 Stat. 932, 933, 935, 948, 953, 954, 955, as amended, secs. 11e(2), 83, 84, Pub. L. 95–604, 92 Stat. 3033, as amended, 3039, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2014(e)(2), 2092, 2093, 2094, 2095, 2111, 2113, 2114, 2201, 2232, 2233, 2236, 2282); sec. 274, Pub. L. 86–373, 73 Stat. 688 (42 U.S.C. 2021); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); sec. 275, 92 Stat. 3021, as amended by Pub. L. 97–415, 96 Stat. 2067 (42 U.S.C. 2022).

Section 40.7 also issued under Pub. L. 95–601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102–486, sec. 2902, 106 Stat. 3123, (42 U.S.C. 5851). Section 40.31(g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 40.46 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 40.71 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

10. In § 40.4, "Definitions," the definition of *decommission* is revised to read:

§ 40.4 Definitions.

* * * * *

Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license, or (2) release of the property under restricted conditions and termination of the license.

* * * * *

11. In § 40.36, paragraph (f)(3)(iv) is revised to read as follows:

§ 40.36 Financial assurance and record keeping for decommissioning.

* * * * *

(f) * * *

(3) * * *

(iv) All areas outside of restricted areas that contain material such that, if the license expired, the licensee would be required to either decontaminate the area to meet the criteria for decommissioning in 10 CFR 20, subpart E, or apply for approval for disposal under 10 CFR 20.2002.

* * * * *

12. In § 40.42, paragraphs (c)(1)(v),(d), and (f)(3) are revised to read as follows:

§ 40.42 Expiration and termination of licenses.

* * * * *

(c)(1) * * *

(v) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey, unless the licensee demonstrates that the premises are suitable for release in accordance with NRC requirements in some other manner. The licensee shall, as appropriate—

* * * * *

(d) If the information submitted under paragraphs (c)(1)(v) or (c)(3) of this section does not adequately demonstrate that the premises are suitable for release in accordance with NRC requirements, the Commission will inform the licensee of the appropriate further actions required for termination of license.

* * * * *

(f) * * *

(3) (i) A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with NRC requirements; or

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with NRC requirements.

PART 50—DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

13. The authority citation for Part 50 continues to read as follows:

Authority: Secs. 102, 103, 104, 105, 161, 182, 183, 186, 189, 68 Stat. 936, 937, 938, 946, 953, 954, 955, 956, as amended, sec. 234, 83 Stat. 1244, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2201, 2232, 2233, 2236, 2239, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 50.7 is also issued under Pub. L. 95–601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102–486, sec. 2902, 106 Stat. 3123, (42 U.S.C. 5851). Section 50.10 also issued under secs. 101, 185, 68 Stat. 936, 955, as amended (42 U.S.C. 2131, 2235); sec. 102, Pub. L. 91–190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.54(dd), and 50.103 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a and Appendix Q also issued under sec. 102, Pub. L. 91–190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under sec. 204, 88 Stat. 1245 (42 U.S.C. 5844). Sections 50.58, 50.91, and 50.92 also issued under Pub. L. 97–415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80–50–81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Appendix F also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

14. In § 50.2, "Definitions," the definition of *decommission* is revised to read:

§ 50.2 Definitions.

* * * * *

Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license, or (2) release of the property under restricted conditions and termination of the license.

* * * * *

15. In § 50.82, paragraph (f)(2)is revised to read as follows:

§ 50.82 Application for termination of license.

* * * * *

(f) * * *

(2) The terminal radiation survey and associated documentation demonstrates that the facility and site are suitable for release in accordance with NRC requirements.

PART 51—ENVIRONMENTAL PROTECTION REGULATIONS FOR DOMESTIC LICENSING AND RELATED REGULATORY FUNCTIONS

16. The authority citation for Part 51 continues to read as follows:

Authority: Sec. 161, 68 Stat. 948, as amended (42 U.S.C. 2201); secs. 201, as amended, 202, 88 Stat. 1242, as amended, 1244 (42 U.S.C. 5841, 5842).

Subpart A also issued under National Environmental Policy Act of 1969, secs. 102, 104, 105, 83 Stat. 853–854, as amended (42 U.S.C. 4332, 4334, 4335); and Pub. L. 95–604, Title II, 92 Stat. 3033–3041; and sec. 193, Pub. L. 101–575, 104 Stat. 2835 (42 U.S.C. 2243). Sections 51.20, 51.30, 51.60, 51.61, 51.80, and 51.97 also issued under secs. 135, 141, Pub. L. 97–425, 96 Stat. 2232, 2241, and sec. 148, Pub. L. 100–203, 101 Stat. 1330–223 (42 U.S.C. 10155, 10161).

10168). Section 51.22 also issued under sec. 274, 73 Stat. 688, as amended by 92 Stat. 3036–3038 (42 U.S.C. 2021) and under Nuclear Waste Policy Act of 1982, sec. 121, 96 Stat. 2228 (42 U.S.C. 10141). Sections 51.43, 51.67, and 51.109 also issued under Nuclear Waste Policy Act of 1982, sec. 114(f), 96 Stat. 2216, as amended (42 U.S.C. 10134(f)).

17. In § 51.22, paragraph (c)(19) is added to read as follows:

§ 51.22 Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review.

* * * * *

(c) * * *

(19) Decommissioning of sites where licensed operations have been limited to the use of:

(i) Small quantities of short-lived radioactive materials, or

(ii) Radioactive materials in sealed sources, provided there is no evidence of leakage of radioactive material from these sealed sources.

* * * * *

PART 70—DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL

18. The authority citation for Part 70 continues to read as follows:

Authority: Secs. 51, 53, 161, 182, 183, 68 Stat. 929, 930, 948, 953, 954, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2201, 2232, 2233, 2282); secs. 201, as amended, 202, 204, 206, 88 Stat. 1242, as amended, 1244, 1245, 1246 (42 U.S.C. 5841, 5842, 5845, 5846).

Sections 70.1(c) and 70.20a(b) also issued under secs. 135, 141, Pub. L. 97–425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 70.7 also issued under Pub. L. 95–601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102–486 sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851). Section 70.21(g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 70.31 also issued under sec. 57d, Pub. L. 93–377, 88 Stat. 475 (42 U.S.C. 2077). Sections 70.36 and 70.44 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 70.61 also issued under secs. 186, 187, 68 Stat. 955 (42 U.S.C. 2236, 2237). Section 70.62 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138).

19. In § 70.4, "Definitions," the definition of *decommission* is revised to read as follows:

§ 70.4 Definitions.

* * * * *

Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license, or (2) release of the property under restricted conditions and termination of the license.

* * * * *

20. In § 70.25, paragraph (g)(3)(iv) is revised to read as follows:

§ 70.25 Financial assurance and record keeping for decommissioning.

* * * * *

(g) * * *

(3) * * *

(iv) All areas outside of restricted areas that contain material such that, if the license expired, the licensee would be required to either decontaminate the area to meet the criteria for decommissioning in 10 CFR 20, subpart E, or apply for approval for disposal under 10 CFR 20.2002.

21. In § 70.38, paragraphs (c)(1)(v),(d), and (f)(3) are revised to read as follows:

§ 70.38 Expiration and termination of licenses.

* * * * *

(c)(1) * * *

(v) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey, unless the licensee demonstrates that the premises are suitable for release in accordance with NRC requirements in some other manner.

* * * * *

(d) If the information submitted under paragraphs (c)(1)(v) or (c)(3) of this section does not adequately demonstrate that the premises are suitable for release in accordance with NRC requirements, the Commission will inform the licensee of the appropriate further actions required for termination of license.

* * * * *

(f) * * *

(3) (i) A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with NRC requirements; or

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with NRC requirements.

PART 72—LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE

22. The authority citation for Part 72 continues to read as follows:

Authority: Secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2238, 2282); sec. 274, Pub. L. 86–373, 73 Stat. 688, as amended (42 U.S.C. 2021); sec. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); Pub. L. 95–601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102–486, sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851); sec. 102 Pub. L. 91–190, 83 Stat. 853 (42 U.S.C. 4332). Secs. 131, 132, 133, 135, 137, 141, Pub. L. 97–425, 96 Stat. 2229, 2230, 2232, 2241, sec. 148, Pub. L. 100–203, 101 Stat. 1330–235 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168).

Section 72.44(g) also issued under secs. 142(b) and 148(c), (d), Pub. L. 100–203, 101 Stat. 1330–232, 1330–236 (42 U.S.C. 10162(b), 10168(c), (d)). Section 72.46 also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97–425, 96 Stat. 2230 (42 U.S.C. 10154). Section 72.96(d) also issued under sec. 145(g), Pub. L. 100–203, 101 Stat. 1330–235 (42 U.S.C. 10165(g)). Subpart J also issued under secs. 2(2), 2(15), 2(19), 117(a), 141(h), Pub. L. 97–425, 96 Stat. 2202, 2203, 2204, 2222, 2244, (42 U.S.C. 10101, 10137(a), 10161(h)). Subparts K and L are also issued under sec. 133, 98 Stat. 2230 (42 U.S.C. 10153) and Sec. 218(a) 96 Stat. 2252 (42 U.S.C. 10198).

23. In § 72.3, "Definitions," the definition of *decommission* is revised to read as follows:

§ 72.3 Definitions.

* * * * *

Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license, or (2) release of the property under restricted conditions and termination of the license.

* * * * *

24. In § 72.54, paragraph (e)(2) is revised to read as follows:

§ 72.54 Application for termination of license.

* * * * *

(e) * * *

(2) The terminal radiation survey and associated documentation demonstrates that the ISFSI or MRS and site are suitable for release in accordance with NRC requirements.

Dated at Rockville, Maryland, this 15th day of August 1994.

For the Nuclear Regulatory Commission.

John C. Hoyle,

Acting Secretary of the Commission.

[FR Doc. 94–20427 Filed 8–19–94; 8:45 am]

BILLING CODE 7590–01–P

pet birds arriving at the Greater Cincinnati International Airport from foreign countries.

We believe that designating the Greater Cincinnati International Airport as a limited port of entry for birds will have no economic impact on domestic or foreign consumers or producers, large or small, because the designation will not have any effect on commercial imports of birds. No additional cost is expected for APHIS because no new personnel will have to be hired, nor will any additional hours have to be worked by the APHIS/VS personnel already on staff who currently perform the required inspections for arriving pet birds without the benefit of prior notice.

The remaining changes contained in this document are administrative in nature and, therefore, will have no economic effect.

Under these circumstances, the Administrator of the Animal and Plant Health Inspection Service has determined that this action will not have a significant economic impact on a substantial number of small entities.

Executive Order 12778

This rule has been reviewed under Executive Order 12778, Civil Justice Reform. This rule: (1) Preempts all State and local laws and regulations that are inconsistent with this rule; (2) has no retroactive effect; and (3) does not require administrative proceedings before parties may file suit in court challenging this rule.

Paperwork Reduction Act

This rule contains no information collection or recordkeeping requirements under the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 *et seq.*).

List of Subjects in 9 CFR Part 92

Animal diseases, Imports, Livestock, Poultry and poultry products, Quarantine, Reporting and recordkeeping requirements.

Accordingly, 9 CFR part 92 is amended as follows:

PART 92—IMPORTATION OF CERTAIN ANIMALS AND POULTRY AND CERTAIN ANIMAL AND POULTRY PRODUCTS; INSPECTION AND OTHER REQUIREMENTS FOR CERTAIN MEANS OF CONVEYANCE AND SHIPPING CONTAINERS THEREON

1. The authority citation for part 92 continues to read as follows:

Authority: 7 U.S.C. 1622; 19 U.S.C. 1306; 21 U.S.C. 102–105, 111, 114a, 134a, 134b, 134c, 134d, 134f, 135, 136, and 136a; 31 U.S.C. 9701; 7 CFR 2.17, 2.51, and 371.2(d).

§ 92.101 [Amended]

2. Section 92.101 is amended as follows:

a. In paragraph (c)(3)(ii), in the second sentence, the words "as provided in § 92.102 or 92.203" are removed and the words "in § 92.102(a)" are added in their place, and the reference "§ 92.102 or 92.203" is removed and the reference "§ 92.102(a)" is added in its place.

b. In paragraph (c)(3)(ii), in the third sentence, the reference "§ 92.102 or 92.203" is removed and the reference "§ 92.102(a)" is added in its place, and the word "Newberg" is removed and the word "Newburgh" is added in its place.

3. In § 92.102, paragraph (a) is revised as set forth below and a new paragraph (d) is added to read as follows:

§ 92.102 Ports designated for the importation of birds.

(a) *Special ports for pet birds.* The following ports are designated as ports of entry for pet birds imported under the provisions of § 92.101(c) and performing or theatrical birds imported under the provisions of § 92.101(f): Los Angeles and San Ysidro, CA; Miami, FL; Honolulu, HI; New York, NY; and Hidalgo, TX.

* * * * *

(d) *Limited ports.* The following ports are designated as ports of entry for pet birds imported under the provisions of § 92.101(c) (1) or (2) and performing or theatrical birds imported under the provisions of § 92.101(f): Anchorage and Fairbanks, AK; San Diego, CA; Denver, CO; Jacksonville, Port Canaveral, St. Petersburg-Clearwater, and Tampa, FL; Atlanta, GA; Chicago, IL; New Orleans, LA; Boston, MA; Baltimore, MD; Portland, ME; Minneapolis, MN; Great Falls, MT; Covington, KY (Greater Cincinnati International Airport); Portland, OR; San Juan, PR; Galveston and Houston, TX; and Seattle, Spokane, and Tacoma, WA.

§ 92.105 [Amended]

4. In § 92.105, paragraph (b), the reference "§ 92.203(d)" is removed and the reference "§ 92.102(a)" is added in its place.

§ 92.106 [Amended]

5. In § 92.106, paragraph (a), the eighth sentence, which reads "During the quarantine period, the importer shall comply with handling procedures (including inspection and testing) as provided in paragraph (c) of this section.", is removed.

6. In § 92.106, paragraph (a), a new sentence is added after the fifth sentence to read as follows: "The daily log and the identification record shall be maintained for 12 months following the date of the release of the bird from quarantine".

Done in Washington, DC, this 11th day of July 1994.

William S. Wallace,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 94-17246 Filed 7-14-94; 8:45 am]

BILLING CODE 3410-34-P

NUCLEAR REGULATORY COMMISSION

10 CFR Parts 2, 30, 40, 70, and 72

RIN 3150–AD85

Timeliness in Decommissioning of Materials Facilities

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its regulations to require timely decontamination and decommissioning by nuclear material licensees. These amendments establish specific time periods for decommissioning unused portions of operating nuclear materials facilities and for decommissioning the entire site upon termination of operations. The rule is intended to reduce the potential risk to public health and the environment from radioactive material remaining for long periods of time at such facilities after licensed activities have ceased.

EFFECTIVE DATE: August 15, 1994.

FOR FURTHER INFORMATION CONTACT: Mary L. Thomas, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415–6230.

SUPPLEMENTARY INFORMATION:

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I. Background

In 1990, the NRC implemented the Site Decommissioning Management Plan (SDMP) to identify and resolve

issues associated with the timely cleanup of a number of sites where buildings, soil, and ground water are contaminated. The SDMP contaminated sites are symptomatic of the need for definitive NRC regulations that specify acceptable time periods for decommissioning nuclear material facilities when licensed activities have ceased.

When decommissioning is delayed for long periods following cessation of operations, there is a risk that safety practices may become lax as key personnel relocate and management interest wanes. In addition, bankruptcy, corporate takeover, or other unforeseen changes in the company's financial status may complicate and perhaps further delay decommissioning.

The NRC published a proposed rule addressing timeliness of decommissioning for public comment in the **Federal Register** on January 13, 1993, (58 FR 4099). The public comment period for the proposed rule expired on March 29, 1993. The NRC is issuing this final rule to establish timeliness criteria for decommissioning nuclear materials facilities to avoid future problems resulting from delayed actions on the cleanup of contaminated inactive facilities and to avoid the occurrence of difficulties associated with a case-by-case approach to requiring timely decontamination and decommissioning.

II. Need for a Rule

The lack of definitive criteria as to when licensees should commence and complete decommissioning their facilities has resulted in instances where the NRC has had to issue orders to establish schedules for timely decommissioning. Because timeliness in decommissioning is a generic issue, the NRC is amending its regulations to clearly delineate the licensee's responsibility for timely decommissioning.

In developing details of these requirements, the NRC considered whether to impose them on all licensees, or to limit the requirements only to those licensees who, because of the size of their operations, had greater potential for needing significant cleanup before their sites could be fully decommissioned; i.e., those licensees covered by the financial assurance requirements for decommissioning in 10 CFR 30.35, 40.36, 70.25, and 72.30. Because the regulatory problems in delaying decommissioning apply to all licensees, regardless of size, the NRC has determined that the provisions of the rule should apply to all 10 CFR Parts 30, 40, 70, and 72 licensees.

Under existing regulations in, § 72.42(b), ISFSI and MRS licensees are required to file applications for renewal of their licenses at least 2 years prior to expiration of the existing license. This final rule requires licensees to notify the NRC (at least 2 years prior to license expiration) if an application for renewal will not be filed. The notification requirement, coupled with the 12-month time period for preparation of the final decommissioning plan, is equivalent to the current requirement in § 72.54(a) for submittal of a plan 1 year before expiration of the license. This requirement also has the effect of clearly documenting the licensee's decision on the future of the site 2 years before license termination.

This final rule does not define radiological criteria for release for unrestricted use, but states that licenses will be terminated in accordance with NRC requirements. The NRC is in the process of establishing these levels in an enhanced participatory rulemaking that will be noticed in the **Federal Register**. Pending promulgation of the new radiological criteria, licensees are expected to comply with current criteria and practices as described in the NRC Action Plan Ensuring Timely Decommissioning of SDMP Sites (57 FR 13389; April 16, 1992). Further information on acceptable criteria may be obtained through the NRC regional or headquarters offices. Once the radiological criteria are finalized, licenses would be terminated in accordance with those criteria.

The final rule also clarifies requirements for radiological surveys performed as part of the license termination process. This rule clarifies that licensees need only submit the final survey showing that the site or area is suitable for release in accordance with NRC requirements after decommissioning has been completed. Some licensees have questioned whether existing requirements may be construed to require two surveys. In order to adequately review and approve a decommissioning plan the NRC must be aware of the conditions at the site. Therefore, a new item was included in the proposed rule that added to the contents of a proposed decommissioning plan a description of the conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan. This description may be a preliminary radiation survey or other type of documentation which characterizes the conditions of the site. No comments were received on this item in the proposed rule.

III. Summary of Requirements and Discussion of Comments

Seventeen comment letters were received on the proposed rule. Nine letters were received from licensees, three from public interest groups, four from industry organizations, and one from a State government. All of the comments were considered with respect to possible revision of the proposed rule. This discussion summarizes the major requirements in the regulation by section and discusses the significant issues raised by public comment and how they were resolved. The bases and origins of the requirements are also explained. Copies of the public comments received on the proposed rule are available for inspection and copying for a fee at the NRC Public Document Room, 2120 L Street, N.W. (Lower Level), Washington, D.C. 20036

Sections 30.4, 40.4, 70.4, and 72.3—Definitions

These sections define terms that are used in the amended Parts 30, 40, 70 and 72. Of particular relevance to this rulemaking is the definition of principal activities. The final rule defines principal activities as those activities that are essential to achieving the purpose for which the license was issued or amended. Principal activities are commonly listed or described in the license under the Authorized Use heading. Principal activities are defined in the regulation to prevent licensees from avoiding end-of-use decommissioning. For example, a licensee could not store licensed radioactive material in an otherwise unused building to avoid end-of-use decommissioning. Storage of licensed material is not a principal activity unless it is specifically authorized for waste (such as greater than class C) that cannot currently be accepted at available disposal facilities, or it is the primary purpose for which the license was issued (such as, spent fuel storage in an ISFSI).

Some commenters suggested that definitions for the terms "uranium recovery facility" and "characterization of the site" be added to the proposed rule. The NRC did not adopt these suggestions with this rulemaking. First, the term "uranium recovery facility" does not appear in this rule; hence no definition is needed. Second, whether there is a need to define "site characterization" is better determined by the nature of the criteria for decommissioning and will be addressed upon completion of that rulemaking.

Sections 30.36(a)–(c), 40.42 (a)–(c), 70.38(a)–(c) and 72.54(a)–(c)

These sections of the regulations address license termination, expiration, revocation, denial of renewal, and their relationship to each other. A license "expires" when: (1) the expiration date stated in the license is reached [unless the licensee has appropriately filed for renewal], (2) the NRC revokes the license, or (3) the NRC formally denies an application to renew the license. "Expiration" of a license, whether voluntary or involuntary, refers to the end of a licensee's authorization to perform activities licensed under the Atomic Energy Act of 1954, as amended, with the exception of a licensee's continuing authorization to perform licensed activities incident to and necessary for site decontamination and decommissioning. Licensees with expired licenses must then decommission pursuant to the time limits and other requirements stated in the regulations. The final rule makes clear that the decommissioning and timeliness criteria apply to all licensees for whom the authorization to perform licensed activities has expired, regardless of whether the expiration was voluntary or involuntary. When the NRC has determined that decommissioning has been completed in a satisfactory manner, the NRC will relieve the licensee of license obligations by terminating the license. All licenses remain in effect until formally terminated by the NRC. One commenter suggested revising the language to clarify that licensees were not required to control access to areas within their facility once they are decontaminated. The language in the final rule was revised to state that licensees were required to control access to restricted areas until they were suitable for release in accordance with NRC requirements.

Sections 30.36(d), 40.42(d), 70.38(d), and 72.54(d)—Submittal of Decommissioning Plan (If Required) Within 12 Months of Notification

The final rule establishes specific requirements for: (1) timely decommissioning of the entire site at the end of all licensed activity at the site, thereby allowing license termination and release of the site in accordance with NRC requirements (i.e., "end-of-license" decommissioning); and (2) timely decommissioning of separate buildings and outdoor areas where licensed activities have ceased while licensed activities continue to be conducted at other site locations (i.e., "end-of-use" decommissioning). Licenses will be amended to exclude decommissioned buildings or outdoor areas as authorized places of use following satisfactory completion of end-of-use decommissioning.

The final rule requires licensees to submit notification of the existence of inactive buildings or outdoor areas but does not require them to provide notification of the existence of inactive parts of buildings, such as rooms or laboratories. To include parts of buildings in the regulation was seen as a cumbersome regulatory requirement both for licensees and the NRC without sufficient resultant benefit. In addition to notification, licensees will be required to initiate decommissioning, or submit a decommissioning plan for NRC approval within 12 months of the notification.

A commenter noted that the 12-month period allowed by the proposed rule for submittal of a decommissioning plan fails to recognize the scope of work necessary to characterize a site prior to preparing a plan. This commenter suggested that consistent with other licensing actions, scheduling commitments should be developed on a site-specific basis. A second commenter also felt that the 12-month period was unrealistic because of the need to obtain other agency approvals and those agencies are not subject to NRC schedules or under the licensee's control. This commenter suggested that, rather than requiring that a decommissioning plan be submitted within 12 months, the rule should require submission of a proposed schedule taking into account the requirements of other affected regulatory bodies.

The NRC did not extend the 12-month period for submittal of a decommissioning plan. The NRC notes that flexibility has been included in the final rule. The NRC may approve alternate schedules as indicated in §§ 30.36(f)(2), 40.42(f)(2), 70.38(f)(2) and 72.52(e)(2). The final rule requires the decommissioning plan to be submitted within 12 months from:

(1) The notification of license expiration,

(2) A decision by the licensee to permanently cease "principal activities," or

(3) When there are no "principal activities" for 24 months.

Sections 30.36(d) (2), (3), and (4), 40.42(d) (2), (3), and (4), 70.38 (d) (2), (3), and (4), 72.54(d) (2) and (3)—Notification of Inactivity for 24 Months and Begin Decommissioning or Submit Plan, as Appropriate.

Sixteen of the 17 commenters foresaw major difficulties with having to begin decommissioning within 24 months of inactivity. They stated that it may not be in the licensee's best interest to decommission unattached buildings because of the additional manpower involved and that future business that would require use of the buildings may be unknown.

The time required for completing decommissioning consists of the periods both for initiating the decommissioning process and for subsequently completing decommissioning activities. In determining the appropriate time period for initiating decommissioning, the NRC considered the health and safety benefits to be obtained by allowing short-lived isotopes to decay before beginning decommissioning operations and the licensee's need to make business decisions concerning future use of inactive buildings or outdoor areas. In determining the appropriate time period for the completion of subsequent decommissioning activities, the NRC considered the time needed to plan and safely carry out decommissioning operations based on previous experience.

With regard to initiation of the decommissioning process, the background information developed for the rulemaking on general requirements for decommissioning (53 FR 24018; June 27, 1988) included an evaluation of decommissioning planning and preparation requirements for the wide variety of different sized operations licensed under 10 CFR Parts 30, 40, and 70. The evaluation indicated that, in general, for materials license facilities, further benefits derived from radiological decay are not likely to be gained by delaying decommissioning beyond approximately 3 years from the date that operations cease. The NRC considers a period of approximately 24 months for making business decisions on further use of inactive facilities to be reasonable. This permits licensees sufficient time to make decisions concerning future use of an inactive facility, while accommodating periods of inactivity due to normal operations, testing, or routine business cycles.

Based on the 24-month time period considered reasonable for making business decisions and considering that the incremental benefits due to

radioactive decay between the second and third years of inactivity are small, the NRC considers a period of approximately 24 months to be a reasonable time period to permit a building or outdoor area to remain inactive without undergoing decommissioning. Therefore, the final rule stipulates that licensees must notify NRC if they have buildings or outdoor areas where no principal activities have been conducted for 24 months. Notification is also required when the license has expired or when the licensee has decided to permanently cease principal activities and begin the formal process leading to license termination. The rule allows licensees 60 days to provide notification. The rule requires licensees that are not required to submit decommissioning plans to begin decommissioning within the 60-day period provided for notification unless the NRC has granted a delay or postponement. Licensees required to submit decommissioning plans will be required to submit final decommissioning plans within 12 months following notification to cease principal activities.

Based on its analysis of the situation, the NRC arrived at a 24-month period as being a reasonable time period for a facility, building or outside area to remain inactive without undergoing decommissioning. Licensees may file for exemption if they feel they will exceed the 24-month inactivity period.

Sections 30.36(e) and (h), 40.42(e) and (h), 70.38(e) and (h), and 72.54(e) and (j)—Submittal of Request to Delay Initiation of the Decommissioning Process and Submittal of Alternate Decommissioning Schedules.

The NRC recognizes that licensees may not wish to decommission the site or separate buildings or outdoor areas when submitting the notification of inactivity for 24 months. Thus, the rule permits licensees to make a request and justify delay or postponement. Licensees will be required to submit the request with justification 30 days prior to the time notification would have been required under paragraph (d). In practical terms, this means:

(1) 30 days after the license expiration date,

(2) 30 days following the decision to permanently cease principal activities at the site or in separate buildings or outdoor areas, or

(3) 30 days following the end of the 24-month time period of inactivity for the site or in separate buildings or outdoor areas.

Five commenters expressed opinions against the provision for granting an extension of time for submitting a decommissioning plan. A commenter recommended that an additional factor be included under paragraph (h), in each of the affected sections in the regulation as a reason to delay decommissioning—the future availability of emerging technologies which would enable more thorough or efficient decontamination. The NRC did not adopt this recommendation because this additional factor, as worded, appears to be too general to be used as a basis for delaying decommissioning. If some particular emerging technology could be identified which would offer more thorough or efficient decontamination on a definite time scale, it could form the basis of a request to the NRC by a licensee for a delay in beginning decommissioning.

Some commenters expressed the opinion that 30 days is not enough time for the licensee to perform a proper analysis and prepare a meaningful submittal. They proposed allowing 90 days for submitting a schedule for preparation, submittal and review of a site characterization plan, site characterization report, and site decommissioning plan and elimination of the 30-day notice. The commenters appeared to misunderstand the purpose of the 30-day notice. The 30-day notice is not for a request to extend the time for submittal of a decommissioning plan but applies to a request and justification for postponement of the initiation of the decommissioning process. For those licensees required to submit decommissioning plans, the regulation allows licensees 12 months, not 30 days, to prepare the decommissioning plan.

A commenter expressed concern with the provision which puts the decommissioning timetable "on hold" until the NRC makes a determination on the extension request. To make the NRC accountable, the commenter strongly urged that the NRC modify the rule to place a reasonable time limit on NRC determinations regarding extension requests (i.e., 30 days). The NRC did not adopt this comment because a 30-day time period for evaluating a request for an extension of the 24-month decommissioning period would be difficult to adhere to due to the complexity involved in evaluation of non-routine factors such as extensive ground-water contamination and because the NRC may have to request further information from the licensee.

Sections 30.36(e), 40.42(e), 70.38(e), and 72.54 (e)(1)—Inclusion of Specific Information to Support a Request to Delay or Postpone Initiation of Decommissioning

Three commenters stated that the wording of the extension request provision failed to define specific standards to be met by a licensee or to describe how the NRC will evaluate requests. It was noted that the term "otherwise in the public interest" was not precisely defined and could be interpreted in a variety of ways. Two commenters noted that the rule states that the NRC may grant a request to delay or postpone decommissioning if NRC determines the relief "is not detrimental to public health and safety and is otherwise in the public interest." In addition, these commenters felt that this section was unnecessary for uranium recovery licensees because the NRC already knows the safety status of the facilities through various periodic reports that must be submitted.

The NRC did not adopt these suggestions. Sections 30.36(h), 40.42(h), 70.38(h) and 72.54(j) of the final rule contain five criteria the NRC will evaluate in reaching a decision on the merits of the licensee's request. Guidance on techniques used by the staff to evaluate requests is typically provided in regulatory guides and other guidance documents. The NRC will issue additional guidance as necessary after the final rule is issued.

Sections 30.36 (e) and (h), 40.42 (e) and (h), 70.38 (e) and (h), and 72.54 (e) and (j)—Public Participation

One commenter suggested that the public would like to be given a role in evaluating the merits of requests for extensions of the decommissioning schedules. This commenter stated that the rule should provide for hearings for any variation in the rule conditions, including granting of an extension.

In most cases, when an extension is granted the license would be amended. Since current NRC rules (§ 2.1205) provide individuals that could be affected the right to request a hearing whenever a license amendment is issued, there does not appear to be a need for any additional rule changes to accommodate this concern.

Sections 30.36(f)(4)(vi), 30.36(g), 30.36(h), 40.42(f)(4)(vi), 40.42(g), 40.42(h), 70.38(f)(4)(vii), 70.38(g), 70.38(h), 72.54(i), and 72.54(j)(1) and (2)—Decommissioning Period

Six of the 17 comment letters on the proposed rule questioned the practicability of the 18-month period for

the completion of decommissioning for various reasons. Several commenters felt that the 18-month limit was premature because NRC has not yet established the acceptance criteria, which may affect cost and scheduling of decommissioning. Other commenters stated that most fuel facilities require significantly more time than 18 months and the rule should recognize this. A commenter expressed the view that the 18-month period should not apply to uranium recovery facilities because portions of the milling facility may need to remain under license for ground-water remediation and tailings closure. The commenter suggested modifying the rule to state that decommissioning would be completed as soon as practicable after a final decision to cease operations. This commenter also suggested extending the period for decommissioning to make scheduling more realistic for major materials licensees. In addition, this commenter suggested that the NRC request strict compatibility for Agreement States to preclude imposition of more restrictive standards than those imposed by NRC.

The NRC has concluded that an 18-month period for completion of decommissioning may not be adequate for many major materials licensees. In response to the comments received, the NRC has decided to increase the time limit to complete decommissioning. This change is expected to have the effect of reducing the number of requests for extensions of the time period without having a significant impact on public health and safety. Following initiation of decommissioning activities, licensees would have a maximum of 24 months to complete decommissioning.

The amended regulations permit licensees to request the NRC to consider extending the 24-month time limit for decommissioning. The NRC will consider site-specific factors on a case-by-case basis. Factors that the NRC may consider to be appropriate include:

(1) Availability of waste disposal facilities;

(2) Reductions in dose or waste volume due to radioactive decay;

(3) Technical feasibility of decommissioning;

(4) Regulatory requirements of other government agencies;

(5) Lawsuits;

(6) Ground-water treatment activities;

(7) Monitored natural ground-water restoration; or

(8) Other factors that could result in more environmental harm than deferred clean-up or that are beyond the control of the licensee.

Based on these time periods the NRC estimates that licensees who are not required to submit decommissioning plans will complete their decommissioning activities in approximately 50 months or less after cessation of operations (i.e., 24 months of inactivity, 60 days for notification, and 24 months to complete decommissioning). Licensees who are required to submit decommissioning plans would be expected to complete their decommissioning activities in approximately 62 months or less (i.e., 24 months of inactivity, 60 days for notification, 12 months to submit a decommissioning plan, and 24 months to complete decommissioning). NRC review and approval of decommissioning plans (estimated to be 6 months or less) will be in addition to the 62-month total.

Sections 30.36(f)(1) and (3), 40.42(f)(1) and (3), 70.38(f)(1) and (3)—Activities Permitted Prior to Approval of a Decommissioning Plan

Three commenters stated that the rule should clearly specify what decontamination and decommissioning activities are permitted without approval of a decommissioning plan. They also stated that there should be specific wording that permits the licensee to proceed with certain activities pending approval of the plan. They believed that decommissioning activities covered under existing authorizations and procedures should be able to proceed pending approval of the plan. In addition, one commenter believed that those activities which would not increase health and safety impacts to workers and the public should be permitted pending approval of the plan. A commenter noted that license amendments could be considered for specific activities while the plan is under NRC review.

The NRC did not adopt these suggestions because sufficient latitude currently exists for licensees to carry out decommissioning activities in the absence of an approved decommissioning plan provided the procedures used are approved under existing licensing conditions and do not increase the potential for health and safety impacts to workers or to the public or result in significantly greater release of radioactive material to the environment.

Sections 30.36(i), 40.42(i), 70.38(i), and 72.54(k)—Radiation Surveys

The comments on this subject were concerned with radiation survey measurements and radiation units to be used. Three commenters questioned the practical value of the required measurement of beta/gamma radiation levels at one centimeter from the surface. The commenters noted that this measurement was not included in NUREG/CR-5849. Four commenters objected to the requirement in the proposed rule to use SI units. They believed that this proposal was in conflict with Part 20 and would be confusing to all concerned. Here again, the commenters suggested that the results of radiation measurement be specified elsewhere, such as in the rule dealing with residual radiation standards.

The NRC has decided to delete the requirement for beta/gamma radiation levels at 1 centimeter from the surface since sufficient guidance exists in NUREG/CR-5849. The provision in the final rule that requires that radiation levels be reported in SI units reflects NRC policy on metrication which was published in the **Federal Register** on October 7, 1991 (57 FR 46202). In keeping with this policy, levels of gamma radiation will be expressed in units of millisieverts. The millisievert was chosen over Coulomb/kilogram to convert from Roentgen because expressing in units of absorbed dose allows easy conversion. The values only differ with respect to orders of magnitude. The staff notes that using absorbed dose to express levels gamma radiation is the approach adopted in Europe and will foster international consistency.

Sections 30.36(j)(2), 40.42(j)(2), 70.38(j)(2), and 72.54(l)(2)—Delay for Radiation Criteria Rule

Five commenters expressed opposition to or concern with the NRC's plans to proceed with the timeliness in decommissioning rulemaking separate from and in advance of the EPR currently underway. The main points made by the commenters in support of either delaying the timeliness rulemaking or combining the two rulemakings were:

(1) Proceeding with the timeliness rulemaking separately constrains the public's ability to influence the radiological-standards rulemaking and weakens the NRC's stated commitment to greater public participation;

(2) The timeliness rulemaking is isolated from the enhanced public participation of the radiological-standards rulemaking;

(3) It is inconsistent to define the length of time decommissioning will require when it is not known what the extent of decommissioning will be (the timeliness rulemaking is based on the premise of decommissioning for release

in accordance with NRC requirements). The results of the radiological standards rulemaking may provide for alternative approaches to decommissioning, such as continual remediation or long-term monitoring, restricted use, and continued institutional care, perhaps through the transfer of the property to a governmental entity; and

(4) Because decommissioning should be done correctly and is expensive, its scheduling and implementation should be accomplished with the benefit of final residual radiation criteria.

The comments regarding the desirability of either delaying the timeliness in decommissioning rulemaking until the rulemaking on decommissioning criteria is completed or combining the two rulemakings have merit. Ideally, the two subjects could be addressed in a single rulemaking because of their strong interdependence. However, the NRC has determined that, pending promulgation of the new decommissioning criteria, adequate criteria exist to conduct decommissioning and are described in the NRC Action Plan Ensuring Timely Decommissioning of SDMP sites (57 FR 13389; April 16, 1992). Because having these new timeliness requirements in the regulations is expected to improve the NRC's ability to see that timely decommissioning is accomplished, the NRC did not adopt the commenters' suggestion. Adoption of the suggestions of the commenters on this point would result in either the continuation of the "status quo", i.e., establishment of time schedules for decommissioning on a case-by-case basis through license condition or order, or postponement of all decommissioning of materials facilities until the rulemaking on decommissioning criteria has been completed.

Section 70.38(f)(4)(vi)

A commenter suggested deleting the requirements to submit updated descriptions of physical security plans and material control and accountability plans. This comment was not adopted because this information is likely to be different from the plans designed to cover routine operations. As noted in the comment, the licensee may be in a position where the possession limit for special nuclear material can be reduced below the threshold for the plans, then the information would not be required in the decommissioning plan.

Viability of Uranium Recovery Industry

Uranium recovery licensees consist of conventional mills, commercial, research and development in situ facilities, ore buying stations, and heap-leach facilities. These sites may contain processing facilities and waste disposal areas. All of the sites, other than the tailings impoundments and waste disposal areas, are to be decommissioned and released in accordance with NRC requirements under NRC's present regulations. The waste disposal areas are reclaimed and, when the specific license is terminated, they are licensed for long-term care under the general license in § 40.28.

The current requirements for decommissioning and reclamation of these sites are contained primarily in Appendix A to 10 CFR Part 40. In particular, Criterion 9 of Appendix A requires that prior to commencement of operations, there must be a NRC-approved plan for:

(1) Decontamination and decommissioning of mill buildings and the milling site to levels which allow unrestricted use of these areas upon decommissioning, and

(2) The reclamation of tailings and/or waste disposal areas in accordance with technical criteria presented in Section I of Appendix A.

Nonetheless, § 40.42 applies to the uranium processing facilities. The effect of the final rule is to require the uranium recovery licensees to notify the NRC within 60 days when they have permanently ceased operations or have not conducted operations for 24 months (§ 40.42(d)) and to submit an update decommissioning plan within 12 months of this notification or license expiration. The provisions in the amended § 40.42(g) on the content of a decommissioning plan are consistent with the decommissioning plan required in Criterion 9 of Appendix A to 10 CFR Part 40. The decommissioning plan submitted at the end of operations is intended to better describe the actual conditions of the site at that time.

Some uranium recovery licensees may require additional time to conduct final decommissioning and site survey in order to support the reclamation of waste disposal areas. Section 40.42(k) provides for an exemption for the waste disposal areas at uranium recovery facilities.

Disposal areas (as defined in Appendix A to 10 CFR Part 40) are reclaimed and ownership is eventually transferred to the Department of Energy. Criterion 6A of Appendix A to 10 CFR Part 40 and Subpart D of 40 CFR Part 192 specifically require the submittal and approval of a timely reclamation plan. For these reasons, the provisions in the final rule in § 40.42(f) for the content of a plan and § 40.42(g) for the timing of completion of the plan do not apply to the reclamation of the waste disposal areas at uranium recovery facilities and thorium mills.

To coordinate decommissioning of uranium recovery facilities and reclamation of disposal areas, the NRC may need to extend the date for completion of decommissioning including the final radiological survey until the reclamation of the disposal area has been completed. Typically, the reclamation of a disposal area may require several years of drying, several construction seasons, and a period of stability monitoring prior to the licensee proposing to terminate the license. Requests for delay in completion of the final aspects of decommissioning can be accommodated through the provisions in § 40.42(h).

The NRC recognizes the fluctuation that has occurred in the uranium industry. The amended regulation allows the NRC to extend the 24-month period of inactivity if the NRC determines, based on a request by the licensee, that this relief is not detrimental to the public health and safety and is otherwise in the public interest. Commenters stated that the proposed rule threatens future energy security of the United States by forcing decommissioning of uranium production facilities. According to the commenters, the proposed timetables failed to take into account site-specific circumstances, factors beyond the control of the licensee, and the problematic nature of the international marketplace. Two commenters stated that their suggestion of exempting uranium recovery facilities from the rule would allow the United States to maintain its domestic uranium producing industry rather than forcing its demise with every downturn in the market and thereby help limit U.S. dependence on foreign energy sources. They also stated that such an exemption would be consistent with NRC Chairman Selin's written testimony before the Senate Committee on Energy and Natural Resources during hearings on the then proposed National Energy Act on June 26, 1992.

What the commenters are referring to is not written testimony but NRC's June 26, 1992, comments to Congress on provisions of the proposed National Energy Policy Act of 1992 relating to mill tailings cleanup funding. The NRC is not exempting uranium recovery facilities from decommissioning. There is no policy justification for concluding that once a uranium recovery facility has ceased operations, decommissioning should not commence promptly. In fact, prompt decommissioning is consistent with this agency's mandate to protect

public health and safety. Commenters have misconstrued the Commission's June 26, 1992, letter to Congress. In that letter, the Commission urged Congress to modify the legislation to provide that uranium mills could be eligible for reimbursements for some of their cleanup costs even if the mills were still operating in 2002. The legislation then pending provided that decommissioning of a mill had to be completed by the end of 2002 in order to receive Federal funding. The legislation ultimately enacted included the modifications recommended by the NRC. Nowhere in NRC's correspondence did the Commission suggest that decommissioning be deferred once a facility has ceased operations. In addition, flexibility has been built into the final rule so that a licensee can file for an exemption from having to commence decommissioning following 24 months of inactivity.

Inclusion of QA Plan in the Decommissioning Plan

One commenter suggested that the content of the decommissioning plan be augmented to include a quality assurance program description, a description of the manner in which the characterization of the site was performed and assurance that the characterization was performed in accordance with a quality assurance program and implementing procedures. This commenter pointed out that the QA program is currently only discussed in Part 72. Because it is especially important to assure high quality data in conducting various tests (e.g., analysis of soil, water, air, contamination), requirements for QA programs should be added to the other sections as well.

The NRC believes that the QA programs incorporated into existing licenses apply to decommissioning as well.

IV. Other Issues

10 CFR Part 2, Appendix C, Supplement VI—Enforcement

Four commenters expressed disagreement with the enforcement policy stated in the Supplementary Information of the proposed rule. They believed that a Severity Level 3 enforcement category seemed harsh or excessive in view of the subjective and unpredictable character of many factors that will influence determinations and actions regarding decommissioning. They also noted that the one-level approach does not seem to recognize the wide range of situations or interpretations that could result in citations. They suggested that the enforcement policy be consistent with the complexities and uncertainties involved.

This comment was not adopted because the NRC considers timely decommissioning of materials facilities an important regulatory issue. Thus, violations involving a failure to notify the NRC as required by regulation or license condition or to complete decommissioning activities in accordance with regulation or license condition normally will be classified at Severity Level III and will result in consideration of monetary civil penalties or other enforcement action as appropriate.

Environmental Assessment

A commenter disagreed with the NRC finding of No Significant Environmental Impact for the proposed rule and believed that it represented an inadequate consideration of potential environmental effects. The commenter noted that NRC has indicated its intention to prepare a GEIS for the residual radiological standards rulemaking and because the timeliness rulemaking has such a strong link to it that the timeliness rulemaking also logically requires a GEIS.

As noted in the Supplementary Information with the proposed rule, the NRC staff prepared an Environmental Assessment which found that, if adopted, the proposed rule would not be a major Federal action significantly affecting the quality of the human environment, and therefore an environmental impact statement is not required. As discussed in the Environmental Assessment, the NRC had previously prepared a Generic Environmental Impact Statement on Decommissioning (GEIS). For licensees covered by this regulation, the GEIS found that either immediate decommissioning or short-term storage to allow short-lived radionuclides to decay is the preferred decommissioning strategy. Delayed decommissioning for an extended period of time would only rarely be justified for these types of facilities. The GEIS concluded that the overall impact of decommissioning existing nuclear materials facilities is small. Because these regulatory changes specifically lean in the direction of the preferred decommissioning strategies, immediate decommissioning or short-term storage, it can be concluded that this rulemaking will have no adverse impact on the environment. A more detailed rationale is given in the environmental assessment published with the notice of proposed rulemaking on Timeliness in Decommissioning of Materials Facilities (58 FR 4099; January 13, 1993).

Economic Impacts

Several commenters stated that the proposed rule represents gross interference with the licensee's right to operate a business within applicable regulations and within the framework of normal business and economic cycles. They believed that licensees must be given the option to "wait out" down-turns in the market by idling facilities and placing them under long term care and maintenance until operations can be profitably restarted. They believed that the proposed rule would deprive the licensees of the ability to obtain future financial return on investment.

The NRC agrees that licensees should have flexibility with regard to business decisions, and this sensitivity resulted in specific provisions and exemptions to account for the special circumstances where the rule might work a hardship on a particular licensee. The NRC does not believe that further considerations are necessary.

License Fees

A commenter suggested that the timeliness rule should recognize the diminished risk and regulatory effort associated with a license during the decommissioning process and the NRC fee structure adjusted accordingly.

In response, there does not appear to be any need to change the fee structure for decommissioning. It is noted that fees for license amendments for major materials or fuel cycle facilities are on a full cost recovery basis and the cost, therefore, would depend upon the amount of effort expended by the NRC staff on any given case. Once a licensee enters a possession-only status the option is available of qualifying for a different fee category due to a change in the nature of the licensed activities.

V. Enforcement

Concurrent with the publication of the final rule, the Commission is modifying Supplement VI of the Enforcement Policy to provide that violations involving a failure to notify the NRC as required by regulation or license condition, failure to meet decommissioning standards, failure to complete decommissioning activities in accordance with regulation or license condition, or failure to meet required schedules without adequate justification may be classified as Severity Level III and may result in consideration of monetary civil penalties or other enforcement action as appropriate.

VI. Agreement State Compatibility

The final rule is a matter of compatibility between the NRC and the Agreements States, thereby providing consistency between Federal and State safety requirements. This rule is assigned a Division 2 compatibility. Under this level of compatibility, the Agreement States would be expected to adopt a timeliness in decommissioning rule but would be permitted flexibility to apply more stringent requirements if deemed appropriate by the State.

VII. Implementation

The timing provisions of this rule begin on the effective date. Thus, licensees that currently have unused facilities at the time of publication of the final rule would not need to submit notifications required by this rule earlier than 2 years after the rule becomes effective. This provides those licensees with same period of time (2 years) in which to determine whether the unused facility would be put into use again or to submit notification as required by the rule.

VIII. Finding of No Significant Environmental Impact: Availability

The NRC has determined under the National Environmental Policy Act of 1969, as amended, and the NRC's regulations in Subpart A of 10 CFR Part 51, that this rule is not a major Federal action significantly affecting the quality of the human environment, and therefore, an environmental impact statement is not required. The action establishes specific requirements for timeliness of decommissioning of nuclear materials facilities. The action is directed to improving the regulatory, licensing, inspection, and enforcement framework relating to these facilities and does not change the underlying fundamental requirement to decommission facilities to levels acceptable for release. Thus, this action will not adversely affect the quality of the human environment. The environmental assessment and finding of no significant impact on which this determination is based is available for inspection at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC. Single copies are available without charge upon written request from Mary L. Thomas, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555.

IX. Paperwork Reduction Act Statement

This final rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). These requirements were approved by the Office of Management and Budget approval numbers 3150–0009, –0017, –0020, –0028, and –0132.

The public reporting burden for this collection of additional information is estimated to average 0.5 hours per response, to prepare and submit a notification of intent to terminate licensed activities. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (T6F33), U.S. Nuclear Regulatory Commission, Washington, DC 20555; and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB–10202 (3150–0009, 3150–0017, 3150–0020, 3150–0028, and 3150–0132), Office of Management and Budget, Washington, DC 20503.

X. Regulatory Analysis

The NRC has prepared a regulatory analysis on this regulation. The analysis examines the costs and benefits of the requirements in the rule. The analysis is available for inspection at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC.

XI. Regulatory Flexibility Certification

In accordance with the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the NRC certifies that this rule does not have a significant economic impact on a substantial number of small entities. The rule imposes requirements for timely decommissioning of a site. Although the rule includes all materials licensees regulated by the NRC and the Agreement States, decommissioning efforts for licensees that possess and use only materials with short half-lives or materials only in sealed sources are simple and require only that enough time be permitted to either allow short-lived materials to decay or to enable them to properly dispose of their sealed sources. Therefore, the impact of the rule on these licensees is not significant. The net cost to the remaining licensees, estimated to number 3,300, is expected to be small based on an analysis of the costs of decommissioning, including waste disposal. The analysis indicates that in nearly all cases, the cost of decommissioning (which includes the costs of waste disposal) will increase if decommissioning is delayed. Complete details of the cost analysis are contained in Section 6.2 of the Regulatory Analysis. However, these remaining 3,300 licensees are not likely to be small entities and, in addition, there actually may be significant costs of cleanup of secondary contamination if decommissioning is delayed.

XII. Backfit Analysis

The NRC has determined that the backfit rule, 10 CFR 50.109, does not apply to this proposed rule and, therefore, that a backfit analysis is not required for this proposed rule because these amendments do not involve any provisions which would impose backfits as defined in 10 CFR 50.109(a)(1).

List of Subjects

10 CFR Part 2

Administrative practice and procedure, Antitrust, Byproduct material, Classified information, Environmental protection, Nuclear materials, Nuclear power plants and reactors, Penalty, Sex Discrimination, Source material, Special nuclear material, Waste treatment and disposal.

10 CFR Part 30

Byproduct material, Criminal penalties, Government contracts, Intergovernmental relations, Isotopes, Nuclear materials, Radiation protection, Reporting and recordkeeping requirements.

10 CFR Part 40

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

10 CFR Part 70

Criminal penalties, Hazardous materials—transportation, Material control and accounting, Nuclear materials, Packaging and containers, Radiation protection, Reporting and recordkeeping requirements, Scientific equipment, Security measures, Special nuclear material.

10 CFR Part 72

Independent storage of spent fuel and high level waste, Manpower training programs, Nuclear materials, Occupational safety and health, Reporting and recordkeeping requirements, Security measures, and Spent fuel.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and 5 U.S.C. 552 and 553, the NRC is adopting the following amendments to 10 CFR Parts 2, 30, 40, 70, and 72.

PART 30—RULES OF GENERAL APPLICABILITY TO DOMESTIC LICENSING OF BYPRODUCT MATERIAL

1. The authority citation for Part 30 continues to read as follows:

Authority: Secs. 81, 82, 161, 182, 183, 186, 68 Stat. 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat 444, as amended (42 U.S.C. 2111, 2112, 2201, 2232, 2233, 2236, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246, (42 U.S.C. 5841, 5842, 5846).

Section 30.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102-486, sec. 2902, 106 Stat 3123, (42 U.S.C. 5851). Section 30.34(b) also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 30.61 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

2. In § 30.4 a definition of the term *principal activities* is added in alphabetical order to read as follows:

§ 30.4 Definitions.

* * * * *

Principal activities, as used in this part, means activities authorized by the license which are essential to achieving the purpose(s) for which the license was issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

* * * * *

3. Section 30.36 is revised to read as follows:

§ 30.36 Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas.

(a) Each specific license expires at the end of the day on the expiration date stated in the license unless the licensee has filed an application for renewal under § 30.37 not less than 30 days before the expiration date stated in the existing license. If an application for renewal has been filed at least 30 days prior to the expiration date stated in the existing license, the existing license expires at the end of the day on which the Commission makes a final determination to deny the renewal application or, if the determination states an expiration date, the expiration date stated in the determination.

(b) Each specific license revoked by the Commission expires at the end of the day on the date of the Commission's final determination to revoke the license, or on the expiration date stated in the determination, or as otherwise provided by Commission Order.

(c) Each specific license continues in effect, beyond the expiration date if necessary, with respect to possession of byproduct material until the Commission notifies the licensee in writing that the license is terminated. During this time, the licensee shall—

(1) Limit actions involving byproduct material to those related to decommissioning; and

(2) Continue to control entry to restricted areas until they are suitable for release in accordance with NRC requirements.

(d) Within 60 days of the occurrence of any of the following, consistent with the administrative directions in § 30.6, each licensee shall provide notification to the NRC in writing of such occurrence, and either begin decommissioning its site, or any separate building or outdoor area that contains residual radioactivity so that the building or outdoor area is suitable for release in accordance with NRC requirements, or submit within 12 months of notification a decommissioning plan, if required by paragraph (f)(1) of this section, and begin decommissioning upon approval of that plan if—

(1) The license has expired pursuant to paragraph (a) or (b) of this section; or

(2) The licensee has decided to permanently cease principal activities, as defined in this part, at the entire site or in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements; or

(3) No principal activities under the license have been conducted for a period of 24 months; or

(4) No principal activities have been conducted for a period of 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements.

(e) The Commission may grant a request to extend the time periods established in paragraph (d) if the Commission determines that this relief is not detrimental to the public health and safety and is otherwise in the public interest. The request must be submitted no later than 30 days before notification pursuant to paragraph (d) of this section. The schedule for decommissioning set forth in paragraph (d) of this section may not commence until the Commission has made a determination on the request.

(f)(1) A decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the Commission and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:

(i) Procedures would involve techniques not applied routinely during cleanup or maintenance operations;

(ii) Workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

(iii) Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(iv) Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(2) The Commission may approve an alternate schedule for submittal of a decommissioning plan required pursuant to paragraph (d) of this section if the Commission determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public health and safety and is otherwise in the public interest.

(3) Procedures such as those listed in paragraph (f)(1) of this section with potential health and safety impacts may not be carried out prior to approval of the decommissioning plan.

(4) The proposed decommissioning plan for the site or separate building or outdoor area must include:

(i) A description of the conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan;

(ii) A description of planned decommissioning activities;

(iii) A description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;

(iv) A description of the planned final radiation survey; and

(v) An updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning.

(vi) For decommissioning plans calling for completion of decommissioning later than 24 months after plan approval, the plan shall include a justification for the delay based on the criteria in paragraph (h) of this section.

(5) The proposed decommissioning plan will be approved by the Commission if the information therein demonstrates that the decommissioning

will be completed as soon as practicable and that the health and safety of workers and the public will be adequately protected.

(g)(1) Except as provided in paragraph (h) of this section, licensees shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months following the initiation of decommissioning.

(2) Except as provided in paragraph (h) of this section, when decommissioning involves the entire site, the licensee shall request license termination as soon as practicable but no later than 24 months following the initiation of decommissioning.

(h) The Commission may approve a request for an alternative schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the Commission determines that the alternative is warranted by consideration of the following:

(1) Whether it is technically feasible to complete decommissioning within the allotted 24-month period;

(2) Whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24-month period;

(3) Whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay;

(4) Whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and

(5) Other site-specific factors which the Commission may consider appropriate on a case-by-case basis, such as the regulatory requirements of other government agencies, lawsuits, ground-water treatment activities, monitored natural ground-water restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

(i) As the final step in decommissioning, the licensee shall—

(1) Certify the disposition of all licensed material, including accumulated wastes, by submitting a completed NRC Form 314 or equivalent information; and

(2) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey unless the licensee demonstrates that the premises are suitable for release in some other manner. The licensee shall, as appropriate—

(i) Report levels of gamma radiation in units of millisieverts (microroentgen) per hour at one meter from surfaces, and report levels of radioactivity, including alpha and beta, in units of megabecquerels (disintegrations per minute or microcuries) per 100 square centimeters—removable and fixed—for surfaces, megabecquerels (microcuries) per milliliter for water, and becquerels (picocuries) per gram for solids such as soils or concrete; and

(ii) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(j) Specific licenses, including expired licenses, will be terminated by written notice to the licensee when the Commission determines that:

(1) Byproduct material has been properly disposed;

(2) Reasonable effort has been made to eliminate residual radioactive contamination, if present; and

(3)(i) A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with NRC requirements; or

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with NRC requirements.

4. Section 30.37 is revised to read as follows:

§ 30.37 Application for renewal of licenses.

(a) Application for renewal of a specific license must be filed on NRC Form 314 and in accordance with § 30.32.

(b) [Reserved]

PART 40—DOMESTIC LICENSING OF SOURCE MATERIAL

5. The authority citation for Part 40 continues to read as follows:

Authority: Secs. 62, 63, 64, 65, 81, 161, 182, 183, 186, 68 Stat. 932, 933, 935, 948, 953, 954, 955, as amended, secs. 11e(2), 83, 84, Pub. L. 95–604, 92 Stat. 3033, as amended, 3039, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2014(e)(2), 2092, 2093, 2094, 2095, 2111, 2113, 2114, 2201, 2232, 2233, 2236, 2282); sec. 274, Pub. L. 86–373, 73 Stat. 688 (42 U.S.C. 2021); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); sec. 275, 92 Stat. 3021 as amended by Pub. L. 97–415, 96 Stat. 2067 (42 U.S.C. 2022).

Section 40.7 also issued under Pub. L. 95–601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102–486, sec. 2902, 106 Stat 3123, (42 U.S.C. 5851). Section 40.31(g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 40.46 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 40.71 also issued under sec. 187, 68 Stat. 955 (42 U.S.C. 2237).

6. In § 40.4 a definition of the term *principal activities* is added in alphabetical order to read as follows:

§ 40.4 Definitions.

* * * * *

Principal activities, as used in this part, means activities authorized by the license which are essential to achieving the purpose(s) for which the license was issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

* * * * *

7. Section 40.42 is revised to read as follows:

§ 40.42 Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas.

(a) Each specific license expires at the end of the day on the expiration date stated in the license unless the licensee has filed an application for renewal under § 40.43 not less than 30 days before the expiration of the existing license. If an application for renewal has been filed, the existing license expires at the end of the day on which the Commission makes a final determination to deny the renewal application or, if the determination states an expiration date, the expiration date stated in the determination.

(b) Each specific license revoked by the Commission expires at the end of the day on the date of the Commission's final determination to revoke the license, or on the expiration date stated in the determination, or as otherwise provided by Commission Order.

(c) Each specific license continues in effect, beyond the expiration date if necessary, with respect to possession of source material until the Commission notifies the licensee in writing that the license is terminated. During this time, the licensee shall—

(1) Limit actions involving source material to those related to decommissioning; and

(2) Continue to control entry to restricted areas until they are suitable for release in accordance with NRC requirements;

(d) Within 60 days of the occurrence of any of the following, consistent with the administrative directions in § 40.5, each licensee shall provide notification to the NRC in writing and either begin decommissioning its site, or any separate building or outdoor area that contains residual radioactivity, so that the building or outdoor area is suitable for release in accordance with NRC requirements, or submit within 12 months of notification a decommissioning plan, if required by paragraph (f)(1) of this section, and

begin decommissioning upon approval of that plan if—

(1) The license has expired pursuant to paragraph (a) or (b) of this section; or

(2) The licensee has decided to permanently cease principal activities, as defined in this part, at the entire site or in any separate building or outdoor area; or

(3) No principal activities under the license have been conducted for a period of 24 months; or

(4) No principal activities have been conducted for a period of 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements.

(e) The Commission may grant a request to delay or postpone initiation of the decommissioning process if the Commission determines that such relief is not detrimental to the public health and safety and is otherwise in the public interest. The request must be submitted no later than 30 days before notification pursuant to paragraph (d) of this section. The schedule for decommissioning set forth in paragraph (d) of this section may not commence until the Commission has made a determination on the request.

(f)(1) A decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the Commission and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:

(i) Procedures would involve techniques not applied routinely during cleanup or maintenance operations;

(ii) Workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

(iii) Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(iv) Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(2) The Commission may approve an alternate schedule for submittal of a decommissioning plan required pursuant to paragraph (d) of this section if the Commission determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public health and safety and is otherwise in the public interest.

(3) The procedures listed in paragraph (f)(1) of this section may not be carried out prior to approval of the decommissioning plan.

(4) The proposed decommissioning plan for the site or separate building or outdoor area must include:

(i) A description of the conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan;

(ii) A description of planned decommissioning activities;

(iii) A description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;

(iv) A description of the planned final radiation survey; and

(v) An updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning.

(vi) For decommissioning plans calling for completion of decommissioning later than 24 months after plan approval, a justification for the delay based on the criteria in paragraph (h) of this section.

(5) The proposed decommissioning plan will be approved by the Commission if the information therein demonstrates that the decommissioning will be completed as soon as practicable and that the health and safety of workers and the public will be adequately protected.

(g)(1) Except as provided in paragraph (h) of this section, licensees shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months following the initiation of decommissioning.

(2) Except as provided in paragraph (h) of this section, when decommissioning involves the entire site, the licensee shall request license termination as soon as practicable but no later than 24 months following the initiation of decommissioning.

(h) The Commission may approve a request for an alternate schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the Commission determines that the alternative is warranted by consideration of the following:

(1) Whether it is technically feasible to complete decommissioning within the allotted 24-month period;

(2) Whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24-month period;

(3) Whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay;

(4) Whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and

(5) Other site-specific factors which the Commission may consider appropriate on a case-by-case basis, such as the regulatory requirements of other government agencies, lawsuits, ground-water treatment activities, monitored natural ground-water restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

(i) As the final step in decommissioning, the licensee shall—

(1) Certify the disposition of all licensed material, including accumulated wastes, by submitting a completed NRC Form 314 or equivalent information; and

(2) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey unless the licensee demonstrates that the premises are suitable for release in some other manner. The licensee shall, as appropriate—

(i) Report levels of gamma radiation in units of millisieverts (microroentgen) per hour at one meter from surfaces, and report levels of radioactivity, including alpha and beta, in units of megabecquerels (disintegrations per minute or microcuries) per 100 square centimeters removable and fixed for surfaces, megabecquerels (microcuries) per milliliter for water, and becquerels (picocuries) per gram for solids such as soils or concrete; and

(ii) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(j) Specific licenses, including expired licenses, will be terminated by written notice to the licensee when the Commission determines that:

(1) Source material has been properly disposed;

(2) Reasonable effort has been made to eliminate residual radioactive contamination, if present; and

(3)(i) A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with NRC requirements.

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with NRC requirements.

(k) Specific licenses for uranium and thorium milling are exempt from paragraphs (d)(4), (f) and (g) of this section with respect to reclamation of tailings impoundments and/or waste disposal areas.

8. Section 40.43 is revised to read as follows:

§ 40.43 Renewal of licenses.

(a) Application for renewal of a specific license must be filed on NRC Form 314 and in accordance with § 40.31.

(b) [Reserved]

PART 70—DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL

9. The authority citation for Part 70 continues to read as follows:

Authority: Secs. 51, 53, 161, 182, 183, 68 Stat. 929, 930, 948, 953, 954, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2201, 2232, 2233, 2282); secs. 201, as amended, 202, 204, 206, 88 Stat. 1242, as amended, 1244, 1245, 1246 (42 U.S.C. 5841, 5842, 5845, 5846).

Sections 70.1(c) and 70.20a(b) also issued under secs. 135, 141, Pub. L. 97-425, 96 Stat. 2232, 2241 (42 U.S.C. 10155, 10161). Section 70.7 also issued under Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102-486 sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851). Section 70.21(g) also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Section 70.31 also issued under sec. 57d, Pub. L. 93-377, 88 Stat. 475 (42 U.S.C. 2077). Sections 70.36 and 70.44 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 70.61 also issued under secs. 186, 187, 68 Stat. 955 (42 U.S.C. 2236, 2237). Section 70.62 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138).

10. In Section 70.4 a definition of the term *principal activities* is added in alphabetical order to read as follows:

§ 70.4 Definitions.

* * * * *

Principal activities, as used in this part, means activities authorized by the license which are essential to achieving the purpose(s) for which the license was issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

* * * * *

§ 70.33 [Amended].

11. Section 70.33 is amended by removing and reserving paragraph (b).

12. Section 70.38 is revised to read as follows:

§ 70.38 Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas.

(a) Each specific license expires at the end of the day on the expiration date stated in the license unless the licensee has filed an application for renewal under § 70.33 not less than 30 days before the expiration of the existing license. If an application for renewal has been filed, the existing license expires at the end of the day on which the Commission makes a final determination to deny the renewal application or, if the determination states an expiration date, the expiration date stated in the determination.

(b) Each specific license revoked by the Commission expires at the end of the day on the date of the Commission's final determination to revoke the license, or on the expiration date stated in the determination, or as otherwise provided by Commission Order.

(c) Each specific license continues in effect, beyond the expiration date if necessary, with respect to possession of special nuclear material until the Commission notifies the licensee in writing that the license is terminated. During this time, the licensee shall—

(1) Limit actions involving special nuclear material to those related to decommissioning; and

(2) Continue to control entry to restricted areas until they are suitable for release in accordance with NRC requirements.

(d) Within 60 days of the occurrence of any of the following, consistent with the administrative directions of § 70.5, each licensee shall provide notification to the NRC in writing and either begin decommissioning its site, or any separate building or outdoor area that contains residual radioactivity, so that the building or outdoor area is suitable for release in accordance with NRC requirements, or submit within 12 months of notification a decommissioning plan, if required by paragraph (f)(1) of this section, and begin decommissioning upon approval of that plan if—

(1) The license has expired pursuant to paragraph (a) or (b) of this section; or

(2) The licensee has decided to permanently cease principal activities, as defined in this part, at the entire site or in any separate building or outdoor area; or

(3) No principal activities under the license have been conducted for a period of 24 months; or

(4) No principal activities have been conducted for a period of 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements.

(e) The Commission may grant a request to delay or postpone initiation of the decommissioning process if the Commission determines that this relief is not detrimental to the public health and safety and is otherwise in the public interest. The request must be submitted no later than 30 days before notification pursuant to paragraph (d) of this section. The schedule for decommissioning set forth in paragraph (d) of this section may not commence until the Commission has made a determination on the request.

(f)(1) A decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the Commission and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:

(i) Procedures would involve techniques not applied routinely during cleanup or maintenance operations;

(ii) Workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

(iii) Procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(iv) Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(2) The Commission may approve an alternate schedule for submittal of a decommissioning plan required pursuant to paragraph (d) of this section if the Commission determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public health and safety and is otherwise in the public interest.

(3) The procedures listed in paragraph (f)(1) of this section may not be carried out prior to approval of the decommissioning plan.

(4) The proposed decommissioning plan for the site or separate building or outdoor area must include:

(i) A description of the conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan;

(ii) A description of planned decommissioning activities;

(iii) A description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;

(iv) A description of the planned final radiation survey; and

(v) An updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning.

(vi) A description of the physical security plan and material control and accounting plan provisions in place during decommissioning.

(vii) For decommissioning plans calling for completion of decommissioning later than 24 months after plan approval, a justification for the delay based on the criteria in paragraph (h) of this section.

(5) The proposed decommissioning plan will be approved by the Commission if the information therein demonstrates that the decommissioning will be completed as soon as practical and that the health and safety of workers and the public will be adequately protected.

(g)(1) Except as provided in paragraph (h) of this section, licensees shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months following the initiation of decommissioning.

(2) Except as provided in paragraph (h) of this section, when decommissioning involves the entire site, the licensee shall request license termination as soon as practicable but no later than 24 months following the initiation of decommissioning.

(h) The Commission may approve a request for an alternate schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the Commission determines that the alternative is warranted by consideration of the following:

(1) Whether it is technically feasible to complete decommissioning within the allotted 24-month period;

(2) Whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24-month period;

(3) Whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay;

(4) Whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and

(5) Other site-specific factors which the Commission may consider appropriate on a case-by-case basis, such as regulatory requirements of other government agencies, lawsuits, ground-water treatment activities, monitored natural ground-water restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

(i) As the final step in decommissioning, the licensee shall—

(1) Certify the disposition of all licensed material, including accumulated wastes, by submitting a completed NRC Form 314 or equivalent information; and

(2) Conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey unless the licensee demonstrates that the premises are suitable for release in some other manner. The licensee shall, as appropriate—

(i) Report levels of gamma radiation in units of millisieverts (microroentgen) per hour at one meter from surfaces, and report levels of radioactivity, including alpha and beta, in units of megabecquerels (disintegrations per minute or microcuries) per 100 square centimeters removable and fixed for surfaces, megabecquerels (microcuries) per milliliter for water, and becquerels (picocuries) per gram for solids such as soils or concrete; and

(ii) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(j) Specific licenses, including expired licenses, will be terminated by written notice to the licensee when the Commission determines that:

(1) Special nuclear material has been properly disposed;

(2) Reasonable effort has been made to eliminate residual radioactive contamination, if present; and

(3)(i) A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with NRC requirements; or

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with NRC requirements.

PART 72—LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE

13. The authority citation for Part 72 continues to read as follows:

Authority: Secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2238, 2282); sec. 274, Pub. L. 86-373, 73 Stat. 688, as amended (42 U.S.C. 2021); sec. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); Pub. L. 95-601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 102-486, sec. 2902, 106 Stat. 3123 (42 U.S.C. 5851); sec. 102 Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Secs. 131, 132, 133, 135, 137, 141, Pub. L. 97-425, 96 Stat. 2229, 2230, 2232, 2241, sec. 148, Pub. L. 100-203, 101 Stat. 1330-235 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168).

Section 72.44(g) also issued under secs. 142(b) and 148(c), (d), Pub. L. 100-203, 101 Stat. 1330-232, 1330-236 (42 U.S.C. 10162(b), 10168(c), (d)). Section 72.46 also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97-425, 96 Stat. 2230 (42 U.S.C. 10154). Section 72.96(d) also issued under sec. 145(g), Pub. L. 100-203, 101 Stat. 1330-235 (42 U.S.C. 10165(g)). Subpart J also issued under secs. 2(2), 2(15), 2(19), 117(a), 141(h), Pub. L. 97-425, 96 Stat. 2202, 2203, 2204, 2222, 2244, (42 U.S.C. 10101, 10137(a), 10161(h)). Subparts K and L are also issued under sec. 133, 98 Stat. 2230 (42 U.S.C. 10153) and Sec. 218(a) 96 Stat. 2252 (42 U.S.C. 10198).

14. In § 72.3, a definition of the term *principal activities* is added in alphabetical order to read as follows:

§ 72.3 Definitions.

* * * * *

Principal activities, as used in this part, means activities authorized by the license which are essential to achieving the purpose(s) for which the license was issued or amended, excluding activities incidental to decontamination or decommissioning.

* * * * *

15. Section 72.54 is revised to read as follows:

§ 72.54 Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas.

(a) Each specific license expires at the end of the day on the expiration date stated in the license except when a licensee has filed an application for renewal pursuant to § 72.42 not less than 24 months before the expiration of the existing license. If an application for renewal has been filed at least 24 months prior to the expiration date stated in the existing license, the existing license expires at the end of the day on which the Commission makes a final determination to deny the renewal application or, if the determination states an expiration date, the expiration date stated in the determination.

(b) Each specific license revoked by the Commission expires at the end of the day on the date of the Commission's final determination to revoke the license or on the expiration date stated in the determination or as otherwise provided by Commission Order.

(c) Each specific license continues in effect, beyond the expiration date if necessary, with respect to possession of

licensed material until the Commission notifies the licensee in writing that the license is terminated. During this time, the licensee shall—

(1) Limit actions involving spent fuel or other licensed material to those related to decommissioning; and

(2) Continue to control entry to restricted areas until they are suitable for release in accordance with NRC requirements.

(d) As required by § 72.42(d), or within 60 days of the occurrence of any of the following, consistent with the administrative directions in § 72.4, each licensee shall notify the NRC in writing, and submit within 12 months of this notification, a final decommissioning plan and begin decommissioning upon approval of the plan if—

(1) The licensee has decided to permanently cease principal activities, as defined in this part, at the entire site or any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements; or

(2) No principal activities under the license have been conducted for a period of 24 months; or

(3) No principal activities have been conducted for a period of 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with NRC requirements.

(e)(1) The Commission may grant a request to delay or postpone initiation of the decommissioning process if the Commission determines that this relief is not detrimental to the public health and safety and is otherwise in the public interest. The request must be submitted no later than 30 days before notification pursuant to paragraph (d) of this section. The schedule for decommissioning set forth in paragraph (d) of this section may not commence until the Commission has made a determination on the request.

(2) The Commission may approve an alternate schedule for submittal of the final decommissioning plan required pursuant to paragraph (d) of this section if the Commission determines that the alternate schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public health and safety, and is otherwise to the public interest.

(f) The proposed final decommissioning plan must include—

(1) A description of the current conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan;

(2) The choice of the alternative for decommissioning with a description of the activities involved;

(3) A description of controls and limits on procedures and equipment to protect occupational and public health and safety;

(4) A description of the planned final radiation survey; and

(5) An updated detailed cost estimate for the chosen alternative for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and plan for assuring the availability of adequate funds for completion of decommissioning including means for adjusting cost estimates and associated funding levels over any storage or surveillance period; and

(6) A description of technical specifications and quality assurance provisions in place during decommissioning.

(g) For final decommissioning plans in which the major dismantlement activities are delayed by first placing the ISFSI or MRS in storage, planning for these delayed activities may be less detailed. Updated detailed plans must be submitted and approved prior to the start of these activities.

(h) If the final decommissioning plan demonstrates that the decommissioning will be completed as soon as practicable, performed in accordance with the regulations in this chapter, and will not be inimical to the common defense and security or to the health and safety of the public, and after notice to interested persons, the Commission will approve the plan subject to any appropriate conditions and limitations and issue an order authorizing decommissioning.

(i)(1) Except as provided in paragraph (j) of this section, each licensee shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months following approval of the final decommissioning plan by the Commission.

(2) Except as provided in paragraph (j) of this section, when decommissioning involves the entire site, each licensee shall request license termination as soon as practicable but no later than 24 months following approval of the final decommissioning plan by the Commission.

(j) The Commission may approve a request for an alternate schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the Commission determines that the alternate schedule is warranted by consideration of the following:

(1) Whether it is technically feasible to complete decommissioning within the allotted 24-month period;

(2) Whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24-month period;

(3) Whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay;

(4) Whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and

(5) Other site-specific factors that the Commission may consider appropriate on a case-by-case basis, such as regulatory requirements of other government agencies, lawsuits, ground-water treatment activities, monitored natural ground-water restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

(k) As the final step in decommissioning, the licensee shall—

(1) Certify the disposition of all licensed material, including accumulated wastes, by submitting a completed NRC Form 314 or equivalent information; and

(2) Conduct a final radiation survey of the premises where the licensed activities were conducted and submit a report of the results of this survey, unless the licensee demonstrates that the premises are suitable for release in some other manner. The licensee shall, as appropriate—

(i) Report levels of gamma radiation in units of millisieverts (microroentgen) per hour at one meter from surfaces, and report levels of radioactivity, including alpha and beta, in units of megabecquerels (disintegrations per minute or microcuries) per 100 square centimeters removable and fixed for surfaces, megabecquerels (microcuries) per milliliter for water, and becquerels (picocuries) per gram for solids such as soils or concrete; and

(ii) Specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

(l) Specific licenses, including expired licenses, will be terminated by written notice to the licensee when the Commission determines that—

(1) The decommissioning has been performed in accordance with the approved final decommissioning plan and the order authorizing decommissioning; and

(2)(i) A radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with NRC requirements; or

(ii) Other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with NRC requirements.

16. In § 72.86, paragraph (b), is revised to read as follows:

§ 72.86 Criminal penalties.

* * * * *

(b) The regulations in this Part 72 that are not issued under Sections 161b, 161i, or 161o for the purposes of Section 223 are as follows: §§ 72.1, 72.2, 72.3, 72.4, 72.5, 72.7, 72.8, 72.9, 72.16, 72.18, 72.20, 72.22, 72.24, 72.26, 72.28, 72.32, 72.34, 72.40, 72.46, 72.56, 72.58, 72.60, 72.62, 72.84, 72.86, 72.90, 72.96, 72.108, 72.120, 72.122, 72.124, 72.126, 72.128, 72.130, 72.182, 72.194, 72.200, 72.202, 72.204, 72.206, 72.210, 72.214, 72.220, 72.230, 72.236, 72.238, and 72.240.

Conforming Amendment

The following amendment to Chapter I of Title 10 generally updates citations to 10 CFR Parts 30, 40, 70 and 72 and is found in Part 2 of the NRC regulations. This amendment is particularly important as it goes beyond updating cross-reference citations. The amendment to 10 CFR Part 2, Appendix C updates and modifies the examples of severity levels. Because Appendix C is a policy statement of the Commission and not a regulation, the Commission is issuing the amendment to the Commission's enforcement policy in 10 CFR Part 2, Appendix C in final form without public comment.

PART 2—RULES OF PRACTICE FOR DOMESTIC LICENSING PROCEEDINGS AND ISSUANCE OF ORDERS

17. The authority citation for Part 2 continues in part to read as follows:

Authority: Sec. 161, 68 Stat. 948, as amended (42 U.S.C. 2201); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841)

* * * * *

18. In Appendix C to 10 CFR Part 2, Supplement VI, Section C is amended by revising paragraphs 9, and 10, and by adding a new paragraph 11, as follows:

Appendix C—General Statement of Policy and Procedure for NRC Enforcement Actions

* * * * *

Supplement VI—Fuel Cycle and Materials Operations

C. Severity Level III—Violations involving for example:

* * * * *

9. A failure to submit an NRC Form 241 in accordance with the requirements in § 150.20 of 10 CFR part 150;

10. A failure to receive required NRC approval prior to the implementation of a change in licensed activities that has radiological or programmatic significance, such as: a change in ownership; lack of an RSO or replacement of an RSO with an unqualified individual; a change in the location where licensed activities are being conducted, or where licensed material is being stored where the new facilities do no meet safety guidelines; or a change in the quantity or type of radioactive material being processed or used that has radiological significance; or

11. A significant failure to meet decommissioning requirements including a failure to notify the NRC as required by regulation or license condition, substantial failure to meet decommissioning standards, failure to conduct and/or complete decommissioning activities in accordance with regulation or license condition, or failure to meet required schedules without adequate justification.

Dated at Rockville, Maryland, this 11th day of July 1994.

For the Nuclear Regulatory Commission.

John C. Hoyle,

Acting Secretary of the Commission.

[FR Doc. 94-17206 Filed 7-14-94; 8:45 am]

BILLING CODE 7590-01-P

NATIONAL CREDIT UNION ADMINISTRATION

12 CFR Parts 701, 709, 745, 747, 790, 791, 792, 793 and 794

Change of Addresses and Redesignation of Offices

AGENCY: National Credit Union Administration ("NCUA").

ACTION: Final rule.

SUMMARY: NCUA moved the location of its central office from Washington, DC to Alexandria, VA in September, 1993. This document updates various sections of NCUA's Rules and Regulations to reflect the agency's current address. Several additional changes are made. First, a correction to a referenced subpart in the regulations is made. Second, NCUA's Administrative Office was renamed the Office of Administration several years ago. References to the Administrative Office are changed to the Office of Administration. Third, in 1990 NCUA switched from the government wide GS pay system to its own CU (credit union) system. References to GS pay are changed to CU pay. Fourth, in February, 1994, NCUA established two new offices, the Office of Community Development Credit Unions and the Office of Chief Economist and Policy Analysis, and placed the Central Liquidity Facility within the Office of Examination and Insurance. In addition, in May, 1994, the Office of Training and Development was established and certain functions were moved from one office to another as a result of streamlining studies done both by agency staff and an outside consulting firm. Descriptions of these changes as well as some minor changes in other office descriptions are made to the appropriate regulation.

EFFECTIVE DATE: July 15, 1994.

ADDRESSES: National Credit Union Administration, 1775 Duke Street, Alexandria, VA 22314-3428.

FOR FURTHER INFORMATION CONTACT: Hattie M. Ulan, Special Counsel to the General Counsel, at 703-518-6540.

SUPPLEMENTARY INFORMATION: NCUA's central office location changed from 1776 G Street, NW., Washington, DC 20456 to 1775 Duke Street, Alexandria, VA 22314-3428 in September, 1993. The change in address is made in parts 701, 709, 745, 747, 791, 792, 793 and 794 of NCUA's Regulations. In July of 1991, NCUA revised part 747 of the Regulations (*see* 56 FR 37828, 8/9/91). This part sets forth procedures for various administrative actions. Under the earlier version of part 747, subpart L (12 CFR § 747.1201 et seq.) described the procedures for appeal of a notice of disapproval of a change in senior executive officers. These procedures are found in subpart J of the current version of part 747. Section 701.14(f) refers to the now nonexistent subpart L. A correction is made to this reference in § 701.14(f). NCUA's Office of Administration was previously titled the Administrative Office. Parts 792 and 794 contain several references to the Administrative Office. These have all been changed to the Office of Administration. Section 792.5(b) contains several references to GS pay. In 1990, NCUA switched from the GS pay system to its own CU pay system. The references in § 792.25(b) are changed from GS to CU.

In February, 1994, the NCUA Board established two new offices, the Office of Community Development Credit Unions and the Office of the Chief Economist and Policy Analysis. The Board also placed the Central Liquidity Facility within the Office of Examination and Insurance. The Office of Community Development Credit Unions will administer the Community Development Revolving Loan Program. This Program is currently described in paragraph 790.2(e). Paragraph 790.2(e) is deleted and the information is moved to the new description of the Office of Community Development Credit Unions in new paragraph 790.2(b)(13). Description of the Office of the Chief Economist and Policy Analysis is found