

PUBLIC SUBMISSION

As of: June 15, 2009
Received: June 11, 2009
Status: Pending_Post
Tracking No. 809cc208
Comments Due: June 26, 2009
Submission Type: Web

Docket: NRC-2009-0142
NRC Staff Assessment of a Proposed Agreement Between the Nuclear Regulatory Commission and New Jersey

Comment On: NRC-2009-0142-0001
State of New Jersey: NRC Staff Assessment of a Proposed Agreement Between the Nuclear Regulatory Commission and the State of New Jersey

Document: NRC-2009-0142-DRAFT-0003
Comment on FR Doc # E9-12260

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5/27/09
 74FR25283
 (3)

General Comment

THIS SUBMITTAL REPLACES THAT UNDER TRACKING NUMBER 809cbc47, THE ATTACHMENTS FOR WHICH FAILED TO UPLOAD PROPERLY. IT IS SUBSTANTIALLY THE SAME SUBMITTAL.

Attached are the comments of Shieldalloy Metallurgical Corporation on the Application by the State of New Jersey to enter into an agreement with the U.S. Nuclear Regulatory Commission ("NRC") pursuant to Section 274b. of the Atomic Energy Act of 1954. As set forth in the attached letter and attachments thereto, the proposed New Jersey radiation control program deviates significantly from established NRC regulations and regulatory policies. Accordingly, New Jersey's Application to become an Agreement State must be denied.

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Attachments

- NRC-2009-0142-DRAFT-0003.1:** Comment on FR Doc # E9-12260
- NRC-2009-0142-DRAFT-0003.2:** Comment on FR Doc # E9-12260

*SUNSI Review Complete
 Template = ADM-013*

*E-KIDS = ADM-03
 Odd = J. Taylor (TMT)
 J. Sollenberger (dms4)*

NRC-2009-0142-DRAFT-0003.3: Comment on FR Doc # E9-12260

NRC-2009-0142-DRAFT-0003.4: Comment on FR Doc # E9-12260



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July 17, 2008

New Jersey Department of Environmental Protection
Alice A. Previte, Esq.
ATTN: 04-08-04/637
Office of Legal Affairs
401 East State Street, 4th Floor
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Trenton, New Jersey 08625-0402

Re: Shieldalloy Comments on Proposed Revision of New Jersey Radiation Protection Programs' Regulations in Support of Its Agreement State Initiative

Dear Ms. Previte:

This letter submits comments by Shieldalloy Metallurgical Corporation ("SMC") on the proposed revision of New Jersey Radiation Protection Programs' regulations ("N.J. Proposed Rule"). The N.J. Proposed Rule was published in the New Jersey Register on May 19, 2008 for a sixty-day comment period.¹ The N. J. Proposed Rule is intended to provide consistency between New Jersey's radiation protection and those of the U.S. Nuclear Regulatory Commission ("NRC"). NRC policy requires such consistency as a prerequisite to New Jersey and the NRC entering an agreement pursuant to 42 U.S.C. § 2021 enabling New Jersey to regulate certain radioactive materials as an "Agreement State."²

SMC owns a facility in Newfield, New Jersey ("the Newfield facility") for which it holds a source materials license from the NRC. The status and ultimate radiological decommissioning of the Newfield facility could be affected if the provisions of the N.J. Proposed Rule were enacted and made applicable to it. SMC has the following three general comments on the N. J. Proposed Rule, which are summarized here and provided in more detail below.

¹ 40 N.J.R. 2309(a) (hereinafter "N. J. Proposed Rule").

² *Criteria for Guidance of States and NRC in Discontinuance of NRC Regulatory Authority and Assumption Thereof by States through Agreement*, 46 Fed. Reg. 7540 (1981), as amended by policy statements published at 46 Fed. Reg. 36,969 (1981) and 48 Fed. Reg. 33,376 (1983); *Statement of Principles and Policy for the Agreement State Program; Policy Statement on Adequacy and Compatibility of Agreement State Programs*, 62 Fed. Reg. 46,517 to 46,525 (1997).

- The remediation standards in the N. J. Proposed Rule do not provide the reasonable flexibility generally found appropriate by other radiation programs nationwide, and to the contrary creates an unnecessarily restrictive regulatory regime for radiological decommissioning that is not rationally related to the stated purpose of the regulations. Applying this generic approach to widely disparate sites has the potential to be deleterious to the public interest.
- The proposed regulations conflate the definitions of “source material” and “Diffuse NARM,” erasing the distinction between them. The N. J. Proposed Rule would appear to make the definition of Diffuse NARM applicable to SMC’s Newfield facility. In fact, SMC’s Newfield facility contains material which has long been classified as source material by the NRC. Confusing the regulation of materials such as laboratory trash from accelerator produced radiopharmaceuticals (Diffuse NARM) with by-products from processing of naturally occurring ores (source material) does not make sense and the N. J. Proposed Rule should be revised to ensure source material is not defined as Diffuse NARM.
- The fee provisions to charge licensees for remediation efforts by New Jersey do not comply with the governing New Jersey statute.

SMC’s specific comments are as follows:

1. The N.J. Proposed Rule Does Not Provide Reasonable Flexibility For Radiological Decommissioning

Nationwide, radiation control programs have found it appropriate for efficient and timely radiological decommissioning to provide flexibility in the analysis approach to address the wide variations in the regulated facilities. As discussed below, the method for calculating compliance with radiological decommissioning criteria in the N. J. Proposed Rule is overly restrictive. The N. J. Proposed Rule (a) requires analysis for thousands (or even billions) of years into the future without a rational basis, (b) does not allow for any radioactive contamination above background in surface waters, (c) does not allow for reasonable alternate scenarios in dose calculations, (d) requires calculations to arbitrarily assume that engineering controls instantaneously fail, rather than degrade over time, and (e) does not allow any increase in the remediation dose criteria even if justified on the basis of the ALARA principal.

a. Analyzing Dose From Radiological Decommissioning For More Than A Thousand Years Into the Future Is Meaningless

The N.J. Proposed Rule requires that dose calculations for remediation must be conducted until the time of peak dose is reached or a thousand years, whichever is longer. *See, e.g.,* N. J. Proposed Rule 7:28-12.10(d); 7:28-12.11(a)4; 7:28-12.11(f)2.iii. First, if the time of peak dose is less than a thousand years, there is no rational basis to analyze a thousand year period. Second, for the types of activities that would be regulated by New Jersey as an Agreement State, calculation of dose beyond a thousand years would be meaningless, as discussed below. The reliance by the N. J. Proposed Rule on statements by the NRC is misplaced as it mischaracterizes the statements.

In promulgating a final rule that limited dose calculations to no more than a thousand years, the NRC addressed comments arguing that the time period for calculating dose was too short. According to the NRC, “[s]ome commenters objected to the proposed 1000-year time frame for calculating dose and wanted it lengthened to better predict health effects over the hazardous life of *each isotope*.” *Final Rule, Radiological Criteria for License Termination*, 62 Fed. Reg. 39,058, 39,083 (July 21, 1997) (“Final Rule”) (emphasis added). The NRC rejected this argument, reiterating the rationale that it had stated in the proposed rule for limiting the time period to 1,000 years:

As previously discussed in the preamble to the proposed rule, the Commission believes the use of 1000 years in its calculation of its maximum dose is reasonable based on the nature of the levels of radioactivity at decommissioned sites and the potential for changes in the physical characteristics at the site over long periods of time. . . . where the consequences of exposure to residual radioactivity at levels near background are small and peak doses for radionuclides of interest in decommissioning occur within 1000 years, long term modeling thousands of years into the future of doses that are near background may be virtually meaningless.

Id. Thus, the NRC explicitly rejected the argument that dose assessments should be conducted over periods that were dependent on the half-life of the nuclide at issue. The 1,000-year time period in NRC regulations applies to *all* facilities covered by the regulation, and *all* radionuclides residing at a given site.³ The N. J. Proposed Rule should be revised to delete requirements for dose calculations where the results would be meaningless.

In addition, the time calculation appears intended only to apply to SMC’s Newfield facility, for which it will have a discriminatory economic impact. The N. J. Proposed Rule states, “The proposed amendment to *N.J.A.C. 7:28-12.10(d)*, extending the time period of dose calculations to the time of peak dose, will have an economic impact on licensees only if the licensees have large amounts of contaminated material that will leach into the groundwater and the peak dose occurs after 1,000 years. The Department and Commission estimate that there are only one or two NRC licensees in the State that would fall into this category. These licensees are former manufacturing facilities and are in the process of decommissioning.” N. J. Proposed

³ The N.J. Proposed Rule cites the NRC as intending to apply the rule only to short-lived radionuclides and agreeing that for long-lived nuclides “future calculations beyond 1000 years would be valuable.” In fact, what the NRC actually said was:

Unlike analyses of situations where *large quantities* of long-lived radioactive material may be involved (e.g., a *high-level waste repository*) and where distant future calculations *may* provide some insight into consequences, in the analysis for decommissioning . . . long term modeling thousands of years into the future of doses that are near background may be virtually meaningless.

62 Fed. Reg. at 39,083 (emphasis added). Contrary to the characterization in the N.J. Proposed Rule, the NRC stated that calculation beyond a thousand years is meaningless except for special cases similar to a high-level waste repository that are not within the authority that would be held by N.J. as an Agreement State.

Rule, Compliance Costs discussion. SMC's Newfield facility is one of the facilities affected by this definition. These proposed decommissioning regulations should be revised to ensure the regulations have a rational basis, are consistent with the NRC rules and comparable programs in the rest of the country, and do not have a discriminatory impact on a single facility.

b. Applying New Jersey Surface Water Quality Standards To Radioactivity Lacks a Rational Basis

The N.J. Proposed Rule requires compliance with the New Jersey Surface Water Quality Standards ("SWQS"). *See, e.g.*, N. J. Proposed Rule 7:28-12.8(c); 7:28-12.11(a)4. The SWQS contain "anti-backsliding" provisions. N.J.A.C. 7:9B-1.5(d). If applied to radioactive discharges to surface waters, these provisions would preclude detectable radioactivity releases above background, even if the levels are significantly below those required to protect the health and safety of the public, because the SWQS do not allow measurable changes in water quality. "Category One Waters shall be protected from any measurable changes (including calculable or predicted changes) to the existing water quality." N.J.A.C. 7:9B-1.5(d)6(iii). Comparable provisions apply to surface waters other than Category One Waters. N.J.A.C. 7:9B-1.5(d)6(iv). The SWQS allow exceptions to the backsliding provisions only if "some change in ambient water quality should be allowed because of necessary and justifiable social or economic development." N.J.A.C. 7:9B-1.8(a); *see also* N.J.A.C. 7:9B-1.9(a)1(i). A decommissioning site may not be able to demonstrate that its discharges are necessary for "social or economic development", particularly given the overly vague standard which the Proposed Rule would adopt. Essentially, New Jersey is proposing to ban altogether any radioactive discharges to surface waters from remediation sites, an impractical standard for radioactivity that is not related to a rational public health and safety goal.

As the N. J. Proposed Rule notes, the NRC regulations allow radioactive discharges to surface waters, provided all pathways for exposure are considered and resulting doses are within limits. The N. J. Proposed Rule recognizes that New Jersey rules do not consider exposures through consumption of fish, use of irrigation water on crops, or bathing, but asserts that implementing the SWQS takes "into account the potential dose that could result from the contamination of surface water." N. J. Proposed Rule, Federal Standards Analysis. The N. J. Proposed Rule provides no further analysis as to how the effective ban proposed on discharges of radioactivity to surface waters by decommissioning sites in the N. J. Proposed Rule is consistent with the NRC approach to allow radioactive discharges to surface waters within limits.

Furthermore, the N. J. Proposed Rule does not consider that the NRC rules require that radioactive discharges to surface waters be minimized to the extent reasonable considering a balance of competing compliance costs and public health and safety benefits. *See* 10 C.F.R. § 20.1101(b). The N. J. Proposed Rule does not and can not explain the equivalence between its proposed impractical ban on discharges with the NRC approach of minimizing discharges consistent with a balance of cost and benefits. The application of SWQS to radioactivity should be deleted from the N. J. Proposed Rule as there is no rational relationship to its public health objectives.

The N. J. Proposed Rule appears to recognize that this effective ban would only apply to SMC's Newfield facility and result in an economic impact that is not justified in accordance with the New Jersey Code. The N. J. Proposed Rule states, "Proposed amended N.J.A.C. 7:28-

12.8(c) requires licensees to adhere to the New Jersey Surface Water Quality standards, *N.J.A.C. 7:9B*. The proposed amendment will have an economic impact only on those licensees whose activities have resulted in contamination to surface water. The Department knows of only one such facility in the State, which is a former manufacturing facility.” N. J. Proposed Rule, Compliance Costs discussion. Again, although not mentioned by name, SMC’s Newfield facility is the facility discussed. Furthermore, New Jersey appears to recognize that this regulation will have a discriminatory impact on SMC. These proposed decommissioning regulations should be revised to ensure the regulations are not arbitrary, have a rational basis focused on protection of human health and the environment, are consistent with the NRC rules and comparable programs in the rest of the country, and do not have a discriminatory impact on a single facility. This is particularly the case where radioactive discharges to surface water in New Jersey are not only permitted by Federal (NRC) regulations but routinely take place with no impact to the public health and safety.

c. The N. J. Proposed Rule Should Allow Calculation of Dose Based on Realistic Scenarios

The N. J. Proposed Rule requires from the use of default clean up criteria for radiological decommissioning whose basis are specific exposure scenarios. N. J. Proposed Rule 7:28-12.11(b). Furthermore, licensees may request consideration of alternate parameters for site-specific characteristics, but not for site-specific exposure scenarios. N. J. Proposed Rule 7:28-12.11(c). New Jersey has previously stated that this approach is based on the assumption that only the specific scenarios assumed by New Jersey “would endure for the length of time the residual radionuclides would be present.” *Soil Remediation Standards for Radioactive Material, Summary of Public Comments and Responses*, DEP Docket 11-99-06/697, adopted June 21, 2000, response to comment 93. In contrast, NRC guidance allows the use of realistic site-specific scenarios with justification for the reasons stated in *License Termination Rule Analysis*, SECY-03-0069 (NRC 2003). See *Consolidated Decommissioning Guidance*, NUREG-1757, Vol. 2, Ch. 5. New Jersey should reevaluate its approach to exposure scenario selection considering the more recent NRC guidance.

d. Dose Calculations Based on Realistic Degradation of Engineering Controls Over Time Should Be Allowed

The N. J. Proposed Rule states:

Under the Department's rules, the licensee would also have to provide for durable institutional controls and provide sufficient financial assurance to enable a responsible government entity or independent third party to carry out checks of the facility every five years and to maintain the controls. When modeling the all controls fail scenario, the Department interprets failure of all institutional and engineering controls strictly. This means that no credit for any engineering controls, such as a fence or cover, can be taken when performing the model to determine if the 100 mrem annual dose is exceeded. The NRC, however, allows the licensee to take credit for controls that have degraded, but not completely failed. So the NRC would allow a small hole in a cover rather, for

example, which could result in a significant difference in the resultant dose.

N. J. Proposed Rule, Compliance Costs discussion. The NRC approach reflects that engineered structures degrade by known physical processes. Instead, New Jersey proposes to assume that engineered structures instantaneously fail at the precise moment when institutional controls are presumed to end. The N. J. Proposed Rule does not and can not provide a reasoned basis for assuming engineered structures simply vanish, rather than degrading through processes consistent with the known physical world. Furthermore, the assumption is inconsistent with the objectives of the regulations as it discourages licensees from providing robust barriers as engineering controls. Contrary to the NRC approach, the New Jersey approach would treat even the most robust engineering control like it is a sand castle on the beach. The N. J. Proposed Rule should be revised to provide for calculations based on realistic degradation of engineering controls over time.

e. The N. J. Proposed Rule Should Allow Use of NRC Remediation Dose Criteria When Appropriate

The N.J. Proposed Rule will not allow consideration of alternate remediation standards if they would result in increasing in any manner the allowed incremental dose criterion of 15 mrem/yr. *See, e.g.*, N. J. Proposed Rule 7:28-12.11(b); 7:28-12.15(a) and (b). The N.J. Proposed Rule will not allow consideration of alternate remediation standards if they would be supported by increasing in any manner the allowed 100 mrem/yr incremental dose criterion in the event controls fail. *See, e.g.*, N. J. Proposed Rule 7:28-12.11(e).

The N. J. Proposed Rule concedes that the NRC remediation standards differ from New Jersey's.

Under the existing Federal and State rules, the NRC requires remediation to a dose of 25 mrem per year (mrem/y) with an as low as reasonably achievable (ALARA) requirement. The Department's and the Commission's existing rules require remediation to a dose of 15 mrem/y. (See *N.J.A.C. 7:28-12.8*.) The NRC does not require a state to adopt the NRC's remediation dose criterion in order to become an Agreement State; consequently, the Department is continuing its remediation dose criterion of 15 mrem/y.

N. J. Proposed Rule, Subchapter 12 discussion. The N. J. Proposed Rule provides no justification for requiring stricter remediation standards than those provided by the NRC, nor for not allowing licensees to apply the Federal standards. Specifically, the N. J. Proposed Rule recognizes that the NRC and New Jersey remediation standards are equivalent as a practical matter. *Id.* The consequence of not allowing consideration of the NRC standards in appropriate cases is that New Jersey would prohibit returning land to productive use when allowed by Federal regulations. The N. J. Proposed Rule should be revised to either adopt the NRC criteria or allow for consideration of alternate dose criteria, such as the NRC criteria, in appropriate cases.

2. New Jersey Improperly Redesignates Source Material as "Diffuse NARM" Without a Rational Basis

The N. J. Proposed Rule defines "Diffuse NARM" such that the definition could improperly cover source material subject to NRC regulation. The N. J. Proposed Rule descriptive material seems to recognize that Diffuse NARM does not include material regulated by the NRC as source material.

The Department and the Commission propose to amend Subchapter 4, and its heading, so that it applies only to diffuse sources of NARM. Because Congress amended the Energy Policy Act to change the definition of byproduct material to include discrete sources of NARM, the State must have regulations that encompass diffuse sources of NARM, in order that these sources are regulated.

Diffuse NARM is a radionuclide that has become concentrated, but not for the purpose of use in commercial, medical, or research activities. An example of diffuse NARM is the concentrated naturally occurring radioactive materials in a waste pile from a mineral extraction facility. In the process of extracting one or more non-radioactive minerals from soil, the naturally occurring radioactive materials become concentrated above licensing criteria in the waste pile. Because the waste has no use in commercial, medical, or research activities, it is not discrete and, therefore, not regulated under Federal (or Agreement State) authority.

The existing subchapter applies to all sources of NARM. Once the Federal Energy Policy Act of 2005 goes into effect in August 2009, NARM materials that the NRC would otherwise regulate will be regulated by the Agreement States, including New Jersey. The appropriate Federal regulations are incorporated throughout the chapter for that purpose. However, diffuse NARM is not a NRC-regulated material, and is not included in the Agreement State rules. Therefore, the State must amend its rules in order that they apply to diffuse NARM. Therefore, the Department and the Commission are proposing to amend *N.J.A.C. 7:28-4.1* to insert the word "diffuse" before accelerator produced and naturally occurring radioactive materials.

N. J. Proposed Rule, Subchapter 4 discussion. The N. J. proposed rule apparently is only intended to cover material not currently regulated by the NRC (“diffuse NARM is not a NRC-regulated material”). However, the proposed regulation at N. J. Proposed Rule 7:28-4.1(b) is ambiguous. The NRC defines as source material naturally occurring uranium or thorium above certain threshold criteria. 10 C.F.R. § 40.4. However, Subchapter 4 of the Proposed Rule (quoted above) provides as an example of Diffuse NARM “concentrated naturally occurring radioactive material in a waste pile for a mineral extraction facility.”⁴ Since this material could well be NRC-licensed source material, the N.J. Proposed Rule seems to be trying to create an ambiguity between what is, and what is not, NRC-licensed materials. Therefore, it appears that the N. J. Proposed Rule should not be read to regulate the source material currently licensed by the NRC at SMC’s Newfield facility as Diffuse NARM.

The N. J. Proposed Rule also appears to suffer from a drafting error. Currently, source, byproduct and special nuclear material are explicitly excluded from the definition of Diffuse NARM. The N. J. Proposed Rule deletes the exception for source material from the scope of New Jersey regulations of Diffuse NARM. N. J. Proposed Rule 7:28-4.1(b). The N. J. Proposed Rule attempts to justify the deletion, stating: “This sentence is no longer necessary because this subchapter applies only to diffuse NARM. Regulation of byproduct, source, and special nuclear material are addressed in the Federal rules that are proposed to be incorporated by reference elsewhere in these proposed rules.” N. J. Proposed Rule, Subchapter 4 discussion. As drafted, the definition of Diffuse NARM would also cover the material that contains naturally occurring or accelerator-produced isotopes covered in the other proposed subchapters if the exception is deleted. The N. J. Proposed Rule should be corrected to ensure that source material does not fall within the definition of N. J. Proposed Rule 7:28-4.1(b).

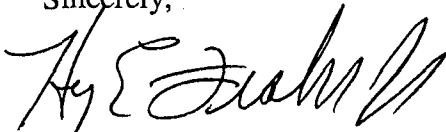
⁴ To the extent that the description in the N.J. Proposed Rule (quoted above) of the general mineral extraction process as concentrating is meant to describe the SMC’s Newfield facility, the description is factually incorrect. The SMC process added significant weights of aluminum powder as part of the process resulting in a tough, volcanic rock-like slag that is diluted, not concentrated, in uranium and thorium compared to the incoming raw material.

3. The Basis For Calculating Certain Fees Is Inconsistent With The Governing New Jersey Statute

In Table 2 of Subchapter 64 of the N. J. Proposed Rule, two categories of decommissioning or reclamation work are charged at "Full Cost." However, no definition of "Full Cost" is provided, nor is there an explanation of whether this fee is an annual or periodic fee. In addition, the annual fee adjustment factors in 7:28-64.10 of the N. J. Proposed Rule have no relationship to the actual costs incurred by N. J. The governing New Jersey statute requires that fees shall be annual or periodic; shall "be based on criteria contained in the fee schedule;" and shall "reflect the actual or projected expense incurred by the department in the performance of the service." N.J.S.A. 26.2D-9(1). The fee provisions in the Proposed Rule do not comply with the requirements of N.J.S.A. 26.2D-9(1) and must be corrected.

If you have any questions or comments concerning this matter, please feel free to contact me at 740 432 6345 ext 246 or my HSE Director, David White at 614 599-9582.

Sincerely,



Hoy E. Frakes, Jr.
President

cc: Robert Haemer, Esq., Pillsbury Winthrop Shaw Pittman LLP USNRC,
Federal and State Materials and Environmental Management
Jack Hayes, USNRC
David Smith, SMC RSO
David White, SMC

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NEW JERSEY REGISTER
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VOLUME 40, ISSUE 18

ISSUE DATE: SEPTEMBER 15, 2008

RULE ADOPTIONS

**ENVIRONMENTAL PROTECTION
ENVIRONMENTAL REGULATION
DIVISION OF ENVIRONMENTAL SAFETY AND HEALTH
COMMISSION ON RADIATION PROTECTION**

40 N.J.R. 5196(b)

Adopted Repeals: N.J.A.C. 7:28-3.5, 3.8, 3.11, 3.13, 4.19, 5.4, 7.5, 8.3, 8.4, 9, 10.4, 10.5, 10.9 and 11

Adopted New Rules: N.J.A.C. 7:28-2.13, 4.16, 12.10, 12.15, and 50 through 64

Adopted Repeals and New Rules: N.J.A.C. 7:28-6

Adopted Amendments: N.J.A.C. 7:28-1.1, 1.4, 1.5, 3.1, 3.2, 3.6, 3.10, 4.1 through 4.18, 5.1 through 5.3, 7.1 through 7.3, 8.1, 8.2, 10.6, 10.8, 12.2 through 12.5, 12.8 through 12.12, 12 Appendix A, 13.1, 13.2, 17.1 through 17.6, 17.8, 18.1, and 48.2

Radiation Protection Programs

Proposed: May 19, 2008 at 40 N.J.R. 2309(a).

Adopted: August 20, 2008 by Lisa P. Jackson, Commissioner, Department of Environmental Protection and August 12, 2008 by the Commission on Radiation Protection, Julie K. Timins, M.D., Chair.

Filed: August 21, 2008 as R.2008 d.281, **with substantive and technical changes** not requiring additional public notice and comment (see N.J.A.C. 1:30-6.3).

Authority: N.J.S.A. 13:1B-1 et seq., 13:1D-1 et seq. and 26:2D-1 et seq.

DEP Docket Number: 04-08-04/637.

Effective Date: September 15, 2008.

Operative Date: Operative upon publication of notice in the New Jersey Register by the Department of Environmental Protection that the U.S. Nuclear Regulatory Commission and the State of New Jersey have entered into an Agreement for the State to regulate source, certain special nuclear, and by-product material.

Expiration Date: June 21, 2010.

The Department of Environmental Protection (Department) and the Commission on Radiation Protection (Commission) are adopting new rules, repeals and amendments to the Radiation Protection Programs' rules, N.J.A.C. 7:28, which new rules, repeals and amendments are part of New Jersey's becoming an Agreement State with the U.S. Nuclear Regulatory Commission (NRC).

New Jersey has a comprehensive radiation protection program encompassing x-ray machines, naturally occurring or accelerator produced radioactive materials (NARM), radon, clean up of radioactively contaminated sites, monitoring around nuclear power plants, emergency preparedness and response to radiological incidents including transportation accidents, and requirements for non-ionizing sources of radiation. Additionally, there are requirements for licensure and certification of people - radiological technologists, nuclear medicine technologists, radon testers and mitigators, and qualified medical physicists.

States have the option to assume responsibility for regulation of radioactive materials that are governed under the Atomic Energy Act (AEA) through an agreement between the Governor of the state and the United States Nuclear Regulatory Commission (NRC). (See 42 U.S.C. §2021.) This is known as becoming an "Agreement State." The AEA requires that an Agreement State's regulations be compatible with the NRC's regulations, and that the state's regulations be adequate to protect the public health and safety, with respect to such materials. (See 42 U.S.C. §2021(d).)

Prior to the 2005 Energy Policy Act (42 U.S.C. §§13201 et seq.), the definition of byproduct material included any radioactive material (except special nuclear material) yielded in, or made radioactive by, exposure to the radiation incident to the process of producing or utilizing special nuclear material. This type of byproduct material includes nuclear medicine produced by a reactor (instead of an accelerator). In August 2005, President Bush signed the Energy Policy Act (42 U.S.C. §§13201 et seq.). By changing the definition of byproduct material to include discrete sources of NARM, the Energy Policy Act gives the NRC control over every aspect of almost all radioactive materials beginning in August 2009, unless a state enters into an Agreement with the NRC. In other words, the existing New Jersey program, except for a limited amount of material, will be Federally preempted, unless New Jersey becomes an Agreement State. In light of this approaching deadline, and mindful of the State's history and experience in regulating radioactive materials, the State notified the NRC of its decision to become an Agreement State by letter dated May 23, 2006, from Governor Corzine to NRC Chairman Nils J. Diaz.

New Jersey is seeking approval from the NRC to regulate source, certain special nuclear, and byproduct material. If the NRC grants New Jersey Agreement State status, New Jersey will have authority to regulate these materials instead of the NRC. The within rules establish New Jersey's regulation of source, certain special nuclear (states can only assume authority to regulate small quantities of special nuclear material), and byproduct material, in order that New Jersey can become an Agreement State.

When the NRC grants New Jersey Agreement State status, which is anticipated to be in late summer 2009, the Department will publish a notice in the New Jersey Register, advising that the within amendments, repeals and new rules are operative. Until the new rules, repeals and amendments are operative, New Jersey must continue to rely on the Federal government to license and regulate source, special nuclear, and byproduct materials.

Summary of Public Comments and Agency Responses:

The following individuals, companies, organizations, and/or agencies submitted written comments on the proposal.

1. Laurence Bernson - Alcatel-Lucent
2. J. Russell Cerchiaro - Schering-Plough
3. Michael J. Drzyzga - Hoffmann-La Roche, Inc.
4. Sue M. Dupre - Princeton University Environmental Health and Safety
5. Michael Egenton - New Jersey State Chamber of Commerce
6. Hoy E. Frakes, Jr. - Shieldalloy Metallurgical Corporation
7. Halim A. Hasan - Lundbeck Research USA, Inc.
8. Debra Hrabinski
9. Tony Russo - Chemistry Council of New Jersey
10. Vincent Williams - Merck Research Laboratories

General

40 N.J.R. 5196(b)

1. COMMENT: The comment period should be extended 60 days because the length and complexity of the proposal and the time of year has made it difficult to complete a review of the proposal and develop appropriate comments. (1, 2, 3, 4, 5, 7, 8, 9, 10)

RESPONSE: Although the proposal was lengthy, the substance of the proposal was straightforward. As stated in the Summary, 40 N.J.R. 2309(a) at 2310, New Jersey rules must be compatible with the Nuclear Regulatory Commission (NRC) regulations; accordingly, the Department and the Commission elected to incorporate the NRC's regulations by reference. NRC licensees in New Jersey had the opportunity to review and comment on NRC regulations when they were proposed. If a facility is in compliance with NRC regulations, the facility should have no difficulty complying with the New Jersey rules. The difference is that the regulator will be the Department instead of the NRC.

As was discussed in the Summary, 40 N.J.R. 2310, if New Jersey does not become an Agreement State by August 2009, the NRC could assume authority over all NARM, which is currently regulated by New Jersey. The State can continue to regulate NARM under a waiver that expires on August 8, 2009.

It was not practical for the Department and the Commission to extend the comment period, in light of the NRC's schedule for reviewing New Jersey's application to become an Agreement State. Appendix C from the NRC's Office of Federal and State Materials and Environmental Management (FSME) Programs State Agreement procedure on Processing an Agreement (SA-700), includes a schedule for processing a new Agreement (http://nrc-stp.ornl.gov/procedures/sa700hb_appc.pdf). The amount of time projected by the NRC to process an Agreement once the NRC receives a formal Agreement application is 39 weeks (between nine and 10 months), provided the application requires little or no revision, the Commission reviews and votes on the two required NRC staff papers in a timely manner (the NRC staff submit a paper to the Nuclear Regulatory Commission members on the proposed Agreement and another paper on the final Agreement), and the state has the required number of employees hired and trained. If the Agreement is to be in place by August 2009, New Jersey should submit its application no later than September 2008, which gives the NRC 11 months to review and approve the application. Part of a complete application is adopted rules. If the comment period had been extended, the rules would likely not be in place to submit a complete application with sufficient time before August 2009 for the NRC to complete its process.

2. COMMENT: Many current NRC licensees in New Jersey are not currently licensed by the Department, and do not have access to the existing Department regulations. An outdated and incomplete version of N.J.A.C. 7:28 is available "on-line." The rules must be purchased as part of the entire Department code at a cost of over \$ 500.00. In order for the proposed new rules to be effectively evaluated by those New Jersey based NRC licensees, they must obtain the current N.J.A.C. 7:28. This purchase process significantly delays the review, and therefore supports extending the comment period. (3, 7, 8)

RESPONSE: The Department's regulations webpage explains that the posted statutes and regulations are "courtesy copies" of the documents. The link on the rules page for how to get copies of the Department's rules states that the official current version of the code must be purchased from LexisNexis. However, another link from the rules page takes one to New Jersey Office of Administrative Law, www.nj.gov/oal/rules.html, where there is a link to LexisNexis, which provides free on-line public access to the New Jersey Administrative Code and the New Jersey Register, www.lexisnexis.com/njoal. As an alternative, the New Jersey Register and the New Jersey Administrative Code are available for review at public and university libraries throughout the State.

The majority of the amendments to the rules incorporate the NRC regulations by reference. The NRC regulations are available on the NRC website, <http://www.nrc.gov/reading-rm/doc-collections/cfr/>, through the Federal Government Printing Office website at <http://www.gpoaccess.gov/CFR/INDEX.HTML>, and at public and university libraries throughout the State.

3. COMMENT: There were an insufficient number of stakeholder meetings about the proposed rules. (3, 10)

RESPONSE: As part of the rulemaking, there were six public stakeholder meetings. Department representatives gave presentations about the rules at the meeting of the New Jersey Chapter of the Health Physics Society, Somerset, December 5, 2006; and the meeting of the Commission on Radiation Protection, Ewing, March 21, 2007. The Department met with the Medical Physicists and other industry groups at the Radiation Protection office, Ewing, on July 17, 2007; and made a presentation to the Mid-Atlantic States and New Jersey Health Physics Society in Lambertville, October 16, 2007; and a presentation to the New Jersey Society of Nuclear Medical Technologists in Atlantic City on March 7, 2008. On December 6, 2007, the Department met with radiological remediation consultants to discuss De-commissioning Regulations.

In addition, the Department posted a link to Agreement State issues on its website, which included a list of Frequently Asked Questions. The Department and the Commission believe that they provided ample opportunities for stakeholders to meet with the Department and the Commission, to learn about the proposed rules and to discuss the rules with Department representatives.

Domestic Treatment Works Discharge Limits

4. COMMENT: There is an inconsistency between the Summary and the rule text at N.J.A.C. 7:28-6 regarding release limits for H-3 and C-14. The Summary at 40 N.J.R. 2317 states that a limit of one curie would apply to both H-3 and C-14, but the rule incorporates the NRC regulation by reference. The NRC discharge limits are five curies per year for H-3 and one curie per year for C-14. (3, 4, 8, 10)

RESPONSE: The Summary is not correct when it states that the limit will be one curie for H-3 and C-14. The rule text is correct, in which 10 CFR 20.1301 is incorporated by reference, replacing the term "sanitary sewer" with "domestic treatment works." There is no change from the current NRC discharge limits, which are five curies per year for H-3 and one curie per year for C-14.

Throughout the Summary, the Department and Commission indicated that the intention is to be adequate and compatible with the Federal rules, as is required if New Jersey is to be an Agreement State. A limit of one curie per year for H-3 would not be compatible with the Federal rules. Consequently, the rule text governs.

Personnel Monitoring

5. COMMENT: Proposed Subchapter 7 no longer contains any reference to personnel monitoring and, therefore, cross references from different subchapters are no longer valid. (4)

RESPONSE: In Subchapter 7, personnel monitoring is mentioned only in N.J.A.C. 7:28-7.4, Use of personnel monitoring equipment. The Department and Commission neither proposed nor adopted amendments to N.J.A.C. 7:28-7.4. (Although the Summary, 40 N.J.R. 2319, does refer to amendments to N.J.A.C. 7:28-7.4 to remove references to radioactive materials or licensees, no such amendment was necessary or proposed.)

The section remains in the rules and cross references to it are valid.

Decommissioning

6. COMMENT: The rules should contain a definition of real property, since the term is used in the decommissioning subchapter (N.J.A.C. 7:28-12). (4)

RESPONSE: The Department and Commission believe that the term "real property," as it is customarily used, is clear. The term includes land and things permanently attached to the land, such as buildings, and stationary mobile homes. Anything that is not real property would be materials and equipment, for purposes of Subchapter 12, Remediation Standards for Radioactive Material, where the term "real property" is used. The rules' dose criterion at N.J.A.C. 7:28-12.8 applies to the land and buildings. The contribution from residual radioactivity from buildings and land together must not exceed 15 millirem per year.

7. COMMENT: Subchapter 12 is not clear with regard to release levels for building surfaces and materials and equipment. The NRC does not include such levels in its rules; however, the NRC refers to Regulatory Guidance documents to support a licensee's "free release" of buildings and equipment. The rule should be clarified or supplemented by cross referencing the NRC guidance upon adoption. (3)

RESPONSE: As stated in the Response to Comment 6, the Department and Commission's dose criterion of 15 mrem per year at N.J.A.C. 7:28-12.8 applies to land and buildings. The NRC guidance documents related to "free release" of materials and equipment are not part of the Federal rules, and are not incorporated into these rules; however, because the adopted rules incorporate the NRC's rules by reference, the NRC's guidance is useful for interpretation. Therefore, the Commission and the Department will use the NRC's current approach for "free release" of materials and equipment outlined in NRC Regulatory Guide (NUREG) 1757, Vol.1, Rev. 2, Consolidated Decommissioning Guidance, which is to review specific cases on an individual basis.

NUREG 1757 provides a description of the current NRC approach to releasing solid materials, which is on a case by case basis. For materials and equipment with surface contamination, the NRC uses either the criteria in Regulatory

Guide 1.86, "Termination of Operating Licenses for Nuclear Reactors," or the criteria in Fuel Cycle Policy and Guidance Directive FC 83-23, entitled "Guidelines for Decontamination for Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Byproduct, Source or Special Nuclear Materials Licenses." Both guidance documents can be found on the NRC website (www.nrc.gov).

The release of materials and equipment with volumetric contamination is implemented by the NRC under the provisions of the December 27, 2002, NRC Memorandum, "Update on Case-Specific Licensing Decisions on Controlled Release of Concrete from Licensed Facilities" (referenced in U.S. Nuclear Regulatory Commission, All-Agreement States Letter No. STP-03-003, "Update on Case-Specific Licensing Decisions on Controlled Release of Concrete from Licensed Facilities," January 15, 2003.). This memorandum indicates that controlled releases of volumetrically contaminated concrete may be approved under an annual dose criterion of a "few mrem." NUREG 1757 goes on to state that a few mrem means zero to five mrem per year total effective dose equivalent (TEDE).

8. COMMENT: The Department and Commission propose to delete text referencing acceptable testing procedures for water and soil at N.J.A.C. 7:28-12.5(c) and (d), and replace it with certification by the Department's Office of Quality Assurance. This could be interpreted to mean that the only acceptable testing methods would be laboratory analysis. Would surveys by hand held instruments still be allowed for determining building surface contamination? (3)

RESPONSE: In 1999, when the Department and the Commission proposed amendments to Subchapter 12, the Department's Office of Quality Assurance did not certify laboratories for radionuclides in soil analyses. Therefore, the Department was compelled to propose and adopt N.J.A.C. 7:28-12.5(c) and (d), which contain requirements on acceptable procedures and intercomparison testing. (See (31 N.J.R. 1723(a) at 1730, 32 N.J.R. 2866(a) at 2884.) Since then, the Office of Quality Assurance has updated its laboratory certification process to include certification of radiological analyses in soil, which make the specific language in the previous rules at N.J.A.C. 7:28-12.5(c) and (d) unnecessary.

The Department's existing regulation at N.J.A.C. 7:28-12.5(e) addresses surveys, requiring surveying with hand held instruments to be done in accordance with the Department's Field Sampling Procedures Manual. The Department and Commission did not propose amendments to N.J.A.C. 7:28-12.5(e), other than to recodify it as (d). Thus, surveys by hand instruments continue to be allowed.

9. COMMENT: The method for calculating compliance with radiological decommissioning criteria in the proposed rule is overly restrictive. Nationwide, radiation control programs have found it appropriate for efficient and timely radiological decommissioning to provide flexibility in the analysis approach to address the wide variation in the regulated facilities. Specifically, analyzing dose from radiological decommissioning sites for more than 1,000 years into the future, as required at proposed N.J.A.C. 7:28-12.10(d) and 12.11(f)2iii, is meaningless, and the Department misinterpreted the NRC's response to comment document regarding calculations beyond 1,000 years being valuable for long-lived radioactive material. The NRC has stated that modeling should be specific to each radionuclide as:

Unlike analyses of situations where *large quantities* of long-lived radioactive material may be involved (e.g. a *high-level waste repository*) and where distant future calculations may provide some insight into consequences, in the analysis for decommissioning. . . long term modeling thousands of years into the future of doses that are near background may be virtually meaningless. (Emphasis added by commenter.)

52 Fed. Reg. 39058, 39083 (July 21, 1997) (Response F.7.3)

If the peak dose occurs in less than 1,000 years, there is no rational basis to analyze for a thousand-year period. (6)

RESPONSE: The existing regulation at N.J.A.C. 7:28-12.10(f)2iii requires dose calculations to be extended for 1,000 years. Thus, the requirement that dose calculations be measured for 1,000 years is not new. The Department and the Commission proposed new N.J.A.C. 7:28-12.10(d) and amended N.J.A.C. 7:28-12.11(f)2iii to require dose calculations to be extended to the time of peak dose or 1,000 years, whichever is longer.

The NRC decommissioning regulation at 10 CFR 20.1401(d) requires that when calculating the total effective dose equivalent to the average member of the critical group, the licensee shall determine the peak annual total effective dose equivalent (TEDE) expected within the first 1,000 years after decommissioning. The commenter's interpretation of the NRC's response to a comment on making the time period correlate with the half-life of the specific nuclide is different than the Department and the Commission's interpretation. A clear point that the NRC made is that the 1,000-year modeling requirement does not apply to long-lived nuclides. Specifically, the NRC responded:

As previously discussed in the preamble to the proposed rule, the [Nuclear Regulatory] Commission believes use of 1000 years in its calculation of maximum dose is reasonable based on the nature of the levels of radioactivity at decommissioned sites and the potential for changes in the physical characteristics at the site over long periods of time. Unlike analyses of situations where large quantities of long-lived radioactive material may be involved (e.g., a high-level waste repository) and where distant future calculations may provide some insight into consequences, in the analysis for decommissioning, where the consequences of exposure to residual radioactivity at levels near background are small and *peak doses for radionuclides of interest in decommissioning occur within 1000 years*, long term modeling thousands of years into the future of doses that are near background may be virtually meaningless.

52 Fed. Reg. 39058, 39083 (July 21, 1997) (Response F.7.3) (emphasis added).

Long-lived radionuclides, such as uranium and thorium, have half-lives in the millions and billions of years and peak doses may well occur after 1,000 years. The Department and Commission believe it is vital to consider the peak dose, whenever it occurs, to ensure that adequate measures are taken to protect the public health and safety. Moreover, in its review of the proposed Agreement State rules, the NRC did not object to the proposed language requiring modeling to the time of peak dose beyond 1,000 years, and agreed that this language met the compatibility requirements for becoming an Agreement State.

With regard to the mandate in N.J.A.C. 7:28-12.10(d) and 12.11(f)2iii that modeling be to the time of peak dose or 1,000 years, whichever is longer, one will not know when peak dose occurs unless it can be demonstrated that the dose decreases over time. For these reasons, the Department and the Commission do not agree that N.J.A.C. 7:28-12.10(d) or 12.11(f)2iii should be modified or deleted on adoption.

10. COMMENT: The Department and the Commission's requirement at N.J.A.C. 7:28-12.8(c) and 12.11(a)4 for decommissioned sites to meet the surface water quality standards would prohibit surface water discharges because of the "anti-backsliding" provisions in the surface water rules. Specifically, the surface water quality standard at N.J.A.C. 7:9B-1.5(d) would preclude detectable radioactivity releases above background, even if the levels are significantly below those required to protect the health and safety of the public, because provisions of the Surface Water Quality Standards do not allow measurable changes in water quality. Exceptions to the backsliding provisions apply only if some change in ambient water quality should be allowed because of necessary and justifiable social or economic development, and that a decommissioned facility may not be able to demonstrate that.

The proposed rules do not consider that the NRC rules allow radioactive discharges to surface waters, provided that all pathways for exposure are considered and resulting doses are within limits and that they are minimized to the extent reasonable considering a balance of costs and benefits. The Department and the Commission have proposed a ban on any radioactive discharges to surface waters from remediation sites and this is an impractical standard for radioactivity that is not related to a rational public health and safety goal.

The proposal does not explain the equivalence between its proposed impractical ban on discharges with the NRC approach of minimizing discharges consistent with a balance of cost and benefits. Application of the Surface Water Quality Standards to radioactivity should be deleted from the rules. The proposed provision has a discriminatory impact on the one facility that would be affected by this provision. (6)

RESPONSE: The intent of N.J.A.C. 7:28-12.8(c) and 12.11(a)4 is to ensure that decommissioned facilities with residual material present do not affect the quality of any surface water near the facility. The Department and the Commission's intent in referencing the surface water quality rules was to ensure that the surface water standards for radioactivity at N.J.A.C. 7:9B-1.14(c)6 are met in order to verify that health and safety of humans and the environment are sufficiently protected.

The Department's provisions on backsliding and antidegradation in N.J.A.C. 7:9B apply to permitted discharges, not potential runoff from decommissioned sites. Accordingly, they would apply to a decommissioned facility only if it seeks a new or expanded wastewater discharge permit.

To ensure that licensees do not have to search through the Surface Water Quality Standards rules (N.J.A.C. 7:9B) to find the rule relating to radioactivity, the Department and the Commission are modifying N.J.A.C. 7:28-12.8(c) on adoption to replace the reference to the entire surface water chapter to the specific provision that contains the standards for radioactivity. The Department is making a similar modification at N.J.A.C. 7:28-12.11(a)4.

As explained above, there is not an impractical ban on surface water discharges; rather, the licensee must ensure that runoff to surface water from a decommissioned site is not over the surface water quality standards for radioactivity. The NRC's approach of minimizing discharges consistent with a balance of cost and benefits is termed ALARA. As explained in the Response to Comment 13 below, the Brownfield and Contaminated Site Remediation Act does not allow this approach.

The fact that there may be only one facility in the State now affected by the rule does not mean that other facilities will not be affected in the future. In fact, each facility at which there is a potential for radioactive materials to migrate to a stream could be affected. Creating an open class is not the equivalent of special legislation, which is prohibited, nor is it arbitrary or discriminatory.

11. COMMENT: The rules should allow calculation of dose based on realistic scenarios. Proposed N.J.A.C. 7:28-12.11(b) requires the use of default clean up criteria whose bases are specific exposure scenarios. Licensees may request consideration of alternate parameters for site-specific characteristics, but not for site-specific exposure scenarios. NRC guidance allows the use of realistic site-specific scenarios with justification for the reasons stated in their License Termination Rule Analysis, and Consolidated Decommissioning Guidance, NUREG 1757, Vol. 2, Ch. 5. Reevaluate the approach to exposure scenario selection, in light of the more recent NRC guidance. (6)

RESPONSE: The Department and the Commission do allow the use of some, but not all, alternate site-specific exposure scenarios. For example, adopted N.J.A.C. 7:28-12.11(c)4 (formerly N.J.A.C. 7:28-12.10(c)4) allows the Department to consider alternate indoor and outdoor occupancy times, if they are justified by land uses other than residential or commercial.

In proposing the adopted rules, the Department and the Commission considered the updated NRC guidance, but the basis for Tables 6 and 7 at N.J.A.C. 7:28-12.11(b) (which tables were not amended in the adopted rules) was provided when the rules were proposed at 31 N.J.R. 1723(a), and the parameters in the tables remain justified.

An explanation on how these values were derived is provided in the Department's publication Development of Generic Standards for Remediation of Radioactively Contaminated Soils in New Jersey. This document may be obtained by contacting the Bureau of Environmental Radiation at (609) 984-5400 or from the Radiation Protection Program's web site at <http://www.state.nj.us/dep/rpp/index.htm>. The allowed minimum soil radionuclide concentrations are different for each radionuclide because of their differing properties. For example, the radionuclide thorium-232 is a strong gamma emitter; therefore, the external exposure pathway is the major contributor to dose, whereas uranium-238 contributes the most dose via the groundwater pathway. (31 N.J.R. 1723(a))

The Department and the Commission established sufficiently conservative bounds on the exposure scenarios in Tables 6 and 7 of adopted N.J.A.C. 7:28-12.11(b) to ensure that the dose criteria would be met for the length of time the residual radionuclides would be present (thousands to billions of years).

12. COMMENT: Dose calculations based on realistic degradation of engineering controls over time should be allowed. The NRC approach reflects that engineered structures degrade by known physical processes. N.J.A.C. 7:28-12.11(e) assumes that engineered structures instantaneously fail at the precise moment when institutional controls are presumed to end. The proposed rule does not and can not provide a reasoned basis for assuming engineered structures simply vanish, rather than degrading through processes consistent with the known physical world. (6)

RESPONSE: The Department and the Commission amended N.J.A.C. 7:28-12.11(e) only to make it applicable to licensees, as well as petitioners. Consequently, it remains in all other respects the same as previous N.J.A.C. 7:28-12.10(e), including the provision regarding institutional and engineering controls.

The adopted rules do not assume that the engineered barriers fail instantaneously. Rather, the rules require the Department to consider the public health consequences in the event that the engineered barriers completely fail at some point in the future. This is a reasonable approach to ensure an adequate degree of protection to the public health and safety. The NRC approach of assuming that engineered structures degrade over time does not take into account intentional human intervention.

In the Department's experience, human intervention greatly increases radiation exposure at radiologically contaminated sites. At some sites, signs indicating that radioactive materials are present are missing, fences have holes cut into them, and there is evidence (including the presence of a mattress and warm coffee cup) of persons residing on sites that

are restricted due to the presence of radioactive materials. This human-caused degradation of engineering controls occurred after only 10 years.

Whenever engineering controls fail, under adopted N.J.A.C. 7:28-12.11(e) the licensee would have to show that the all control fails dose criterion (100 mrem/y) is met. This level is over six times the unrestricted dose criterion of 15 mrem per year.

13. COMMENT: The Department and the Commission should allow use of NRC remediation dose criteria when appropriate and when justified based on the As Low As Reasonably Achievable (ALARA) principle. Proposed N.J.A.C. 7:28-12.11(e) would not allow consideration of alternate remediation standards if they would result in increasing in any manner the allowed incremental dose criterion of 15 mrem per year, and would not allow consideration of remediation standards if they would be supported by increasing in any manner the allowed 100 mrem per year all controls fail dose criterion.

The proposal contains no justification for requiring stricter remediation standards than those provided by the NRC, nor for not allowing licensees to apply the Federal standards in appropriate cases. The proposed rule would prohibit returning land to productive use when allowed by Federal regulations. (6)

RESPONSE: Neither the remediation criterion of 15 mrem per year at N.J.A.C. 7:28-12.8(a)1 nor the all controls fail dose criterion of 100 mrem per year is new, nor is either amended in the adopted rules. These dose criteria have been in the rules since August 2000 (31 N.J.R. 1723(a), 32 N.J.R. 2866(a)). At the time they proposed the criteria, the Department and the Commission justified the 15 mrem per year incremental dose limit in a publication entitled, Development of Generic Standards for Remediation of Radioactively Contaminated Soils in New Jersey, which was made available to the public on the Department's website, and by hard copy if requested. The 100 mrem per year all controls fail dose criterion was justified in the Summary to the proposed Soil Remediation Standards for Radioactive Materials (31 N.J.R. 1724-1725).

The fact that these dose criteria do not have an explicit associated ALARA requirement is also not new. ALARA determinations allow the use of cost as a factor for determining what level of remediation is cost effective below the standards. The Department and the Commission did not include a provision for ALARA in meeting these dose criteria because the Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-1 et seq., does not allow such a provision.

As explained in the Response to Comment 9 above, there is flexibility in complying with the remediation standards, including the availability of a petition for alternative remediation standards, N.J.A.C. 7:28-12.11.

14. COMMENT: The Department and the Commission improperly designated source material as "diffuse NARM" without a rational basis. Proposed amended Subchapter 4 is intended to cover only material that is not currently regulated by the NRC; however proposed N.J.A.C. 7:28-4.1(b) is ambiguous. The NRC defines as source material naturally occurring uranium or thorium above certain threshold criteria (10 CFR 40.1). The Summary of Subchapter 4, 40 N.J.R. 2312, provides as an example of diffuse NARM, "concentrated naturally occurring radioactive material in a waste pile for a mineral extraction facility." This creates an ambiguity between what is and what is not NRC-licensed materials.

The proposed deletion of the exception for source, special nuclear and byproduct material at N.J.A.C. 7:4.1(b), could be used to regulate source material as diffuse NARM. (6)

RESPONSE: The Department and the Commission can understand the confusion this may have caused for source material licensees. There are several facilities in the State that in the past extracted minerals either from native sand or imported material, concentrated naturally occurring radioactive materials (NORM) in the process and are now left with waste piles with technologically enhanced NORM (TENORM). This TENORM does not meet the definition of source material (the uranium and thorium are below 0.05 percent by weight), but the concentration of uranium and/or thorium is above the exemption for licensing NARM. Any facility that possesses uranium or thorium or any combination thereof above 0.05 percent by weight will be regulated as source material through N.J.A.C. 7:28-60 (which is 10 CFR Part 40 incorporated by reference).

Since replacing the deleted text will not affect the original intent of the proposal, and will avoid confusion for licensees that possess source material and TENORM, the Department and the Commission are modifying the rule on adoption to reinsert the exception for source, special nuclear, and byproduct material at N.J.A.C. 7:28-4.1(b).

Broad Scope Licensing

15. COMMENT: Proposed N.J.A.C. 7:28-54 incorporates by reference the Federal rules at 10 CFR Part 33, which include a provision that licensees cannot add or cause the addition of byproduct material to any food, beverage, cosmetic, drug or other product designed for ingestion or inhalation, or application to, a human being (10 CFR 33.17(a)(4)). Currently, pharmaceutical companies that discover new molecular entities and develop them into medicine will in some way formulate a radio-labeled version of the drug which is then transferred to a NRC Medical Use licensee (10 CFR Part 35 or equivalent Agreement State licensee) for clinical testing in humans. Therefore, all pharmaceutical companies that engage in this practice have a condition in their broad scope license that excludes them from the limitation of 10 CFR 33.17(a)(4). How will the Department and the Commission address this issue, with a similar license condition or new regulations? (3, 10)

RESPONSE: The Department and the Commission are incorporating the Federal regulations at 10 CFR Part 33 by reference. There is no proposed change to the Federal requirement at 10 CFR 33.17(a)(4). Accordingly, unless a licensee has an exemption, the prohibition in the Federal rules will apply.

N.J.A.C. 7:28-2.8, Special exemptions, allows the Department, with the approval of the Commission, to grant an exemption from any requirement of the rules, provided the conditions of N.J.A.C. 7:28-2.8 are met. The pharmaceutical companies may apply for an exemption from N.J.A.C. 7:28-54.1 (and the prohibition of the Federal rules) through N.J.A.C. 7:28-2.8.

Fees

16. COMMENT: The basis for calculating certain fees is inconsistent with the governing New Jersey statute. N.J.S.A. 26.2D-9(l) requires that fees shall be annual or periodic, shall be based on criteria contained in the fee schedule, and shall reflect the actual or projected expense incurred by the Department in the performance of the service. Proposed N.J.A.C. 7:28-64.10, where the fees are adjusted annually based on the consumer price index, does not comply with the requirements of N.J.S.A. 26.2D-9(l). (6)

RESPONSE: The adopted fees are based directly on the Department's cost to provide the services for which the fees are charged. Subsequent adjustment by the Consumer Price Index, as the rules allow, is a reasonable projection of the anticipated increase in the Department's costs. In the event that the inflation adjusted fees do not keep pace with the Department's actual costs, the Department can propose amended fees in accordance with the requirements of the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq.

17. COMMENT: The term "full cost" is used in Tables 2 of N.J.A.C. 7:28-64.2, Schedule of fees. No definition of full cost was provided in the proposal and it is unclear whether this fee will be annual or periodic. (6)

RESPONSE: As stated in the Summary at 40 N.J.R. 2359, and as provided in N.J.A.C. 7:28-64.4(d), the Department incorporates by reference the fee provisions of 10 CFR Parts 170 and 171 for the purpose of calculating fees. Since the NRC charges full cost for decommissioning, the Department also charges full cost, which is consistent with the Legislative mandate in N.J.S.A. 26D-9(l). Full cost means that the Department will assign unique job numbers to a licensee and staff will code their timesheets appropriately. The Department will then bill the licensee semi-annually for the actual cost the Department incurs (based on the salary of the specific staff members that coded time, fringe and indirect costs, and support services, such as laboratory costs).

18. COMMENT: The Department proposes to charge fees for non-routine inspections (at full cost) and license amendments, but the NRC incorporates the cost of these activities in its annual fee. It will be difficult for the regulated community to budget for unforeseen events. Including the costs of these items in the annual fee would reduce paperwork for the Department and the licensee. (3, 4, 7, 8)

RESPONSE: To ensure that the Department collects sufficient funds to administer and implement the Agreement State program, the Department investigated the fee structures of other Agreement States. The majority of the Agreement States charge full cost for non-routine inspections and a graduated cost for license amendments.

Under the adopted rules, there is no separate fee for license amendment requests that involve little staff time to complete, such as facility name changes, and removal of authorized users. These are routine tasks, and are requested by numerous licensees; accordingly, payment of the annual fee is sufficient at this time to cover the cost of these services.

The rules do contain specific fees for amendments that require significant staff time to complete. These include a request to add isotopes, change procedures, add authorized users, add a process, or relocate a facility, or a request that

requires a site visit. By charging separate fees for non-routine tasks, the Department is ensuring that the cost is passed on to only those licensees that use the service and not shared among all licensees.

19. COMMENT: Reconsider charging a fee to universities and non-profit institutions. The NRC does not currently charge a fee. (8)

RESPONSE: As stated in the Summary, 40 N.J.R. 2363, the Federal government reimburses the NRC for the costs associated with providing services to university and non-profit institutions. This reimbursement is provided for in the Omnibus Budget Reconciliation Act of 1990, as amended.

Unlike the NRC, the Department does not have a mechanism to receive fee relief for those activities for which it does not charge fees or charges reduced fees. The Department is required to recover in fees 100 percent of the cost of services it provides. If the Department were to eliminate or further reduce the fee to universities and non-profits from payment of fees, the Department would have to spread the cost among the remaining licensees, who would incur higher fees as a result.

A fee for non-profit educational institutions is not new. The previous rules at N.J.A.C. 7:28-4.19 did not exempt non-profit educational institutions from fees.

20. COMMENT: There should not be a fee to non-profit educational institutions and private medical practices for non-contiguous additional use sites. Facilities with additional use sites within four miles of each other are now administered under a single Department license. Some universities have various sites across New Jersey, but all operate under the same NRC license. (4, 8)

RESPONSE: As stated in the Summary, 40 N.J.R. 2363, the Department considered the added costs to non-profit educational institutions and proposed relief by charging a reduced fee, or no fee, for certain additional use sites. Some colleges and universities have many buildings that are not adjacent or contiguous; that is, a campus may have buildings where radioactive materials are used that are more than five miles from the main facility that holds the radioactive materials license. In such cases, instead of charging the full fee, the adopted rules provide for a reduced fee of the 25 percent of the usual annual fee. In the case of the facility with an additional use site within less than five miles of the main facility, no additional use fee will be charged because there will be minimal additional cost to the Department to license and inspect such closely located facilities.

In the case of a university with sites across the State, the additional use fee would be charged, and is appropriate, because the Department incurs additional expense by traveling throughout the State to perform inspections.

A comparison to the NRC license is not appropriate, since the NRC does not charge a fee to non-profit educational institutions.

Summary of Agency-Initiated Changes:

N.J.A.C. 7:28-1.1(b) is modified on adoption to reinstate the language of the previous rule, making the chapter applicable to "all persons," as well as those licensed or registered by the Department. The rule is also modified on adoption to apply to those licensed or registered to install, handle, transport and store the equipment and materials identified in the rule. These activities were also included in the previous rule.

The Radiation Protection Act at N.J.S.A. 26:2D-10 requires "all sources of radiation" to be "shielded, transported, handled, used and kept in such a manner as to prevent all users thereof and all persons within effective range thereof from being exposed to unnecessary radiation." Accordingly, it was not appropriate, as proposed, to limit the scope of the rules to only those licensed or registered individuals. Rather, the rules must cover all persons, in order that they cover "all sources," as required under the statute. To limit the rules to only those licensed or registered by the State would not satisfy the requirements of the Radiation Protection Act.

Similarly, the rules as proposed would not have applied to all of those activities that the Radiation Protection Act addresses. Unlike the previous rules, which were sufficiently comprehensive to address the requirements of the statute, the proposed rules would not have applied to the transportation, storage, handling, or shielding of sources of radiation, contrary to the statute. As modified on adoption, the rule meets the statutory requirement.

N.J.A.C. 7:28-6.1(d)6 is modified on adoption to delete redundant text.

N.J.A.C. 7:28-12.12(c)1ii is modified on adoption to clarify that there is determined to be substantial public interest in public outreach events related to restricted release license termination of contaminated sites if the Department receives a petition containing the signatures of 25 or more people. The proposal stated that the petition must contain the signatures of 25 people.

N.J.A.C. 7:28-17.4(k) is modified on adoption by replacement of the reference to a license with reference to a registration. This subchapter will regulate machine source radiography. Machine sources of radiation are registered with the State, not issued licenses.

N.J.A.C. 7:28-53.1(c) is modified on adoption to correct a cross reference.

N.J.A.C. 7:28-58.1(c)3 is modified on adoption to correct the punctuation. The beginning quotation marks are missing from the word "No," which will replace the wording to be deleted from the incorporated 10 CFR 40.6.

N.J.A.C. 7:28-61.1(c)10 is modified on adoption to delete duplicative words.

N.J.A.C. 7:28-64.2, Table 1, Fee Category 7.C is modified on adoption to correct the punctuation by adding a period to the end of the sentence that concludes "... when authorized on the same license." The proposal had omitted the period.

N.J.A.C. 7:28-64.8 is modified on adoption by replacement of the phrase "[a]n application for" with the phrase "[a] letter requesting." The proposed text refers to applications for license amendments. There are no such applications. Requests for an amendment to a license will be in the form of a letter to the Department.

Federal Standards Analysis

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. require State agencies that adopt, readopt or amend State regulations that exceed any Federal standards or requirements to include in the rulemaking document a Federal Standards Analysis.

The Department and the Commission are adopting new rules, repeals and amendments in order that the State's rules are compatible with the NRC regulations, so that New Jersey can become an Agreement State. Except as discussed below, the adopted new rules and amendments do not exceed Federal standards.

The NRC regulations at 10 CFR 20.1401(d) require modeling to 1,000 years; whereas, the adopted amendment at N.J.A.C. 7:28-12.10(d) requires modeling to the time of peak dose. The adopted amendment appears to be more stringent than the NRC regulations at 10 CFR 20.1401(d). However, in the NRC's response to comment on their proposed decommissioning regulations, 62 Fed. Reg. at 39083 (Response F.7.3), the NRC explains that the 1,000-year provision is intended to apply only to short-lived nuclides. Short-lived nuclides are defined as having half-lives between 5.3 and 30 years and which would decay to unrestricted dose levels in about 10 to 60 years. (62 Fed. Reg. at 39069.) For long-lived nuclides, future calculations beyond 1,000 years would be valuable. (62 Fed. Reg. at 39083.) Thus, the intent of 10 CFR 20.1401(d) is to require additional longer dose assessments, depending on the duration of the nuclides. Therefore, based on the regulatory intent of 10 CFR 20.1401(d), the adopted amendment to increase the time period of interest is not more stringent than the Federal regulation at 10 CFR 20.1401(d). The short-lived nuclides to which the 1,000 years was intended to apply would have decayed to unrestricted levels by 1,000 years. Accordingly, the proposed rule is not more stringent than the Federal rule, and no further analysis is required.

Although the NRC rules do not require compliance with specific water quality standards, the adopted amendments to N.J.A.C. 7:28-12.8, which include adherence to the Surface Water Quality standards for radioactivity, can be compared to the NRC's requirement of an all pathways dose criterion. The "all pathways" requirement, as applied to surface water, means that surface water contamination that results in human exposure must be assessed as part of the 25 mrem/year dose criterion. Surface water that is contaminated with radiation could result in contaminated fish, contamination of irrigation water used for crops, and human exposure to radiation through recreational bathing. The Department does not require consideration of these pathways in dose assessments to demonstrate compliance with the Department's dose decommissioning criterion. By requiring adherence to the Surface Water Quality Standards, the Department and the Commission are both taking into account the potential dose that could result from contamination of surface water, resulting in no significant difference between the two approaches. Therefore, the adopted rule is consistent with the Federal rule and no further analysis is required.

Adopted Subchapter 55, Medical Use of Radioactive Materials, incorporates by reference the Federal rules at 10 CFR Part 35; however, the Department and the Commission are requiring licensees to use a dose calibrator before administering radiopharmaceuticals. NRC currently requires the use of this instrument for only certain administrations to humans. Dose calibrators provide a check on the prescribed dose, as well as the prescribed radionuclide of radiopharmaceuticals. The Department and the Commission considered an actual example of a misadministration of a dose of radiopharmaceuticals to demonstrate that the benefits of using a dose calibrator outweigh the costs.

The cost of a new dose calibrator is about \$ 7,000. The cost of personnel time to use the calibrator is estimated to be about 40 hours per year, at a pay rate of about \$ 33.00/hour (2006 pay rate obtained from the New Jersey Nuclear Medicine Technologist Board). The cost of personnel time to ensure that the calibrator is properly calibrated (a linearity check) may require a consultant, and is estimated to take about five hours per year at a pay rate of \$ 50.00 per hour, for a total cost of \$ 8,570.

The benefit from using a dose calibrator is the avoidance of administering an improper dose. The Department and Commission are aware of a reported incident in which four mCi of Thallium-201 were administered to a patient, instead of the prescribed dose of Tc-99m pertechnetate. The administration resulted in a whole body dose of 5.2 rem, which could have been avoided had a dose calibrator been used. The NRC uses \$ 2,000 per person-rem in its ALARA analyses. (Appendix N of NUREG-1757, Consolidated Decommissioning Guidance, Vol. 2, Rev.2.) Thus, the cost of the improperly administered dose was \$ 2,000 times 5.2 rem, or \$ 10,400. Even if only one misadministration happens per year, the benefit of the averted dose (\$ 10,400) outweighs the cost of buying and using a new dose calibrator (\$ 8,570).

In practice, the costs associated with this analysis are overestimated. The majority of medical facilities already possess dose calibrators and use them.

Full text of the adoption follows (additions to proposal indicated in boldface with asterisks ***thus***; deletions from proposal indicated in brackets with asterisks ***[thus]***):

SUBCHAPTER 1. GENERAL PROVISIONS

7:28-1.1 Purpose and scope

(a) (No change.)

(b) This chapter applies to ***all persons and*** persons licensed or registered by the Department to receive, possess, use, transfer, ***install, handle, transport, store,*** or dispose of ionizing radiation producing machines, non-ionizing radiation producing sources, diffuse technologically enhanced naturally occurring radioactive materials, diffuse accelerator-produced radioactive materials, by-product, source, or certain special nuclear material or to operate a production or utilization facility under N.J.A.C. 7:28-51 through 60. The limits in this chapter do not apply to doses due to background radiation, to exposure of patients to radiation for the purpose of medical diagnosis or therapy, to exposure from individuals administered radioactive material and released under N.J.A.C. 7:28-55.1, or to exposure from voluntary participation in medical research programs.

(c) The rules in this chapter establish standards for protection against ionizing radiation resulting from activities conducted under registrations or licenses issued by the Department.

(d) It is the purpose of the rules in this chapter to control the receipt, possession, use, transfer, and disposal of licensed material, ionizing radiation producing machines, or non-ionizing radiation producing sources by any licensee or registrant in such a manner that the total dose or exposure to an individual (including doses resulting from licensed and unlicensed radioactive material and from radiation sources other than background radiation) does not exceed the standards for protection against radiation prescribed in the rules in this chapter. However, nothing in this chapter shall be construed as limiting actions that may be necessary to protect health and safety.

7:28-1.4 Definitions

(a) The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise. Additional words and terms applicable to the chapter, incorporated from 10 CFR 20, are

located at N.J.A.C. 7:28-6. Additional words and terms applicable to a specific subchapter only, will be found in that subchapter.

1. General Terms:

...

"Annually" means occurring once per year at intervals of not less than 51 consecutive weeks nor more than 53 consecutive weeks.

...

"Semi-annually" means occurring twice per year at intervals of not less than 25 consecutive weeks nor more than 27 consecutive weeks.

...

2. Ionizing radiation terms:

...

"Diffuse" means a radionuclide that has become concentrated, but not for the purpose of use in commercial, medical, or research activities.

"Domestic sewage" means waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

"Domestic treatment works" or "DTW" means all publicly owned treatment works as well as any other treatment works processing primarily domestic sewage and pollutants together with any ground water, surface water, storm water or process wastewater that may be present.

...

"Radioactive materials registrant" means a person who is required to register radioactive byproduct material, source material or special nuclear material with the Department pursuant to this chapter.

"Radiographer" means any individual who is in attendance at a site where ionizing radiation-producing machines are being used and who uses or supervises their use in industrial radiographic operations and who is responsible to the owner for assuring compliance with the requirements of this chapter.

"Radiographer's assistant" means any individual who, under the personal supervision of a radiographer, uses ionizing radiation-producing machines, related handling tools, or survey instruments in industrial radiography.

"Radiography" means the examination of humans or animals, or of the structure of materials by non-destructive methods, utilizing ionizing radiation-producing machines. This term is not intended to apply to techniques such as electron microscopy or x-ray diffraction.

"Registrant" means a person who is required to register an ionizing radiation-producing machine source of radiation with the Department pursuant to this chapter.

...

"Sewage sludge" means the solid, semi-solid, or liquid residue generated by the processes of a domestic treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and any material derived from sewage sludge.

...

[(c)] *3.* (No change in text.)

7:28-1.5 Communications

(a) Communications concerning this chapter, or matters relating to radiation protection, may be addressed to the New Jersey Department of Environmental Protection, Radiation Protection and Release Prevention Element, PO Box 415, Trenton, New Jersey 08625-0415, Telephone: (609) 984-5636, Fax: (609) 633-2210. The physical location of the office is 25 Arctic Parkway, Ewing, New Jersey 08638. Applications and forms may be obtained from the website at <http://www.state.nj.us/dep/rpp/index.htm>.

(b) All emergency notification of incidents involving sources of radiation in this State shall be immediately reported to either one of the following agencies:

1. Radiation Protection and Release Prevention Element
New Jersey Department of Environmental Protection
25 Arctic Parkway
Ewing, NJ 08638
Telephone: (609) 984-5462
Hours: 8:00 A.M. to 5:00 P.M. daily, except Saturday, Sunday, and Holidays

After hours and weekends toll free: 1 (877) 927-6337 (1 (877) WARN-DEP)

2. (No change.)

SUBCHAPTER 2. USE OF SOURCES OF IONIZING RADIATION AND SPECIAL EXEMPTIONS

7:28-2.8 Special exemptions

The Department, upon application and a showing of hardship or compelling need, with the approval of the Commission, may grant an exemption from any requirement of these rules should it determine that such exemption will not result in any exposure to radiation in excess of the limits permitted by N.J.A.C. 7:28-6, Standards for Protection Against Radiation.

7:28-2.13 Violations

(a) The Department may obtain an injunction or other court order to prevent a violation of the provisions of:

1. The Act; or
2. A regulation or order issued pursuant to the Act.

(b) The Department may impose a civil penalty for a violation of:

1. Any provision of this chapter or order issued hereunder;
2. Any term, condition, or limitation of a license issued under this chapter; or
3. A revocation under N.J.A.C. 7:28-4.17, 51 through 60, or 63.

SUBCHAPTER 3. REGISTRATION OF IONIZING RADIATION-PRODUCING MACHINES

7:28-3.1 Registration for possession of ionizing radiation-producing machines

40 N.J.R. 5196(b)

(a) Any person, manufacturer, dealer or State, county or local government shall register with the Department every ionizing radiation-producing machine possessed within the State of New Jersey except as exempted by N.J.A.C. 7:28-3.2.

(b) Any person, manufacturer, dealer or State, county or local government shall apply for such registration within 30 days after taking possession, custody or control of ionizing radiation-producing machines on forms available from the Department.

(c) (No change.)

7:28-3.2 Exemptions from registration for possession of ionizing radiation-producing machines

(a)-(c) (No change.)

7:28-3.5 (Reserved)

7:28-3.6 Transfer of registration for ionizing radiation-producing machines

Registrations for ionizing radiation-producing machines are not transferable.

7:28-3.8 (Reserved)

7:28-3.10 Denial of an application for registration, and suspension, modification, or revocation of registration of ionizing radiation-producing machines

(a) The Department, in addition to any penalties authorized by the Act, may deny an application for registration or suspend, modify or revoke a registration of ionizing radiation-producing machines by reason of amendments to the Act, adoption of rules, orders issued by the Department pursuant to said Act or if the applicant or registrant:

1.-7. (No change.)

(b) (No change.)

(c) The Department may terminate a registration upon request submitted by the registrant to the Department in writing.

7:28-3.11 (Reserved)

SUBCHAPTER 4. LICENSING OF DIFFUSE NATURALLY OCCURRING OR DIFFUSE ACCELERATOR PRODUCED RADIOACTIVE MATERIALS

7:28-4.1 Scope and general provisions

(a) This subchapter shall apply to persons who manufacture, produce, transfer, distribute or arrange for the distribution, sell, lease, receive, acquire, own, possess or use any diffuse naturally occurring or diffuse accelerator produced radioactive materials, including TENORM, in this State.

(b) No person shall manufacture, produce, transfer, distribute or arrange for the distribution, sell, lease, receive, acquire, own, possess or use any diffuse naturally occurring or diffuse accelerator produced radioactive materials, including TENORM, in this State unless authorized by a specific license issued by the Department as provided by N.J.A.C. 7:28-4.7 and 4.8, a general license as provided in N.J.A.C. 7:28-4.5, or an exemption as provided in N.J.A.C. 7:28-4.3.

Excepted from this provision are by-product, source and special nuclear materials.

(c) A person who sells, transfers, distributes or arranges for the distribution of a device containing diffuse naturally occurring or diffuse accelerator produced radioactive materials manufactured by another person, but which is sold, transferred or distributed under its own name, shall obtain a license in accordance with this subchapter.

7:28-4.2 Recognition of licenses for diffuse NARM from other jurisdictions

(a) Any person who possesses a specific license or equivalent licensing document issued by a Federal agency or any other state is granted a general license in this State provided that the provisions of (b)1 through 4 below have been met.

(b) Any person who possesses a specific license or equivalent licensing document issued by a Federal agency or any other state may, pursuant to the general license in (a) above, transport, receive, possess, or use the radioactive materials specified in such license within this State for a period not in excess of 180 days in any period of 12 consecutive months without obtaining a specific license from the Department provided that:

1. (No change.)

2. The licensee notifies the Department in writing at least three days prior to the time that such radioactive material is brought into this State. Such notification shall indicate the location, period, and type of proposed possession and use within this State, and shall be accompanied by a copy of the pertinent licensing document. If in a specific case the three-day period would impose an undue hardship on the user, he may, upon application to the Department, obtain permission to proceed sooner;

3.-4. (No change.)

(c) (No change in text.)

7:28-4.3 Exemption from requirement for a license for manufacture, production, transfer, distribution or arrangement of distribution, sale, lease, receipt, acquisition, ownership, possession or use of all diffuse naturally occurring or diffuse accelerator produced radioactive materials

(a) A person shall be exempt from the requirement to obtain a license for the following activities:

1.-2. (No change.)

3. The person manufactures, produces, receives, possesses, uses, transfers, distributes or arranges for the distribution, sells, leases, owns or acquires products or materials containing diffuse naturally occurring or diffuse accelerator produced radioactive materials in concentrations not in excess of those exempted in (b) below;

Recodify existing 5.-7. as 4.-6. (No change in text.)

7. The person owns a domestic treatment works where sewage sludge is present which may contain TENORM from the separation of liquids and solids which is the outcome of normal operations of the domestic treatment works;

8. (No change in text.)

9. The person owns property where residual contamination remaining at the site was remediated under the Radiation Protection Act (N.J.S.A. 26:2D-1 et seq.) and/or the other authorities listed in the Soil Remediation Standards at N.J.A.C. 7:28-12.2(a). Such residual concentrations may be greater than the limits specified in (a)5 above, but be under restricted conditions imposed by the Department (such as engineering and institutional controls), and meet the dose criteria specified in N.J.A.C. 7:28-12.8.

(b) The following concentrations of diffuse naturally occurring radioactive materials, including TENORM, and diffuse accelerator-produced radioactive materials, when obtained from naturally occurring materials or when produced by an accelerator are exempt from the requirements for a license:

Exempt Concentrations

Column 1

Column 2

Exempt Concentrations		
-----		-----
-----		-----
Gas concentration		Liq & solid Concentration
Element (nuclide)	(uCi/ml)	(uCi/ml)***
-----	-----	-----

* The values for those diffuse naturally occurring radioactive materials and diffuse accelerator produced radioactive materials, including TENORM, that are followed by a single asterisk(*) are based upon multiplying 20 times the most restrictive release concentrations specified in 10 CFR 20 Appendix B, Table 2, Columns 1 (air) and 2 (water).

** These concentrations do not apply to source material for thorium and uranium.

*** uCi/g for solids

1.-2. (No change.)

(c) If a person manufactures, produces, transfers, distributes or arranges for the distribution, sells, leases, receives, acquires, owns, possesses or uses diffuse naturally occurring radioactive materials or diffuse accelerator produced radioactive materials, including TENORM, in quantities less than those listed in N.J.A.C. 7:28-4.5(c), they are exempt from the requirement for a license.

7:28-4.4 Types of licenses for manufacture, production, transfer, distribution or arrangement for distribution, sale, lease, receipt, acquisition, ownership, possession or use of all diffuse naturally occurring or diffuse accelerator produced radioactive materials

(a) General licenses described in N.J.A.C. 7:28-4.5 are effective without the filing of an application with the Department or the issuance of licensing documents to particular persons.

(b) Specific licenses are issued to named persons upon application filed pursuant to the requirements of this subchapter.

7:28-4.5 General licenses for the transfer, distribution or arrangement for distribution, sale, lease, receipt, acquisition, ownership, possession or use of diffuse naturally occurring or diffuse accelerator produced radioactive materials and certain devices and equipment

(a) Any person who uses, transfers, distributes or arranges for the distribution, sells, leases, receives, acquires, owns or possesses the following devices and equipment incorporating diffuse naturally occurring or diffuse accelerator produced radioactive material, when manufactured, tested and labeled by the manufacturer in accordance with the specifications contained in a specific license issued by the Department, or a specific license of a Federal agency or any other state, shall be deemed to have a general license:

1.-3. (No change.)

(b) The devices described in (a) above shall not be transferred, abandoned or disposed of except by transfer to a person duly authorized to receive such device by a specific license issued by the Department, a Federal agency, or any other state.

(c) The following quantities of radioactive substances, when obtained from diffuse naturally occurring materials or diffuse accelerator produced radioactive materials, are generally licensed provided that no person shall at any one time possess or use more than a total of 10 such quantities:

40 N.J.R. 5196(b)

Radioactive Material ----- ...	Column A Not as a Sealed Source (microcuries) -----	Column B As a Sealed Source (microcuries) -----
---	--	--

(d)-(e) (No change.)

(f) Persons who transfer, distribute or arrange for the distribution, sell, lease, receive, acquire, own, possess or use items and quantities of radioactive materials set forth in (a) and (c) above pursuant to a general license shall not:

1.-4. (No change.)

(g) Persons who receive, acquire, possess or use a device pursuant to a general license specified in (a) above:

1.-2. (No change.)

3. Shall have the device tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at intervals not to exceed six months;

4.-6. (No change.)

7. Shall be exempt from the requirements of this subchapter, except the provisions of N.J.A.C. 7:28-4.4(a), 4.9, 4.14, 4.19, records of surveys, records of radioactive materials, and reports of theft, loss, or incidents pursuant to the requirements in N.J.A.C. 7:28-6, Standards for Protection Against Radiation.

7:28-4.6 Application for and renewal of specific licenses for manufacture, transfer, distribution or arrangement for distribution, sale, lease, receipt, acquisition, ownership, possession or use of diffuse naturally occurring or diffuse accelerator produced radioactive materials

(a) Upon approval of an initial or renewal application, a specific license may be issued by the Department for a period of 10 years commencing on the date the license is issued.

(b) Application for specific licenses and renewals shall be filed with the Department, on forms available from the Department.

(c) All applications shall contain the following signature and certification:

1. (No change.)

2. The certification shall be signed by the highest ranking corporate, partnership, or governmental officer or official at the facility or the individual for which or for whom the specific license is requested.

(d) An application for a specific license may include a request for a license authorizing one or more activities.

(e) Information included in the specific license application will be incorporated in and made a part of the terms and conditions of such license by reference.

(f) All applicants for initial and renewal applications for specific licenses shall complete the application in its entirety with no reference to previously filed documents. The Department may accept photocopies of previous relevant applications.

(g) No initial or renewal specific licenses shall be issued unless the appropriate annual license fee required by N.J.A.C. 7:28-64.4 is paid.

(h) Except as provided in N.J.A.C. 7:28-4.19, applications and documents submitted to the Department will be made available for public inspection.

(i) Upon the request of the Department at any time after the filing of the original or renewal specific license application, and before the expiration of the license, the applicant shall submit further information to enable the Department to determine whether the application should be granted or denied or whether a license should be modified or revoked.

(j) All applications for a license or amendment shall be signed by the applicant or licensee or a person duly authorized to act for and on his behalf.

(k) The Department may deny an application for a specific license if the applicant:

1.-3. (No change.)

7:28-4.7 General requirements for approval of an application for an initial specific license or renewal of a specific license for use of diffuse naturally occurring or diffuse accelerator produced materials

(a) If the Department determines that an applicant meets the requirements of this subchapter and the Act, it may issue an initial specific license or renew a specific license for non-human use of radioactive materials provided:

1.-3. (No change.)

7:28-4.8 Special requirements for approval of an application for an initial specific license or renewal of a specific license for use of diffuse naturally occurring or diffuse accelerator produced radioactive materials

(a) If the Department determines that an applicant meets the requirements of this subchapter and the Act, an initial specific license or renewal of a specific license may be issued for use of multiple quantities or types of radioactive material provided:

1. The applicant satisfies the general requirements for approval of specific license applications in N.J.A.C. 7:28-4.7;

2.-4. (No change.)

(b) If the Department determines that an applicant meets the requirements of this subchapter and the Act, an initial specific license or renewal of a specific license may be issued for use of multiple quantities or types of radioactive material in processing for distribution to other authorized persons provided:

1. The applicant satisfies the general requirements for approval of specific license application in N.J.A.C. 7:28-4.7;

2.-3. (No change.)

(c) If the Department determines that an applicant meets the requirements of this subchapter and the Act, an initial specific license or renewal of a specific license may be issued to distribute certain devices to persons generally licensed under N.J.A.C. 7:28-4.5(a) and (e) provided:

1. The applicant satisfies the general requirements for approval of specific license applications in N.J.A.C. 7:28-4.7;

2. The applicant submits sufficient information relating to the design, manufacturer prototype testing, quality control procedures, labeling, proposed uses and potential hazards of the device to provide reasonable assurance that:

i. (No change.)

40 N.J.R. 5196(b)

ii. No person possessing, using, transporting or exposed to the device will receive a radiation dose to a major portion of his body in excess of 0.1 rem in any one year under ordinary circumstances of use;

iii.-iv. (No change.)

3. (No change.)

(d) If the Department determines that an applicant meets the requirements of this subchapter and the Act, an initial specific license or renewal of a specific license will be issued to transfer, possess, or control products or materials containing exempt concentrations of radioactive material specified in N.J.A.C. 7:28-4.3(b) which the transferor has introduced into the product or material provided:

1. The applicant satisfies the general requirements for approval of specific license applications in N.J.A.C. 7:28-4.7;

2.-3. (No change.)

4. Within 30 days subsequent to the end of the reporting period, each specific licensee shall file an annual report with the Department describing kinds and quantities of products transferred, the concentration of radioactive material contained and the quantity of radioactive material transferred during the reporting period which shall be the 12-month period ending June 30 of each calendar year.

7:28-4.9 Terms and conditions of general and specific licenses

(a) Each license issued pursuant to this subchapter shall be subject to all the provisions of the Act, now or hereafter in effect, and to this chapter and orders of the Department.

(b) No license to possess or utilize radioactive material pursuant to this subchapter shall be transferred or assigned.

(c) Each person licensed by the Department pursuant to this subchapter shall confine his or her possession and use of radioactive material to the locations and purposes authorized by such license, and shall not use or permit the use of radioactive materials contrary to the applicable requirements of this chapter. Persons licensed under the provisions of this subchapter may transfer radioactive material within the State only to the persons licensed to receive such material or as otherwise authorized by the Department in writing.

(d) The Department may incorporate in any license at the time of issuance, or thereafter, all such additional requirements and conditions with respect to the licensee's manufacture, distribution or arrangement for the distribution, sale, lease, receipt, possession, use, ownership or transfer of radioactive material as it deems appropriate or necessary in order to assure compliance with this chapter and the Act.

(e) Each licensee authorized under N.J.A.C. 7:28-4.8(c) to distribute certain devices to generally licensed persons shall:

1. (No change.)

2. Furnish to each general licensee to whom such device is transferred a copy of N.J.A.C. 7:28-4.5(a), (e) and (g), 8.3 and 8.5, records of surveys and records of radioactive materials pursuant to the requirements in N.J.A.C. 7:28-6, Standards for Protection Against Radiation.

7:28-4.10 Expiration of specific license

Except as provided in N.J.A.C. 7:28-4.11, each specific license shall expire at 12:01 A.M. of the day, in the month and year stated in the license.

7:28-4.11 Status of specific licenses pending renewal

40 N.J.R. 5196(b)

In any case in which a specific licensee has filed a complete application in proper form for renewal of a specific license not less than 30 days prior to expiration of the existing specific license, such specific license and all its existing conditions shall not expire until the Department has acted upon the application.

7:28-4.12 Amendment of a specific license at request of licensee

(a) Applications for amendment of a specific license shall be filed in accordance with N.J.A.C. 7:28-4.6 and shall specify the amendment desired and the grounds for such amendment.

(b) The Department will evaluate only amendment applications submitted by personnel authorized by the licensee.

(c) The applicant for an amended specific license shall not engage in the activities for which an amendment has been requested until approval has been granted by the Department.

7:28-4.13 Records

All persons licensed pursuant to this subchapter shall keep records in accordance with N.J.A.C. 7:28-6, Standards for Protection Against Radiation.

7:28-4.14 Inspections

(a) All licensees shall allow the Department or its agents to inspect radioactive material and the facilities and premises where radioactive material is used or stored.

(b) (No change.)

(c) Upon request by the Department, or its agents, licensees shall make available for inspection by the Department records kept pursuant to this chapter.

7:28-4.15 Tests

(a) At the request of the Department or its agents, each licensee shall perform, or allow the Department to perform if the Department so desires, such tests as the Department deems appropriate or necessary for the administration of this subchapter, including tests of the following:

1.-4. (No change.)

7:28-4.16 Financial assurance and recordkeeping for decommissioning

(a) Except as set forth in (b) below, this section incorporates by reference 10 CFR 30.35 Financial assurance and recordkeeping for decommissioning, and the Appendices as referenced in 10 CFR 30.35.

(b) The following provisions of 10 CFR 30.35 are incorporated by reference with the specified changes:

1. "Unsealed byproduct material" and "byproduct material" shall mean "diffuse NARM";
2. "Commission," "Nuclear Regulatory Commission," "U.S. Nuclear Regulatory Commission," and "NRC," shall mean "Department of Environmental Protection";
3. 10 CFR 30.35(g), replace "Each person licensed under this part or parts 32 through 36 and 39" with "Each person licensed under this subchapter";
4. 10 CFR 30.35(g), replace "§30.34(b)," with " N.J.A.C. 7:28-4.9"; and
5. 10 CFR 30.35(g)(3)(iv), replace "10 CFR part 20, subpart E," with "N.J.A.C. 7:28-12".

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7:28-4.17 Modification, revocation, suspension, and termination of general and specific licenses

(a) Each general license shall be subject to modification, suspension or revocation by reason of amendments to the Act, adoption of rules by the Commission or the Department, orders issued by the Department pursuant to authority of the Act, or for violation or failure to observe any of the terms and provisions of the Act, license or any rule of the Commission or the Department, or order of the Department.

(b) Each specific license shall be subject to modification, suspension or revocation by reason of:

1.-3. (No change.)

4. Conditions revealed by the application for a specific license or statement of fact or any report, records or inspection or other means which would warrant the Department to refuse to grant a specific license on an original application;

5. Violation of or failure to observe any of the terms and provisions of the Act or the license, or any rule of the Department or order of the Department;

6. Falsification or misleading statements in any license application;

7. Alteration of licensing document;

8. (No change.)

9. Failure to make timely payment of licensing fees.

(c) If a specific license is not to be renewed or if a licensee requests a termination of its license, the licensee shall furnish to the Department, prior to the expiration date of the license, close-out surveys, wipe tests and/or soil samples demonstrating that the facility meets the requirements of N.J.A.C. 7:28-12. The facility shall also provide a disposition certificate attesting to the disposal of radioactive material.

7:28-4.18 Requests for an adjudicatory hearing

(a) When the Department denies an initial application for or renewal of a specific license, or determines to modify, revoke, suspend or terminate a general or specific license, the Department shall send a notice of decision to the applicant or licensee by certified mail return receipt requested. The notice shall advise the applicant or licensee of the right to request a contested case hearing pursuant to the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq. and the New Jersey Uniform Administrative Procedure Rules, N.J.A.C. 1:1. The notice shall include the following information:

1.-3. (No change.)

4. The requirements for requesting a stay under N.J.A.C. 7:28-4.19.

(b)-(d) (No change.)

7:28-4.19 (No change in text.)

SUBCHAPTER 5. CONTROLLED AREAS FOR REGISTRANTS

7:28-5.1 Areas that registrants must control

Every area in which there is any reasonable possibility of an occupant receiving an exposure dose from radiation more than the dose specified in N.J.A.C. 7:28-6 for radiation levels outside a controlled area shall be set apart as a controlled area by any person having possession, custody or control of any ionizing radiation-producing machine.

7:28-5.2 Limitations on controlled areas for registrants

No area within controlled areas shall be used for residential quarters although a room or rooms in residential buildings may be set apart as a controlled area.

7:28-5.3 Precautionary procedures

(a) Any person having possession, custody or control of any ionizing radiation-producing machine shall comply with the following precautionary procedures:

1. Area surveys shall be performed in controlled areas and in adjacent areas to insure that exposure levels to individuals conform to N.J.A.C. 7:28-6. The surveys shall be performed in accordance with N.J.A.C. 7:28-7, Radiation Surveys and Personnel Monitoring for Registrants.

Recodify existing 4.-7. as 2.-5. (No change in text.)

SUBCHAPTER 6. STANDARDS FOR PROTECTION AGAINST RADIATION

7:28-6.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 20, Standards for Protection Against Radiation.

(b) The Department does not regulate nuclear reactors, special nuclear materials in quantities sufficient to form a critical mass, high-level waste disposal facilities, or byproduct material defined in Section 11e(2) of the Atomic Energy Act of 1954, as amended (42 U.S.C. §2014). Insofar as the incorporated rules refer to those facilities and/or materials previously referenced, those references are not incorporated, nor do any cross references include those facilities and/or materials.

(c) The following provisions of 10 CFR Part 20 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 20.1001, Purpose;
2. 10 CFR 20.1002, Scope;
3. 10 CFR 20.1003, Definitions, the following definitions are not incorporated by reference: "act," "Commission," "Department," and "sanitary sewerage system";
4. 10 CFR 20.1007, Communications;
5. 10 CFR 20.1009, Implementation collection requirements: OMB approval;
6. 10 CFR 20.1401, General provisions and scope;
7. 10 CFR 20.1402, Radiological criteria for unrestricted use;
8. 10 CFR 20.1403, Criteria for license termination under restricted conditions;
9. 10 CFR 20.1404, Alternate criteria for license termination;
10. 10 CFR 20.1405, Public notification and public participation;
11. 10 CFR 20.2301, Application for exemptions;

12. 10 CFR 20.2401, Violations; and
13. 10 CFR 20.2402, Criminal penalties.

(d) The following provisions of 10 CFR Part 20 are incorporated by reference with the specified changes:

1. "Nuclear Regulatory Commission," "NRC," "Commission," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 20 of the Code of Federal Regulations that are incorporated by reference, mean the New Jersey Department of Environmental Protection, except when specifically noted in this subchapter;
2. 10 CFR 20.1003, in the definition of "ALARA," replace "licensed activity" with "licensed or registered activity," and "and licensed materials" with ", licensed materials, and registered ionizing radiation producing machine sources";
3. 10 CFR 20.1003, in the definition of "background radiation," in the first sentence replace "or special nuclear material)" with "special nuclear material, or technologically enhanced naturally occurring radioactive material)," and replace in the last sentence "or special nuclear materials regulated by the Commission" with ", or special nuclear materials regulated by the State or the NRC, or diffuse NARM regulated by the State";
4. 10 CFR 20.1003, in the definition of "controlled area," replace "licensee" with "licensee or registrant";
5. 10 CFR 20.1003, in the definition of "declared pregnant woman," replace "licensee" with "licensee or registrant";
6. 10 CFR 20.1003, in the definition of "license," replace "parts 30 through 36, 39, 40, 50, 60, 61, 63, 70, or 72," with "N.J.A.C. 7:28-4, 51 through *[56 through]* 60, or 63";
7. 10 CFR 20.1003, in the definition of "licensed material," replace "special nuclear material," with "special nuclear material in quantities not sufficient to form a critical mass, diffuse NARM";
8. 10 CFR 20.1003, in the definition of "occupational dose," replace "licensed and unlicensed sources of radiation, whether in the possession of the licensee or other person," with "licensed and unlicensed, or registered or unregistered sources of radiation, whether in possession of the licensee or registrant or other person";
9. 10 CFR 20.1003, in the definition of "public dose," replace "under the control of a licensee," with "under the control of a licensee or registrant.";
10. 10 CFR 20.1003, in the definition of "survey," replace "or other sources of radiation." with ", other sources of radiation, or radiation from ionizing radiation-producing machines." After the last sentence in the definition of "survey," add "For registrants, the survey must be made under the supervision of a qualified individual.";
11. 10 CFR 20.1003, in the definition of "unrestricted area," replace "licensee" with "licensee or registrant";
12. 10 CFR 20.1006, delete "Except as specifically authorized by the Commission in writing, no" with "No," and replace "by the General Counsel" with "signed and approved by the Commissioner of the Department,";
13. 10 CFR 20.1201, replace "licensee" with "licensee or registrant," except in 10 CFR 20.1201(e);
14. 10 CFR 20.1207, replace entire section with "The licensee or registrant shall ensure that the annual occupational dose for minors does not exceed 10 percent of the annual dose limits specified for adult workers in 10 CFR 20.1201.";
15. 10 CFR 20.1208, replace "licensee" with "licensee or registrant";
16. 10 CFR 20.1301, replace "licensee" with "licensee or registrant;" and replace "sanitary sewer system" with "domestic treatment works";

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17. 10 CFR 20.1301(a)(1), replace "licensed operation" with "licensed or registered operation";
 18. 10 CFR 20.2001(a)(3), replace "within the limits of §20.1301; or" with "within the limits of §20.1301, provided prior permission in writing, in the form of a New Jersey Pollutant Discharge Elimination System permit, is obtained from the Department in accordance with N.J.A.C. 7:14A for discharges to ground or surface waters; or";
 19. 10 CFR 20.2003, replace "sanitary sewerage" with "domestic treatment works";
 20. Replace the text of 10 CFR 20.2201(a)(2) with "Reports must be made to the address and telephone numbers indicated in N.J.A.C. 7:28-1.5";
 21. 10 CFR 20.2201(b)(2)(ii), replace "Administrator of the appropriate NRC Regional Office listed in Appendix D to part 20" with "Supervisor, Radioactive Materials Section of the Department";
 22. Replace the text of 10 CFR 20.2202(d) with "Reports made by licensees in response to the requirements of this section must be made to the address and telephone numbers indicated in N.J.A.C. 7:28-1.5";
 23. 10 CFR 20.2203(b)(2), replace "Privacy Act Information" with "New Jersey Open Public Records Act, N.J.S.A. 47:1A-1 et seq.";
 24. Replace the text of 10 CFR 20.2203(d) with "All licensees, who make reports under paragraph (a) of this section shall submit the report in writing either by mail or by hand delivery to the Supervisor, Radioactive Materials Section of the Department at the addresses indicated in N.J.A.C. 7:28-1.5";
 25. 10 CFR 20.2204, replace "Administrator of the appropriate NRC Regional Office listed in Appendix D to part 20" with "Supervisor, Radioactive Materials Section of the Department";
 26. 10 CFR 20.2206(c), replace the second sentence with "The licensee shall submit the report to the Supervisor, Radioactive Materials Section of the Department at the address indicated in N.J.A.C. 7:28-1.5"; and
 27. Replace the language at 10 CFR 20.2402 with "Section 26:2D-22 of the Radiation Protection Act of 1958, as amended, provides for criminal sanctions for violation of any provision of the Act."
- (e) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 7. RADIATION SURVEYS AND PERSONNEL MONITORING FOR REGISTRANTS

7:28-7.1 Surveys inside controlled areas

- (a) The registrant shall ensure that controlled areas shall be surveyed by, or under the direction of, a qualified individual to determine if the installation is maintained and operations are conducted in compliance with this chapter.
- (b) The registrant shall ensure that radiation levels shall be determined with the use of suitable instruments and methods.
- (c) The registrant shall ensure that the record of a survey shall contain, but shall not be limited to the radiation levels, the time the radiation is produced, the workweek and the fraction of the workweek that any individual may be exposed to the radiation.
- (d) The registrant shall ensure that subsequent surveys shall be conducted at such times and as frequently as may be necessary to assure that the controlled areas and operations remain in compliance with this chapter.

7:28-7.2 Surveys outside controlled areas

Surveys shall be made outside controlled areas at sufficient intervals and locations as may be necessary to insure compliance with N.J.A.C. 7:28-6.

7:28-7.3 Statement in lieu of actual survey

A written statement signed by a qualified individual and including his calculations and analysis of the dose rates in the vicinity of a radiation source may be acceptable in place of the survey required in N.J.A.C. 7:28-7.1, Surveys inside controlled areas.

SUBCHAPTER 8. RECORDS FOR REGISTRANTS

7:28-8.1 Personnel-monitoring records

(a) Clear and legible records shall be maintained by the owner for calendar quarters on Form RH-26, or on a clear and legible form containing all the information required on RH-26. These records shall show the radiation exposures of all individuals who are required to wear personnel-monitoring equipment according to N.J.A.C. 7:28-7.4, Use of personnel-monitoring equipment.

(b) Each employee, at his or her request, shall be supplied by the owner with an annual statement of his or her radiation exposure record.

(c)-(g) (No change.)

7:28-8.2 Records of surveys

(a) Records shall be maintained showing the results of such surveys as are required pursuant to N.J.A.C. 7:28-7, Radiation Surveys and Personnel Monitoring for Registrants.

(b)-(c) (No change.)

(d) The owner of any installation covered in N.J.A.C. 7:28-14 through 16 shall submit to the Department within 30 days of receipt a copy of each report of radiation surveys made in compliance with N.J.A.C. 7:28-7, Radiation Surveys and Personnel Monitoring for Registrants.

7:28-8.3 (No change in text.)

SUBCHAPTER 9. (RESERVED)

SUBCHAPTER 10. LABELING, POSTING, AND CONTROLS FOR REGISTRANTS

7:28-10.1 General requirement

(a) (No change.)

(b) In addition to the language prescribed in the various sections of this subchapter, any supplementary information which might be appropriate in aiding individuals to minimize exposure to radiation may be provided on or near such required signs or labels.

7:28-10.4 Labeling of equipment

All ionizing radiation-producing machines capable, when operated, of producing a radiation area shall be labeled in a manner which cautions individuals of this fact.

7:28-10.5 (No change in text.)

7:28-10.6 Exceptions from posting and labeling requirements

Radiation areas and high radiation areas which result from the operation of therapeutic x-ray machines operated at potentials of 60 kv and below or from the operation of diagnostic x-ray machines shall be exempt from the posting requirements of N.J.A.C. 7:28-10.2, 10.3 and 10.4 provided that the operator of the equipment has taken precautions to insure that no individual other than the patient shall be in the radiation area.

SUBCHAPTER 11. (RESERVED)

SUBCHAPTER 12. REMEDIATION STANDARDS FOR RADIOACTIVE MATERIALS

7:28-12.2 Applicability

(a) The standards and/or dose criteria in this subchapter are applicable to:

1. Remediation of radioactive contamination of real property by any technologically enhanced naturally occurring radioactive materials, source, by-product, certain special nuclear material, and diffuse NARM; and
2. Any other remediation of radioactive contamination including, without limitation, any remediation pursuant to: the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 et seq.; the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.; the Industrial Site Recovery Act, N.J.S.A. 13:1K-6 et seq.; the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; the Comprehensive Regulated Medical Waste Management Act, N.J.S.A. 13:1E-48.1 et seq.; the Major Hazardous Waste Facilities Siting Act, N.J.S.A. 13:1E-49 et seq.; the Sanitary Landfill Facility Closure and Contingency Fund Act, N.J.S.A. 13:1E-100 et seq.; the Regional Low Level Radioactive Waste Disposal Facility Siting Act, N.J.S.A. 13:1E-177 et seq.; any law or regulation by which the State may compel a person or licensee to perform remediation activities; or N.J.A.C. 7:26C.

(b) (No change.)

(c) The Department shall apply the radiation remediation standards and dose criteria in this chapter at applicable sites as "Applicable or Relevant and Appropriate Requirements" as defined in the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq.

7:28-12.3 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise:

"Appropriate period of time" means the length of time determined by the Department, taking into consideration the radioactive half-life, total activity, concentration, and physical condition of the residual radioactivity, geologic stability of the area, and current and projected future demographics.

...

"Contaminated site" means a site as defined pursuant to the Technical Requirements for Site Remediation rules at N.J.A.C. 7:26E-1.8.

...

"Engineering controls" means any physical mechanism to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls under this subchapter may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, radon remediation systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, without limitation, slurry walls and ground water pumping systems.

...

"Radioactive contamination or radioactive contaminant" means the collective amount of radiation emitted from one or more radionuclides in the soil, and on/in building materials and/or equipment at concentrations above natural background levels.

...

"Remediation standards" means the combination of numeric standards that establish a level or concentration, and narrative standards, to which radioactive contaminants must be treated, removed or otherwise cleaned for soil, ground water or surface water, as established by the Department pursuant to N.J.S.A. 58:10B-12 and this chapter, in order to meet the health risk or environmental standards.

"Residual radioactivity" means radioactivity in structures, materials, soils, groundwater, and other media at a site resulting from activities under the licensee's or person responsible for the remediation's control. This includes radioactivity from all licensed and unlicensed sources used by the licensee or person responsible for the remediation, 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 U.S. NRC regulations at 10 CFR Part 20 or the provisions of N.J.A.C. 7:28-12.15.

...

"Uncontaminated surface soil" means soil whose average natural background radionuclide total concentrations are less than the remediation standards for radionuclides, and cannot exceed the background established for the site by more than two standard deviations.

...

7:28-12.4 General requirements

(a) Any person or licensee conducting remediation pursuant to this subchapter shall comply with the requirements of N.J.A.C. 7:26E, Technical Requirements for Site Remediation, excluding those sections related to sampling, surveying, and background investigations. Sampling, surveying and laboratory requirements shall be in accordance with N.J.A.C. 7:28-12.5.

(b) The Department shall require a licensee to provide a decommissioning plan that addresses historical site assessment, scoping, characterization, remedial action options and selection, and a final status survey report when, based on the types, quantities, and half-lives of the licensed material, such elements of the decommissioning plan are appropriate.

(c) Compliance with this subchapter shall not relieve any person or licensee from complying with more stringent cleanup standards or provisions imposed by any other applicable statute, rule or regulation.

(d) Upon Departmental approval of the remedial action workplan or similar plan, the Department may not subsequently require a change to that workplan or similar plan in order to compel a different remediation standard due to the fact that the established remediation standards have changed; however, the Department may compel a different remediation standard if the difference between the new remediation standard and the remediation standard approved by the Department in the workplan or similar plan differs by an order of magnitude.

7:28-12.5 Sampling, surveying and laboratory requirements

(a) Facilities licensed under 10 CFR Part 50 that have Nuclear Regulatory Commission-approved quality assurance plans are exempt from the requirements of this section. Otherwise, in addition to the requirements in N.J.A.C. 7:26E Appendix A IV.1, persons responsible for conducting remediations or licensees shall include the following in the radionuclide analysis reports:

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1.-6. (No change.)

(b) If available, persons responsible for conducting remediations or licensees shall provide:

1.-5. (No change.)

(c) Any laboratory providing radiological analysis for soil or water shall be certified pursuant to N.J.A.C. 7:18.

(d) (No change in text.)

7:28-12.8 Radiation dose standards applicable to remediation of radioactive contamination of all real property

(a) Sites shall be remediated so that the incremental radiation dose to any person from any residual radioactive contamination at the site above that due to natural background radionuclide concentration, under either an unrestricted use remedial action, limited restricted use remedial action, or a restricted use remedial action, shall be as specified below:

1.-2. (No change.)

(b) (No change in text.)

(c) Radioactively contaminated surface water shall be remediated to comply with the New Jersey Surface Water Quality Standards, N.J.A.C. 7:9B*-1.14(c)6*.

7:28-12.9 Minimum remediation standards for TENORM and source material contamination

(a) For radioactive contamination, the requirements of N.J.A.C. 7:28-12.8 shall be considered to be met for a specific radionuclide if:

1. Where only one radionuclide adds to the radioactive contamination of the site, the incremental concentration of the radionuclide above the natural background radionuclide concentration does not exceed the value in Table 1A, 1B (for unrestricted use), 2A, 2B (for limited restricted use), 3A, or 3B (for restricted use) below;

Tables 1A-2B (No change.)

Table 3A Allowed Incremental Derived Concentration Guideline Level of Individual Radionuclides in Soils; Restricted Use Standards for Radioactive Contamination (pCi/g)<(1)>

Feet of Uncontaminated Surface Soil (USS)		Feet of Vertical Extent of Residual Radionuclides (VE)								
		VE1	VE2	VE3	VE4	VE5	VE6	VE7	VE8	VE9
Ac227	USS 1	17	9	6	5	5	5	5	4	4
	USS 2	17	10	7	7	6	5	5	5	5
	USS 3	17	10	10	8	6	6	6	6	6
	USS 4	17	15	10	8	8	8	8	8	8
	USS 5	17	15	10	10	10	10	10	10	10

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Th232	USS 1	13	9	7	5	4	2	3	3	3
	USS 2	13	10	7	5	4	3	3	3	3
	USS 3	13	10	7	5	4	4	4	4	4
	USS 4	13	10	7	5	5	5	5	5	5
	USS 5	13	10	7	6	6	6	6	6	6

Table 3B Allowed Incremental Derived Concentration Guidance Level of Individual Radionuclides in Soils;

Restricted Use Standards for Radioactive Contamination (Bq/g) <(1)>

Feet of Uncontaminated		Feet of Vertical Extent of Residual Radionuclides (VE)								
Surface Soil (USS)		VE1	VE2	VE3	VE4	VE5	VE6	VE7	VE8	VE9
Ac227	USS 1	0.62	0.34	0.24	0.18	0.18	0.18	0.17	0.17	0.17
	USS 2	0.63	0.36	0.24	0.24	0.23	0.20	0.19	0.19	0.19
	USS 3	0.63	0.36	0.36	0.29	0.23	0.23	0.23	0.23	0.23
	USS 4	0.63	0.54	0.37	0.29	0.28	0.28	0.28	0.28	0.28
	USS 5	0.63	0.54	0.37	0.36	0.36	0.36	0.36	0.36	0.36
Th232	USS 1	0.48	0.35	0.25	0.19	0.15	0.13	0.11	0.10	0.10
	USS2	0.48	0.39	0.26	0.19	0.15	0.13	0.12	0.12	0.12
	USS3	0.48	0.39	0.26	0.19	0.15	0.14	0.14	0.14	0.14
	USS4	0.48	0.39	0.26	0.19	0.17	0.17	0.17	0.17	0.17
	USS 5	0.48	0.39	0.26	0.22	0.22	0.22	0.22	0.22	0.22

<(1)-(3)> (No change.)

2.-3. (No change.)

(b) (No change.)

7:28-12.10 Minimum remediation standards for accelerator-produced, by-product, and certain special nuclear materials

- (a) Remediation standards shall meet the requirements at N.J.A.C. 7:28-12.8.
- (b) Computer models acceptable to the Department shall be used to determine the remediation standards.
- (c) Modeling parameters used in developing unrestricted and restricted use standards shall be equivalent to those used in the NJDEP's model, RaSoRS, as supplemented or amended, and incorporated herein by reference, which is available on the Radiation Protection Program's website at <http://www.state.nj.us/dep/rpp/index.htm>.
- (d) Dose calculations shall be performed out to the time of peak dose or 1,000 years, whichever is longer.
- (e) Restricted use remediation standards shall meet requirements at N.J.A.C. 7:28-12.11(e) and 12.12.

7:28-12.11 Petition for alternative remediation standards for radioactive contamination

(a) In lieu of using the minimum remediation standards for radioactive contamination found at N.J.A.C. 7:28-12.9 or developed under N.J.A.C. 7:28-12.10, a person or licensee may petition the Department for an alternative remediation standard for radioactive contamination. Such an alternate remediation standard:

1. (No change.)
2. Shall not result in incremental concentrations exceeding three pCi/L (111 Bq/m³) of radon in indoor air in the lowest level of the building;
3. Shall not result in radionuclide in groundwater levels exceeding those in the New Jersey Groundwater Quality Standards in N.J.A.C. 7:9C; and
4. Shall not result in radionuclide in surface water levels exceeding those in the New Jersey Surface Quality Standards in N.J.A.C. 7:9B*-1.14(c)6*.

(b) The Department shall not consider a petition for an alternative remediation standard for radionuclides that is supported by increasing, in any manner, the allowed incremental dose criterion of 15 mrem/yr (0.15 mSv/yr) or the allowed incremental radon in air concentration of three pCi/L (111 Bq/m³), or varying the parameters listed in Tables 6 or 7 below.

Tables 6 and 7 (No change.)

(c) The Department shall consider petitions only in cases where site-specific or waste specific factors, and/or site design features are used in performing the dose assessment, which are different than those used by the Department in establishing the remediation standards in N.J.A.C. 7:28-12.9 or 12.10. Factors which the Department shall consider in a petition for an alternate remediation standard include, but are not limited to:

- 1.-4. (No change.)

(d) A petition for an alternate remediation standard shall include an analysis demonstrating how and why the difference in factors such as those in Tables 8 and 9 above and/or indoor and outdoor occupancy times will result in substantially different remediation standards than those in N.J.A.C. 7:28-12.9.

(e) Regardless of the factors used by the petitioner or licensee, the Department shall not approve alternative standard petitions that include institutional and engineering controls where failure of those controls, not including the failure of a radon remediation system, would result in more than 100 mrem (one mSv) total annual effective dose equivalent.

(f) In the event the Department determines that sufficient evidence exists to support consideration of an alternative remediation standard, the petitioner or licensee shall submit a written analysis which demonstrates compliance with the dose limits in N.J.A.C. 7:28-12.9 or 12.10 including:

1. (No change.)

2. A dose assessment analysis, including:

i. An estimate of the radiation doses received by a post-remediation on-site resident for an unrestricted use remedial action, or by an employee (of a proposed commercial use facility) for a limited restricted use or restricted use remedial action;

ii. (No change.)

iii. Dose calculations which shall be extended for a period of 1,000 years or to the time of peak dose, whichever is longer;

iv.-vii. (No change.)

(g) (No change.)

(h) Computer models acceptable to the Department may be used by the petitioner or licensee for an alternative remediation standard to confirm that the requirements of N.J.A.C. 7:28-12.9 or 12.10 have been and will continue to be met.

7:28-12.12 Requirements pertaining to engineering or institutional controls

(a) All remediation proposals shall designate the intended use(s) of the property. Such intended use(s) shall be restricted as necessary to prevent future exposure, and shall otherwise be consistent with current and projected State and local zoning designations or land uses. For sites not remediated to the unrestricted use standards in N.J.A.C. 7:28-12.9 or 12.10, the Department shall define the nature and duration of all appropriate engineering or institutional controls necessary to meet the standards in N.J.A.C. 7:28-12.9, 12.10, or 12.11(a), based upon the particular conditions of the site.

(b) In order for any remediation under this subchapter requiring engineering controls or institutional controls to meet the standards in N.J.A.C. 7:28-12.9, 12.10, or 12.11(a), the person responsible for conducting the remediation, or licensee, shall, in addition to meeting the provisions of N.J.S.A. 58:10B-13:

1. (No change.)

2. Provide sufficient financial assurance for the costs of implementing and maintaining the requisite active engineered or institutional controls for an appropriate period of time. Acceptable financial assurance mechanisms are set forth at 10 CFR 20.1403(c), incorporated herein by reference.

(c) A person responsible for conducting the remediation, or the licensee, shall conduct public outreach if the Department determines that outreach is needed, or when the Department determines that there is substantial public interest in activities concerning restricted release license termination.

1. The Department may determine that there is substantial public interest when it receives:

i. A petition containing the signatures of 25 or more people that live or work within 200 feet of the site, if contamination has not migrated from the site boundary;

ii. A petition containing the signatures of 25 ***or more*** people that live or work within 200 feet of the extent of contamination, if contamination has migrated from the site boundary; or

iii. A written request by a municipal official, such as a mayor or chairperson of an environmental commission, or a designated local health official.

2. When the Department determines that there is substantial public interest, the Department shall notify the person responsible for conducting the remediation or the licensee and post a summary of findings on the Department's web site at www.state.nj.us/dep; and

3. The person responsible for conducting the remediation or the licensee shall develop and implement enhanced public notice based on the expressed needs of the community and may include the following:

- i. Publicizing and hosting an information session or public meeting;
- ii. Publishing a notice containing basic information about the site in the local paper of record; or
- iii. Establishing a local information repository.

4. The notifications required pursuant to this section are not intended to satisfy the public participation requirements applicable to sites subject to the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. and the National Contingency Plan, 40 CFR Part 300.

7:28-12.13 Requirements pertaining to a change in land use

(a) Any subsequent proposed use of a property that is different from the intended use (other than unrestricted use remedial actions) described in the original remediation proposal shall require a prior review and prior approval by the Department. To initiate this review, 90 calendar days prior to a proposed change in land use, the person or licensee proposing such use shall prepare and submit to the Department, at the Bureau of Environmental Radiation, PO Box 415, Trenton, NJ 08625-0415, and to each affected municipality, a brief written description of the new proposed use as compared to the intended use upon which the original remediation was based including all planned soil excavations, and any additional remedial actions to be implemented.

(b) If the Department determines that the proposed new use may cause the dose limitations of N.J.A.C. 7:28-12.8 to be exceeded, the person or licensee requesting the use change shall be required to prepare and submit to the Department's Bureau of Environmental Radiation, PO Box 415, Trenton, NJ 08625-0415, a dose assessment analysis, containing the information required under N.J.A.C. 7:28-12.11(f)2, (g), and (h), to ascertain whether the dose limitation requirements of N.J.A.C. 7:28-12.8 will be met for the proposed new use.

(c) In preparing the dose assessment analysis, the person or licensee may incorporate into the new use plan new remedial measures such as different radionuclide in soil concentrations, or radioactive contamination vertical extents, and/or new engineering or institutional controls, provided that for engineering or institutional controls, the person responsible for conducting the remediation or licensee provides for the cost of implementing and maintaining them as specified in N.J.A.C. 7:28-12.12(c)3.

7:28-12.14 (No change in text.)

7:28-12.15 Requirements pertaining to onsite burial or capping

(a) No owner or licensee shall bury or construct an engineered barrier (cap) over radioactive material onsite unless the requirements of N.J.A.C. 7:28-12.8 and 12.11 are met.

(b) Owners or licensees with sites that have been used for burial of radioactive materials or where radioactive material has been capped, shall not be allowed to convert these sites to other uses unless the requirements of N.J.A.C. 7:28-12.8 and 12.11 are met.

(c) The owner or licensee of any burial ground or capped material shall notify the Department in writing not less than 30 days in advance of any transfer of title to the property involved.

Restricted Standards	USS 1	0.67	0.55	0.37	0.30	0.22	0.18	0.18	0.15	0.15
	USS 2	0.67	0.56	0.37	0.30	0.22	0.18	0.18	0.18	0.18
	USS 3	0.67	0.56	0.37	0.30	0.22	0.22	0.22	0.22	0.22
	USS 4	0.67	0.56	0.37	0.30	0.23	0.23	0.26	0.26	0.26
	USS 5	0.67	0.56	0.37	0.33	0.33	0.33	0.33	0.33	0.33

<(1)> (No change in text.)

SUBCHAPTER 13. REPORTS OF THEFTS AND RADIATION INCIDENTS FOR REGISTRANTS

7:28-13.1 Reports of theft or loss

A registrant shall immediately notify the Department by telephone, telefax or telegraph of any theft or loss of any ionizing radiation-producing machine under such circumstances that a substantial radiation hazard may result.

7:28-13.2 Reportable radiation incidents

(a) A registrant shall immediately notify the Department by telephone, telefax or telegraph of any radiation incident which may have caused or threatens to cause the following:

1. (No change.)

Recodify existing 3. and 4. as 2. and 3. (No change in text.)

(b) (No change.)

(c) A registrant shall notify the Department within 24 hours by telephone, telefax or telegraph of any radiation incident which may have caused or threatens to cause the following:

1. (No change.)

Recodify existing 3. and 4. as 2. and 3. (No change in text.)

(d) (No change.)

(e) A registrant shall notify the Department in writing within 30 days of the following:

1. Each exposure of an individual to radiation in excess of any applicable limit of N.J.A.C. 7:28-6;

2. (No change.)

3. Levels of radiation not involving exposure of any individual in excess of any applicable limit of N.J.A.C. 7:28-6 outside a controlled area in excess of 10 times the limits of N.J.A.C. 7:28-6, Standards for Protection Against Radiation.

(f) The reports set forth in (e) above shall describe the extent of exposure of individuals to radiation, the levels of radiation, the cause of the exposure and/or levels, and corrective steps taken or planned to assure against a recurrence.

(g) In each case where (e)1 above requires a report to the Department of exposure of an individual, the owner shall:

1. (No change.)
2. Concurrently give written notification to the individual of the nature and extent of the exposure. Such notice shall contain the following statement: "This report is furnished to you under the provisions of N.J.A.C. 7:28-13, Reports of Thefts and Radiation Incidents for Registrants. You should preserve this report for future reference."

SUBCHAPTER 17. INDUSTRIAL AND NONMEDICAL X-RAY RADIOGRAPHY

7:28-17.1 Scope

(a) This subchapter establishes radiation-safety requirements for persons utilizing ionizing radiation-producing machines for industrial and nonmedical radiography.

(b)-(d) (No change.)

7:28-17.2 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise:

...

"Temporary job site" means any location where industrial radiography is performed other than the location(s) listed in a registration issued by the Department pursuant to N.J.A.C. 7:28-3.

7:28-17.3 Registration requirements

All owners of ionizing radiation-producing machines shall comply with N.J.A.C. 7:28-3.

7:28-17.4 Equipment control

(a) (Reserved.)

(b) (No change.)

(c) All ionizing radiation-producing machines shall be kept locked at all times except when under the direct surveillance of a radiographer or of a radiographer's assistant or as provided in N.J.A.C. 7:28-17.6(a).

(d) (Reserved.)

(e) (No change.)

(f)-(j) (Reserved)

(k) Each owner shall maintain current logs, which shall be kept available for inspection by the Department at the address specified in the *[license]* ***registration***, showing for each radiation source the following information.

1. A description, or make and model number of the ionizing radiation-producing machine;

- 2.-3. (No change.)

(l) Each owner conducting industrial radiography at a temporary job site shall make the following records available at the site for inspection by the Department:

1. (Reserved.)
2. A copy of the owner's current registration of a ionizing radiation-producing machine issued by the Department pursuant to N.J.A.C. 7:28-3;
3. (Reserved.)
- 4.-6. (No change.)
7. Daily pocket dosimeter records for the period of operation at the site required to be made pursuant to N.J.A.C. 7:28-17.5; and
8. A copy of the latest instrument calibration and the original log of daily instrument operational check source test results for the specific devices in use at the site required to be made pursuant to (e)1 and 2 above.

7:28-17.5 Personal radiation safety requirements for radiographers

(a) The owner shall not permit any person to act as a radiographer until such person:

- 1.-2. (No change.)
3. Has demonstrated competence to use the ionizing radiation-producing machines and survey instruments which will be employed in his or her assignment.

(b) The outline of the course for radiographer's training is as follows:

1. Fundamentals of radiation safety:

i.-iii. (No change.)

iv. Levels of radiation from ionizing radiation-producing machines;

v. (No change.)

2. (No change.)

3. Radiographic equipment to be used:

i. (No change.)

ii. (Reserved)

iii.-iv. (No change.)

4.-5. (No change.)

(c) The owner shall not permit any person to act as a radiographer's assistant until such person:

1. (No change.)

2. Has demonstrated competence to use under the personal supervision of the radiographer the ionizing radiation-producing machines and radiation-survey instruments which will be employed in his or her assignment; and

3. (No change.)

40 N.J.R. 5196(b)

(d) The owner shall prepare written operating and emergency procedures which shall include instructions in at least the following:

1. The handling and the use of ionizing radiation-producing machines to be employed such that no person is likely to be exposed to radiation doses in excess of the limits established in N.J.A.C. 7:28-6;

2.-3. (No change.)

4. Methods and occasions for locking and securing ionizing radiation-producing machines;

5. (No change.)

6. (Reserved.)

7.-9. (No change.)

(e) (No change.)

7:28-17.6 Precautionary procedures in radiographic operations

(a)-(c) (No change.)

(d) In addition to the requirements of N.J.A.C. 7:28-7, no radiographic operation shall be conducted unless the owner ensures that radiation surveys are made and recorded as follows:

1. (No change.)

2. (Reserved.)

3. (Reserved.)

4. Clear and legible records shall be kept of the surveys that are required by (d)1 above and maintained for inspection by the Department.

7:28-17.8 Shielded room radiography

(a) No person shall operate or permit the operation of any ionizing radiation-producing machine used in shielded room radiography unless the equipment, installation, and personnel meet the requirements of N.J.A.C. 7:28-17.1 through 17.6 and this section.

(b) No person shall operate or permit any person to operate an ionizing radiation-producing machine used in shielded room radiography until such operator has completed the following requirements:

1.-3. (No change.)

(c) Each owner shall supply appropriate personnel monitoring equipment and shall require that it be used by every individual who operates, makes "set-ups," or performs maintenance on an ionizing radiation-producing machine used in shielded room radiography.

(d) (No change.)

(e) No person shall enter an enclosed room in which shielded room radiography is performed until after a physical radiation survey is conducted to determine whether the ionizing radiation producing machine is off. A record shall be maintained of the date and exposure rate measured for each physical radiation survey and shall be made available for inspection by the Department.

(f)-(g) (No change.)

(h) All ionizing radiation-producing machines used in shielded room radiography and all objects exposed thereto shall be confined within an installation or structure designed or intended for radiography and in which radiography is regularly performed in accordance with the following requirements:

1.-6. (No change.)

SUBCHAPTER 18. MAJOR NUCLEAR FACILITIES

7:28-18.1 Scope

(a)-(b) (No change.)

(c) The intent of this section is to insure that individuals outside of these facilities receive no radiation exposures from environmental or direct radiation that are in excess of the limits of N.J.A.C. 7:28-6.

SUBCHAPTER 48. FEES FOR THE REGISTRATION OF NONIONIZING RADIATION PRODUCING SOURCES

7:28-48.2 Definitions

The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

...

"Radiation area" means an area which is accessible to a worker and in which there exists levels of nonionizing radiation that exceed the maximum permissible levels of such radiation as specified in the rules of the Commission.

...

SUBCHAPTER 49. (RESERVED.)

SUBCHAPTER 50. NOTICES, INSTRUCTIONS AND REPORTS TO WORKERS: INSPECTION AND INVESTIGATIONS

7:28-50.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 19, Notices, Instructions and Reports to Workers: Inspection and Investigations.

(b) The following provisions of 10 CFR Part 19 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 19.5, Communications; and
2. 10 CFR 19.8, Information collection requirements: OMB approval.

(c) The following provisions of 10 CFR Part 19 are incorporated by reference with the specified changes:

1. At 10 CFR 19.2, Scope, delete references to 10 CFR Parts 50, 60, 63, 72 and 76;
2. At 10 CFR 19.3, Definitions, "Commission" shall mean the New Jersey Department of Environmental Protection;

3. "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 19 of the Code of Federal Regulations that are incorporated by reference, mean the New Jersey Department of Environmental Protection, except when specifically noted in this subchapter;
 4. 10 CFR 19.4, delete "Except as specifically authorized by the Commission in writing, no" with "No," and replace "by the General Counsel" with "signed and approved by the Commissioner of the Department,";
 5. 10 CFR 19.11(a)(1), replace "Part 20" with "N.J.A.C. 7:28-6";
 6. 10 CFR 19.13(b), replace "§20.2106 of 10 CFR Part 20" with "N.J.A.C. 7:28-6";
 7. 10 CFR 19.13(c)(1)(i), replace "§20.2106" with "N.J.A.C. 7:28-6";
 8. 10 CFR 19.13(c)(1)(i), replace "§20.1502" with "N.J.A.C. 7:28-6";
 9. 10 CFR 19.13(d), replace "§§20.2202, 20.2203, 20.2204, or 20.2206 of this Chapter" with "N.J.A.C. 7:28-6";
 10. 10 CFR 19.17(a), replace all references to "Executive Director for Operations" with "Chief, Bureau of Environmental Radiation of the Department";
 11. 10 CFR 19.17(a) and (b), replace all references to "Administrator of the appropriate Regional Office" with "Supervisor, Radioactive Materials Section";
 12. 10 CFR 19.18(b), replace "Office of the General Counsel" with "Office of the Attorney General of New Jersey";
 13. 10 CFR 19.20, delete references to 10 CFR Parts 50, 60, 63, 72 and 76; and
 14. 10 CFR 19.32, add "Allegations of discrimination are to be reported to the Division on Civil Rights, Department of Law and Public Safety, 140 East Front Street, P.O. Box 089, Trenton, New Jersey, 08625-089."
- (d) For those facilities whose radioactive materials are licensed solely by the Department, NRC Form 3, "Notice to Employees" shall mean the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation," available from the Department via the Department's website at: www.nj.gov/dep/rpp/rms/rmsdown.htm, or by requesting a copy by telephone during business hours at (609) 984-5462.
- (e) Those facilities which possess a license from the Department and the NRC for radioactive materials shall post both the NRC's Form 3, "Notice to Employees," and the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation."
- (f) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.
- (g) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 51. RULES OF GENERAL APPLICABILITY TO DOMESTIC LICENSING OF BYPRODUCT MATERIAL

7:28-51.1 Incorporation by reference

- (a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 30, Rules of General Applicability to Domestic Licensing of Byproduct Material.

(b) The following provisions of 10 CFR Part 30 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 30.4, Definitions, the following definitions are not incorporated by reference: "act," "byproduct material," "curie," "decommission," "department" and "Department of Energy," "effective dose equivalent," "government agency," "license," "medical use," "person," "source material" and "special nuclear material";
2. 10 CFR 30.6, Communications;
3. 10 CFR 30.8, Information collection requirements: OMB approval;
4. 10 CFR 30.21(c), Radioactive drug: Capsules containing carbon-14 urea for "in vivo" diagnostic use for humans;
5. 10 CFR 30.34(d), (e)(1) and (e)(3), Terms and conditions of licenses;
6. 10 CFR 30.41(a)(6), Transfer of byproduct material; and
7. 10 CFR 30.55, Tritium reports.

(c) The following provisions of 10 CFR Part 30 are incorporated by reference with the specified changes:

1. 10 CFR 30.4, Definitions, "Commission" shall mean the New Jersey Department of Environmental Protection;
2. "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 30 of the Code of Federal Regulations that are incorporated by reference, mean the New Jersey Department of Environmental Protection, except when specifically noted in this subchapter;
3. 10 CFR 30.5, delete "Except as specifically authorized by the Commission in writing, no" with "No," and replace "by the General Counsel" with "signed and approved by the Commissioner of the Department,";
4. 10 CFR 30.9(b), replace all references to "Administrator of the appropriate Regional Office" with "Supervisor, Radioactive Materials Section";
5. 10 CFR 30.10(b), replace "10 CFR part 2, subpart B" with " N.J.S.A. 26:2D-13";
6. 10 CFR 30.12, replace "when the Commission determines that the exemption of the prime contractor or subcontractor is authorized by law" with "when the Department and the Commission on Radiation Protection determine that the exemption of the prime contractor or subcontractor is in accordance with N.J.A.C. 7:28-2.8";
7. 10 CFR 30.14(c), add "the Department" after "holding a specific license issued by";
8. 10 CFR 30.14(c), "Commission" shall mean the U.S. Nuclear Regulatory Commission;
9. 10 CFR 30.15(a), delete "20 and" and add "and N.J.A.C. 7:28-6" after "of this Chapter";
10. 10 CFR 30.16, delete "20 and" and add "and N.J.A.C. 7:28-6" after "of this Chapter";
11. 10 CFR 30.19(a), delete "20 and" and add "and N.J.A.C. 7:28-6" after "of this Chapter";
12. 10 CFR 30.20(a), delete "20 and" and add "and N.J.A.C. 7:28-6" after "of this Chapter";
13. 10 CFR 30.32(a), replace the first sentence with "Application for specific licenses and renewals from the State shall be filed with Department on forms available from the Department";

14. 10 CFR 30.32(e), replace all references to 10 CFR Part 170 with N.J.A.C. 7:28-64;
15. 10 CFR 30.33(a)(5), replace "Director Office of Federal and State Materials and Environmental Management Program," with "Manager, Bureau of Environmental Radiation";
16. 10 CFR 30.35(c)(5), replace "10 CFR Part 20, Appendix G" with "N.J.A.C. 7:28-6";
17. 10 CFR 30.35(c)(5), replace "10 CFR Part 20" with "N.J.A.C. 7:28-12";
18. 10 CFR 30.35(g)(3)(i), replace " 10 CFR 20.1003" with "N.J.A.C. 7:28-6";
19. 10 CFR 30.35(g)(3)(iii), replace " 10 CFR 20.2108" with "N.J.A.C. 7:28-6";
20. 10 CFR 30.35(g)(3)(iv), replace "10 CFR Part 20, subpart E" with "N.J.A.C. 7:28-12";
21. 10 CFR 30.35(g)(3)(iv), replace " 10 CFR 20.2002" with "N.J.A.C. 7:28-6";
22. 10 CFR 30.36(j)(2), replace "10 CFR Part 20, subpart E" with "N.J.A.C. 7:28-12";
23. 10 CFR 30.36(k)(3)(i), replace "10 CFR Part 20, Subpart E" with "N.J.A.C. 7:28-12";
24. 10 CFR 30.36(k)(3)(ii), replace "10 CFR Part 20, subpart E" with "N.J.A.C. 7:28-12";
25. 10 CFR 30.37(a), replace the wording of (a) with "Application for renewal of a specific State license shall be filed with the Department on forms available from the Department";
26. 10 CFR 30.38, Change the title of the section from "Application for amendment of licenses" to "Amendment of licenses." Replace "Applications for amendment of a license shall be filed on Form NRC-313 in accordance with 30.32" with "Requests to amend a license shall be submitted in letter form to the Department";
27. 10 CFR 30.50(b)(1)(ii), replace "appendix B of §§20.1001-20.2401 of 10 CFR Part 20" with " N.J.A.C. 7:28-6.1";
28. 10 CFR 30.50(b)(4)(i), replace "appendix B of §§20.1001-20.2401 of 10 CFR Part 20" with " N.J.A.C. 7:28-6.1";
29. 10 C.F.R 30.50(c)(2), replace "appropriate NRC Regional office listed in appendix D to part 20 of this Chapter" with "Department";
30. 10 CFR 30.51(d), replace "appropriate NRC Regional Office" with "Department";
31. 10 CFR 30.51(d)(1), replace "§§20.2002 (including burials authorized before January 28, 1981), 20.2003, 20.2004, 20.2005" with "N.J.A.C. 7:28-6";
32. 10 CFR 30.51(d)(2), replace "§20.2103(b)(4)" with N.J.A.C. 7:28-6";
33. 10 CFR 30.51(e)(1), replace "§§20.2002 (including burials authorized before January 28, 1981), 20.2003, 20.2004, 20.2005" with "N.J.A.C. 7:28-6";
34. 10 CFR 30.51(e)(2), replace "§20.2103(b)(4)" with N.J.A.C. 7:28-6"; and
35. 10 CFR 30, Appendix B to Part 30--Quantities of Licensed Material Requiring Labeling, end Note, replace "§20.303" with "N.J.A.C. 7:28-6."

(d) For those facilities whose radioactive materials are licensed solely by the Department, NRC Form 3, "Notice to Employees" shall mean the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radia-

tion," available from the Department via the Department's website at: www.nj.gov/dep/rpp/rms/rmsdown.htm, or by requesting a copy by telephone during business hours at (609) 984-5462.

(e) Those facilities which possess a license from the Department and the NRC for radioactive materials shall post both the NRC's Form 3, "Notice to Employees" and the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation."

(f) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

(g) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 52. GENERAL DOMESTIC LICENSES FOR BYPRODUCT MATERIAL

7:28-52.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 31, General Domestic Licenses for Byproduct Material.

(b) The following provisions of 10 CFR Part 31 are not incorporated by reference. If there is a cross reference to a Federal citation specifically excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR Part 31.4, Information collection requirements: OMB approval.

(c) The following provisions of 10 CFR Part 31 are incorporated by reference with the specified changes:

1. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 31 of the Code of Federal Regulations that are incorporated by reference, means the Department, except when specifically noted in this subchapter;

2. 10 CFR 31.2, delete "20," and add "and N.J.A.C. 7:28-6" after "of this chapter";

3. 10 CFR 31.5(c)(5), replace "§20.1402" with "N.J.A.C. 7:28-12";

4. 10 CFR 31.5(c)(9)(i), replace "20.2201, and 20.2202" with "and N.J.A.C. 7:28-6";

5. 10 CFR 31.5(c)(10), replace "§§20.2201, and 20.2202 of this chapter" with "N.J.A.C. 7:28-6";

6. 10 CFR 31.5(c)(10), delete "20," and add "and N.J.A.C. 7:28-6" after "of this chapter";

7. 10 CFR 31.5(c)(13)(ii), after "fee required by" replace "Section 170.31" with "N.J.A.C. 7:28-64";

8. 10 CFR 31.5(c)(13)(iv), the terms "NRC" and "Commission" mean the U.S. Nuclear Regulatory Commission;

9. 10 CFR 31.5(c)(14), replace "Director of Nuclear Material Safety and Safeguards, ATTN: GLTS, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001" with "Department";

10. 10 CFR 31.7(b), delete "20," and add "N.J.A.C. 7:28-6" after "of this chapter";

11. 10 CFR 31.7(b), replace "§§20.2201, and 20.2202" with "N.J.A.C. 7:28-6";

12. 10 CFR 31.8(c), delete "20," and add ", as well as N.J.A.C. 7:28-6" after the second "of this chapter";

13. 10 CFR 31.10(b)(1), replace "§20.2001" with "N.J.A.C. 7:28-6";
14. 10 CFR 31.10(b)(3), delete "20," and add "and N.J.A.C. 7:28-6,";
15. 10 CFR 31.10(b)(3), replace "§§20.2001, 20.2201, and 20.2202 of this chapter" with "N.J.A.C. 7:28-6";
16. 10 CFR 31.11(c)(5), replace "§20.2001" with "N.J.A.C. 7:28-6";
17. 10 CFR 31.11(e), add "radioactive materials" prior to "registrant";
18. 10 CFR 31.11(f), delete "20," and add "and N.J.A.C. 7:28-6" after "of this chapter"; and
19. 10 CFR 31.11(f), replace "§§20.2001, 20.2201, and 20.2202" with "N.J.A.C. 7:28-6."

(d) For those facilities whose radioactive materials are licensed solely by the Department, NRC Form 3, "Notice to Employees," shall mean the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation," available from the Department via the Department's website at www.nj.gov/dep/rpp/rms/rmsdown.htm, or by requesting a copy by telephone during business hours at (609) 984-5462.

(e) Those facilities which possess a license for radioactive materials from both the Department and the NRC shall post both the NRC's Form 3, "Notice to Employees," and the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation."

(f) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

(g) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 53. SPECIFIC DOMESTIC LICENSES TO MANUFACTURE OR TRANSFER CERTAIN ITEMS CONTAINING BYPRODUCT MATERIAL

7:28-53.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 32, Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Byproduct Material.

(b) The following provisions of 10 CFR Part 32 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 32.8, Information collection requirements: OMB approval;
2. 10 CFR 32.11, Introduction of byproduct material in exempt concentrations into products or materials, and transfer of ownership or possession: Requirements for license;
3. 10 CFR 32.12, Same: Records and material transfer reports;
4. 10 CFR 32.14, Certain items containing byproduct material; requirements for license to apply or initially transfer;
5. 10 CFR 32.15, Same: Quality assurance, prohibition of transfer, and labeling;
6. 10 CFR 32.16, Certain items containing byproduct material: Records and reports of transfer;

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7. 10 CFR 32.18, Manufacture, distribution and transfer of exempt quantities of byproduct material: Requirements for license;
8. 10 CFR 32.19, Same: Conditions of licenses;
9. 10 CFR 32.20, Same: Records and material transfer reports;
10. 10 CFR 32.21, Radioactive drug: Manufacture, preparation or transfer for commercial distribution of capsules containing carbon-14 urea each for "in vivo" diagnostic use for humans to persons exempt from licensing; Requirements for a license;
11. 10 CFR 32.21a, Same: Conditions of license;
12. 10 CFR 32.22, Self-luminous products containing tritium, krypton-85 or promethium 147: Requirements for license to manufacture, process, produce, or initially transfer;
13. 10 CFR 32.23, Same: Safety criteria;
14. 10 CFR 32.25, Conditions of licenses issued under Part 32.22: Quality control, labeling, and reports of transfer;
15. 10 CFR 32.26, Gas and aerosol detectors containing byproduct material: Requirements for license to manufacture, process, produce, or initially transfer;
16. 10 CFR 32.27, Same: Safety criteria;
17. 10 CFR 32.28, Same: Table of organ doses;
18. 10 CFR 32.29, Conditions of licenses issued under 32.26: Quality control, labeling, and reports of transfer;
19. 10 CFR 32.40, Schedule A-Prototype tests for automobile lock illuminators; and
20. 10 CFR 32.210, Registration of product information.

(c) The following provisions of 10 CFR Part *[30]* *32* are incorporated by reference with the specified changes:

1. 10 CFR 32.52(a), replace "Director of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001," with "New Jersey Department of Environmental Protection, Radioactive Materials Section, P.O. Box 415, Trenton, New Jersey 08625-0415";
2. 10 CFR 32.56, replace "Director of Nuclear Material Safety and Safeguards," with "Department";
3. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 32 of the Code of Federal Regulations that are incorporated by reference, mean the Department, except when specifically noted in this subchapter;
4. 10 CFR 32.2, in the definition of "nationally tracked source," replace "part 20 of this Chapter" with "10 CFR part 20 as incorporated by reference in N.J.A.C. 7:28-6";
5. 10 CFR 32.51(a)(2)(ii), replace "§20.1201(a) of this chapter" with "N.J.A.C. 7:28-6";
6. 10 CFR 32.51(a)(4), replace "§20.1901 of this chapter" with "N.J.A.C. 7:28-6";
7. 10 CFR 32.51(a)(5), replace "§20.1901 of this chapter" with "N.J.A.C. 7:28-6";

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8. 10 CFR 32.51(c), replace "§20.1201(a) of this chapter" with "N.J.A.C. 7:28-6";
9. 10 CFR 32.51a(a)(2), add "and" between "31.2," and "30.51";
10. 10 CFR 32.51a(a)(2), delete "20.2201, and 20.2202" and add "and N.J.A.C. 7:28-6" after "of this chapter";
11. 10 CFR 32.51a(b)(1), add "and" between "31.2" and "30.51" in both locations;
12. 10 CFR 32.51a(b)(1), delete "20.2201, and 20.2202" from both locations and add "and N.J.A.C. 7:28-6" after "of this chapter" in both locations;
13. 10 CFR 32.54(a), replace "§20.1901 of this chapter" with "N.J.A.C. 7:28-6";
14. 10 CFR 32.61(d), replace "§20.1901(a) of this chapter" with "N.J.A.C. 7:28-6";
15. 10 CFR 32.71(c)(2), replace "§20.1901(a) of this chapter" with "N.J.A.C. 7:28-6"; and
16. 10 CFR 32.71(e), replace "§20.2001" with "N.J.A.C. 7:29-6."

(d) For those facilities whose radioactive materials are licensed solely by the Department, NRC Form 3, "Notice to Employees" shall mean the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation," available from the Department via the Department's website at: www.nj.gov/dep/rpp/rms/rmsdown.htm, or by requesting a copy by telephone during business hours at (609) 984-5462.

(e) Those facilities which possess a license from the Department and the NRC for radioactive materials shall post both the NRC's Form 3, "Notice to Employees," and the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation."

(f) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

(g) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 54. SPECIFIC DOMESTIC LICENSES OF BROAD SCOPE FOR BYPRODUCT MATERIAL

7:28-54.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 33, Specific Domestic Licenses of Broad Scope for Byproduct Material.

(b) The following provisions of 10 CFR Part 33 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 33.8, Information collection requirements: OMB approval.

(c) The following provisions of 10 CFR Part 33 are incorporated by reference with the specified changes:

1. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 33 of the Code of Federal Regulations that are incorporated by reference, mean the Department; and

2. 10 CFR 33.12, replace with "Application for specific licenses from the State and renewals shall be filed with Department on forms available from the Department."

(d) For those facilities whose radioactive materials are licensed solely by the Department, NRC Form 3, "Notice to Employees," shall mean the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation," available from the Department via the Department's website at: www.nj.gov/dep/rpp/rms/rmsdown.htm, or by requesting a copy by telephone during business hours at (609) 984-5462.

(e) Those facilities which possess a license from the Department and the NRC for radioactive materials shall post both the NRC's Form 3, "Notice to Employees," and the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation."

(f) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

(g) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 55. MEDICAL USE OF BYPRODUCT MATERIAL

7:28-55.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 35, Medical Use of Byproduct Material.

(b) The following provisions of 10 CFR Part 35 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 35.8, Information collection requirements: OMB approval; and
2. 10 CFR 35.63(b)(2)(i).

(c) The following provisions of 10 CFR Part 35 are incorporated by reference with the specified changes:

1. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 35 of the Code of Federal Regulations, that are incorporated by reference, means the Department, except when specifically noted in this subchapter;
2. 10 CFR 35.1, delete "20," and add "and N.J.A.C. 7:28-6" after "of this chapter";
3. 10 CFR 35.12(b)(1), replace "Filing an original and one copy of NRC Form 313, "Application for Material License," with "Filing an original application for a specific license from the State with the Department on forms available from the Department,";
4. 10 C.F.R 35.12(c), delete the wording "amendment or";
5. 10 CFR 35.12(c)(1), delete the wording "and one copy" and "either";
6. 10 CFR 35.12(c)(1)(i), delete the wording "NRC Form 313, 'Application for Material License,' or" and replace with "an initial application or renewal application form available from the Department";
7. 10 CFR 35.12(c)(1)(ii), delete wording "or renewal";

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8. 10 CFR 35.12(d), create new wording for (d) to state "A request for an amendment must be made by submitting a letter requesting the amendment with relevant supporting documentation as required by 35.610, 35.642, 35.643, and 35.645, as applicable";
 9. 10 CFR 35.12(d), change existing citation to 35.12(e);
 10. 10 CFR 35.12(e), change existing citation to 35.12(f);
 11. 10 CFR 35.18(a)(1), delete the wording "NRC Form 313 'Application for Material License,' and replace with "an original application for a specific license from the State";
 12. 10 CFR 35.24(a), replace "§20.1101 of this chapter" with "N.J.A.C. 7:28-6";
 13. 10 CFR 35.61(a), replace "10 CFR Part 20" with "N.J.A.C. 7:28-6";
 14. 10 CFR 35.70(a), replace "Part 20 of this chapter" with "N.J.A.C. 7:28-6";
 15. 10 CFR 35.80(a)(4), replace "Part 20 of this chapter" with "N.J.A.C. 7:28-6";
 16. 10 CFR 35.310(a)(2)(i), replace "§20.1301(a)(1) of this chapter" with "N.J.A.C. 7:28-6";
 17. 10 CFR 35.310(a)(2)(ii), replace "§20.1301(c) of this chapter" with "N.J.A.C. 7:28-6";
 18. 10 CFR 35.410(a)(4)(i), replace "§20.1301(a)(1) of this chapter" with "N.J.A.C. 7:28-6";
 19. 10 CFR 35.410(a)(4)(ii), replace "§20.1301(c) of this chapter" with "N.J.A.C. 7:28-6";
 20. 10 CFR 35.652(a), replace "§20.1501 of this chapter" with "N.J.A.C. 7:28-6";
 21. 10 CFR 35.3045(c), replace "NRC Operations Center" with "Department";
 22. 10 CFR 35.3047(c), replace "NRC Operations Center" with "Department";
 23. 10 CFR 35.3047(d), replace "appropriate NRC Regional Office listed in §30.6 of this chapter" with "Department";
and
 24. 10 CFR 35.3067, replace "appropriate NRC Regional Office listed in §30.6 of this chapter" with "Department" and delete ", with a copy to the Director, Office of Nuclear Material Safety and Safeguards."
- (d) For those facilities whose radioactive materials are licensed solely by the Department, NRC Form 3, "Notice to Employees" shall mean the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation," available from the Department via the Department's website at: www.nj.gov/dep/rpp/rms/rmsdown.htm, or by requesting a copy by telephone during business hours at (609) 984-5462.
- (e) Those facilities which possess a license from the Department and the NRC for radioactive materials shall post both the NRC's Form 3, "Notice to Employees" and the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation."
- (f) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.
- (g) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 56. LICENSES AND RADIATION SAFETY REQUIREMENTS FOR IRRADIATORS

7:28-56.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 36, Licenses and Radiation Safety Requirements for Irradiators.

(b) The following provisions of 10 CFR Part 36 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 36.8, Information collection requirements: OMB approval.

(c) The following provisions of 10 CFR Part 36 are incorporated by reference with the specified changes:

1. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 36 of the Code of Federal Regulations that are incorporated by reference, means the Department, except when specifically noted in this subchapter;

2. 10 CFR 36.1(a), delete "20," and add "N.J.A.C. 7:28-6" after "of this chapter";

3. 10 CFR 36.11, replace "Form NRC 313, 'Application for Material License,'" with "forms available from the Department," delete "and one copy," and replace "appropriate NRC Regional Office listed in appendix D to part 20 of this chapter" with "Department";

4. 10 CFR 36.17, replace "Commission" with "Department, with approval of the Commission on Radiation Protection," and replace "by law and will not endanger life or property or the common defense and security and are otherwise in the public interest" with "in accordance with the provisions of N.J.A.C. 7:28-2.8";

5. 10 CFR 36.23(g), replace " 10 CFR 20.1902" in both locations with "N.J.A.C. 7:28-6";

6. 10 CFR 36.55(a), replace " 10 CFR 20.1501(c)" with "N.J.A.C. 7:28-6";

7. 10 CFR 36.57(d), replace "10 CFR part 20, table 2, column 2 or table 3 of appendix B" with "as incorporated by reference in N.J.A.C. 7:28-6"; and

8. 10 CFR 36.59(c), replace "table 2, column 2, appendix B to part 20" with "as incorporated by reference in N.J.A.C. 7:28-6."

(d) For those facilities whose radioactive materials are licensed solely by the Department, NRC Form 3, "Notice to Employees" shall mean the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation," available from the Department via the Department's website at: www.nj.gov/dep/rpp/rms/rmsdown.htm, or by requesting a copy by telephone during business hours at (609) 984-5462.

(e) Those facilities which possess a license from the Department and the NRC for radioactive materials shall post both the NRC's Form 3, "Notice to Employees" and the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation."

(f) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

(g) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 57. LICENSES AND RADIATION SAFETY REQUIREMENTS FOR WELL LOGGING

7:28-57.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 39, Licenses and Radiation Safety Requirements for Well Logging.

(b) The following provisions of 10 CFR Part 39 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 39.8, Information collection requirements: OMB approval.

(c) The following provisions of 10 CFR Part 39 are incorporated by reference with the specified changes:

1. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 39 of the Code of Federal Regulations that are incorporated by reference, means the Department, except when specifically noted in this subchapter;

2. 10 CFR 39.1(a), delete "20," and add "and N.J.A.C. 7:28-6" after "of this chapter";

3. 10 CFR 39.11, replace "Form NRC 313, "Application for Material License." with "forms available from the Department" and replace "appropriate NRC Regional Office listed in appendix D of part 20 of this chapter" with "Department";

4. 10 CFR 39.15(a)(5)(iii)(B), replace "§20.1901(a)" with "N.J.A.C. 7:28-6";

5. 10 CFR 39.31(a)(1), replace "§20.1901(a)" with "N.J.A.C. 7:28-6";

6. 10 CFR 39.31(a)(2), replace "§20.1901(a)" with "N.J.A.C. 7:28-6";

7. 10 CFR 39.33(a), replace "part 20 of this chapter" with "N.J.A.C. 7:28-6";

8. 10 CFR 39.35(d)(2), replace "appropriate NRC Regional Office listed in appendix D of part 20 of this chapter" with "Department";

9. 10 CFR 39.61(a)(2)(i), delete "20," and add "and N.J.A.C. 7:28-6" after "of this chapter";

10. 10 CFR 39.61(b)(1), delete "parts 19 and 20 of this chapter" and add "part 19 of this chapter and N.J.A.C. 7:28-6";

11. 10 CFR 39.63(h), replace "§20.1906 of this chapter" with "N.J.A.C. 7:28-6";

12. 10 CFR 39.71(b), replace "§20.1003 of this chapter" with "N.J.A.C. 7:28-6";

13. 10 CFR 39.73(a), replace "19, 20, and 39" with "N.J.A.C. 7:28-6, 50 and 57";

14. 10 CFR 39.75(d), replace "***§71.5" with "N.J.A.C. 7:28-61";

15. 10 CFR 39.75(e), add ", or NRC" after "Agreement State";

16. 10 CFR 39.77(a), replace "NRC Regional Office by telephone" with "Department by telephone as per N.J.A.C. 7:28-1.5";

17. 10 CFR 39.77(b), replace "§§20.2201-20.2202, §20.2203 and §30.50" with "N.J.A.C. 7:28-6 and N.J.A.C. 7:28-51"; and

18. 10 CFR 39.91, add "with the approval of the Commission on Radiation Protection," after "initiative," and replace "and will not endanger life or property or the common defense and security and are otherwise in the public interest" with "in accordance with the provisions of N.J.A.C. 7:28-2.8."

[(f)] *(d)* Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

[(g)] *(e)* Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 58. DOMESTIC LICENSING OF SOURCE MATERIAL

7:28-58.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 40, Domestic Licensing of Source Material.

(b) The following provisions of 10 CFR Part 40 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 40.2a, Coverage of inactive tailings sites;
2. 10 CFR 40.4, Definitions. The following definitions in 10 CFR 40.4 are not incorporated by reference: "Commission," "decommission," and "license";
3. 10 CFR 40.5, Communications;
4. 10 CFR 40.8, Information collection requirements: OMB approval;
5. 10 CFR 40.12(b), Carriers;
6. 10 CFR 40.20(b) and (c), Types of licenses;
7. 10 CFR 40.23, General license for carriers of transient shipments of natural uranium other than in the form of ore or ore residue;
8. 10 CFR 40.26, General license for possession and storage of byproduct material as defined in this part;
9. 10 CFR 40.27, General license for custody and long-term care of residual radioactive material disposal sites;
10. 10 CFR 40.28, General license for custody and long-term care of uranium or thorium byproduct materials disposal sites;
11. 10 CFR 40.31(c), (f) through (h), (j), (k), (l), Application for specific licenses;
12. 10 CFR Part 40.32(d), (e), (g), General requirements for issuance of specific licenses;
13. 10 CFR 40.33, Issuance of a license for a uranium enrichment facility;
14. 10 CFR 40.35(f), Conditions of specific licenses issued pursuant to §40.34;
15. 10 CFR 40.38, Ineligibility of certain applicants;

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16. 10 CFR 40.41(d), (e)(1), (e)(3), and (g), Terms and conditions of licenses;
17. 10 CFR 40.51(b)(6), Transfer of source or byproduct material;
18. 10 CFR 40.64, Reports;
19. 10 CFR 40.65, Effluent monitoring reporting requirements;
20. 10 CFR 40.66, Requirements for advance notice of export shipments of natural uranium;
21. 10 CFR 40.67, Requirement for advance notice for importation of natural uranium from countries that are not party to the Convention on the Physical Protection of Nuclear Material; and
22. 10 CFR 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.

(c) The following provisions of 10 CFR Part 40 are incorporated by reference with the specified changes:

1. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 40 of the Code of Federal Regulations that are incorporated by reference, means the Department, except when specifically noted in this subchapter;
2. "Registrant" as used in the provisions of Part 40 of the Code of Federal Regulations that are incorporated by reference, means a "radioactive materials registrant" except when specifically noted;
3. 10 CFR 40.6, delete "Except as specifically authorized by the Commission in writing, no" with "***No," and replace "by the General Counsel" with "signed and approved by the Commissioner of the Department,";
4. 10 CFR 40.9(b), replace "Administrator of the appropriate Regional Office" with "Department";
5. 10 CFR 40.14(a), replace "Commission" with "Department, with approval of the Commission on Radiation Protection," and replace "by law and will not endanger life or property or the common defense and security and are otherwise in the public interest" with "in accordance with the provisions of N.J.A.C. 7:28-2.8";
6. 10 CFR 40.21, delete "or byproduct material";
7. 10 CFR 40.22(b), replace "parts 19, 20, and 21, of this chapter" with "part 21 of this chapter and N.J.A.C. 7:28-6 and N.J.A.C. 7:28-50";
8. 10 CFR 40.25(c)(1), replace "NRC Form 244, "Registration Certificate--Use of Depleted Uranium Under General License" with "forms available from the Department";
9. 10 CFR 40.25(c)(2), replace "Director, Division of Industrial and Medical Nuclear Safety, with a copy to the Regional Administrator of the appropriate U.S. Nuclear Regulatory Commission Regional Office listed in appendix D of part 20 of this chapter" with "Department";
10. 10 CFR 40.25(d)(4), replace "Director, Division of Industrial and Medical Nuclear Safety, with a copy to the Regional Administrator of the appropriate U.S. Nuclear Regulatory Commission Regional Office listed in appendix D of part 20 of this chapter" with "Department";
11. 10 CFR 40.25(e), delete "parts 19, 20, and 21, of this chapter" with "part 21 of this chapter and N.J.A.C. 7:28-6 and N.J.A.C. 7:28-50";

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12. 10 CFR 40.31(a), replace "NRC Form 313, 'Application for Material License,' in accordance with the instructions in §40.5 of this chapter" with "forms available from the Department";
13. 10 CFR 40.31(e), replace "§170.31" with "N.J.A.C. 7:28-64";
14. 10 CFR 40.34(a)(2), replace "§20.1201(a)" with "N.J.A.C. 7:28-6";
15. 10 CFR 40.25(c)(1), (c)(2), and (d)(3), add "or Department equivalent" after "'Registration Certificate-Use of Depleted Uranium Under General License,'";
16. 10 CFR 40.35(d)(1) and (d)(2), add "or Department equivalent" after "'Registration Certificate-Use of Depleted Uranium Under General License,'";
17. 10 CFR 40.35(e)(1), replace "Director, Office of Nuclear Material Safety and Safeguards" with "Department";
18. 10 CFR 40.31(c), replace "regulations contained in parts 2 and 9 of this chapter" with "the Open Public Records Act (N.J.S.A. 47:1A-1 et seq.)";
19. 10 CFR 40.31(e), replace "part 170" with "Subchapter 64" and "§170.31" with "Subchapter 64";
20. 10 CFR 40.36(e)(2), replace "part 30" with "Subchapter 51";
21. 10 CFR 40.36(f)(3)(i), replace " 10 CFR 20.1003" with "N.J.A.C. 7:28-6";
22. 10 CFR 40.36(f)(3)(iii), replace " 10 CFR 20.2108" with "N.J.A.C. 7:28-6";
23. 10 CFR 40.36(f)(3)(iv), replace "10 CFR part 20, subpart E" with "N.J.A.C. 7:28-12" and replace " 10 CFR 20.2002" with "N.J.A.C. 7:28-6";
24. 10 CFR 40.41(c), replace "part 71" with "N.J.A.C. 7:28-61";
25. 10 CFR 40.41(f)(1), replace "appropriate NRC Regional Administrator" with "Department";
26. 10 CFR 40.42(j)(2), replace "10 CFR part 20, subpart E" with "N.J.A.C. 7:28-12";
27. 10 CFR 40.42(k)(3)(i), replace "10 CFR part 20, subpart E" with "N.J.A.C. 7:28-12";
28. 10 CFR 40.42(k)(3)(ii), replace "10 CFR part 20, subpart E" with "N.J.A.C. 7:28-12";
29. 10 CFR 40.43(a), add "or Department equivalent" after "NRC Form 313";
30. 10 CFR 40.44, add "or Department equivalent" after "NRC Form 313";
31. 10 CFR 40.60(b)(1)(ii), replace "appendix B of §§20.1001-20.2401 of 10 CFR part 20" with "N.J.A.C. 7:28-6";
32. 10 CFR 40.60(b)(4)(i), replace "appendix B of §§20.1001-20.2401 of 10 CFR part 20" with "N.J.A.C. 7:28-6";
33. 10 CFR 40.60(c)(2), replace "NRC's Document Control Desk" with "Department" and replace "appropriate NRC regional office listed in appendix D to part 20 of this chapter" with "Department";
34. 10 CFR 40.61(d)(1), replace "§20.2002, (including burials authorized before January 28, 1981), 20.2003, 20.2004, 20.2005" with "N.J.A.C. 7:28-6";
35. 10 CFR 40.61(d)(2), replace "§20.2103(b)(4)" with "N.J.A.C. 7:28-6";

36. 10 CFR 40.61(e)(1), replace "§20.2002, 20.2003, 20.2004, 20.2005" with "N.J.A.C. 7:28-6"; and

37. 10 CFR 40.61(e)(2), replace "§20.2103(b)(4)" with "N.J.A.C. 7:28-6."

(d) For those facilities whose radioactive materials are licensed solely by the Department, NRC Form 3, "Notice to Employees" shall mean the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation," available from the Department via the Department's website at: www.nj.gov/dep/rpp/rms/rmsdown.htm, or by requesting a copy by telephone during business hours at (609) 984-5462.

(e) Those facilities which possess a license from the Department and the NRC for radioactive materials shall post both the NRC's Form 3, "Notice to Employees" and the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation."

(f) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

(g) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 59. LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIOACTIVE WASTE

7:28-59.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 61, Licensing Requirements for Land Disposal of Radioactive Waste.

(b) The following provisions of 10 CFR Part 61 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 61.4, Communications;
2. 10 CFR 61.8, Information collection requirements: OMB approval;
3. 10 CFR 61.16, Other information; and
4. 10 CFR 61.23(i) and (j), Standards for issuance of a license.

(c) The following provisions of 10 CFR Part 61 are incorporated by reference with the specified changes:

1. "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 61 of the Code of Federal Regulations, that are incorporated by reference, means the Department, except when specifically noted in this subchapter;
2. 10 CFR 61.1(a), replace "part 20 of this chapter" with "N.J.A.C. 7:28-6";
3. 10 CFR 61.1(b), replace "part 150 of this chapter" with "N.J.A.C. 7:28-62";
4. 10 CFR 61.1(b)(2), replace "part 40 of this chapter" with "N.J.A.C. 7:28-58";
5. 10 CFR 61.1(b)(3), replace "part 20 of this chapter" with "N.J.A.C. 7:28-6";
6. 10 CFR 61.5, delete "Except as specifically authorized by the Commission in writing, no" with "No," and replace "by the General Counsel" with "signed and approved by the Commissioner of the Department,";

7. 10 CFR 61.6, replace "Commission" with "Department, with approval of the Commission on Radiation Protection," and replace "by law and will not endanger life or property or the common defense and security and are otherwise in the public interest" with "in accordance with the provisions of N.J.A.C. 7:28-2.8";
 8. 10 CFR 61.7(c)(4), replace "Department" with "Department of Energy";
 9. 10 CFR 61.12(k), replace "part 20 of this chapter" with "N.J.A.C. 7:28-6";
 10. 10 CFR 61.13(c), replace "part 20 of this chapter" with "N.J.A.C. 7:28-6";
 11. 10 CFR 61.20(c), replace "part 170 of this chapter" with "N.J.A.C. 7:28-64";
 12. 10 CFR 61.23(d), replace "part 20 of this chapter" with "N.J.A.C. 7:28-6";
 13. 10 CFR 61.24(k)(1), replace "NRC Regional Administrator" with "Supervisor of the Radioactive Materials Section";
 14. 10 CFR 61.43, replace "part 20 of this chapter" with "N.J.A.C. 7:28-6";
 15. 10 CFR 61.52(a)(6), replace "§§20.1301 and 20.1302 of this chapter" with "N.J.A.C. 7:28-6";
 16. 10 CFR 61.71, 10 CFR 61.72(a), 10 CFR 61.73(a), 10 CFR 61.73(b), and 10 CFR 61.73(c), replace "Director" with "Manager of the Bureau of Environmental Radiation";
 17. 10 CFR 61.80(i)(1), delete "to the Director, Office of Federal and State Materials and Environmental Management Programs," and replace "with a copy to the appropriate NRC Regional Office shown in appendix D to part 20 of this chapter" with "to the Department";
 18. 10 CFR 61.80(g), replace "§§30.55, 40.64" with "N.J.A.C. 7:28-51, N.J.A.C. 7:28-58 and §§";
 19. 10 CFR 61.80(j), replace "§70.52 of this chapter" with "N.J.A.C. 7:28-60";
 20. 10 CFR 61.80(k), replace "§§30.41, 40.51, and 70.42 of this chapter" with "N.J.A.C. 7:28-51, 58, and 60"; and
 21. 10 CFR 61.80(l)(1)(i), replace "in 10 CFR part 20, appendix G" with "as is incorporated by reference in N.J.A.C. 7:28-6."
- (d) For those facilities whose radioactive materials are licensed solely by the Department, NRC Form 3, "Notice to Employees" shall mean the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation," available from the Department via the Department's website at: www.nj.gov/dep/rpp/rms/rmsdown.htm, or by requesting a copy by telephone during business hours at (609) 984-5462.
- (e) Those facilities which possess a license from the Department and the NRC for radioactive materials shall post both the NRC's Form 3, "Notice to Employees" and the Department's Form RPP-14, "Notice to Employees, Standards for Protection Against Radiation."
- (f) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.
- (g) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 60. DOMESTIC LICENSING OF SPECIAL NUCLEAR MATERIAL

7:28-60.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 70, Domestic Licensing of Special Nuclear Material.

(b) The following provisions of 10 CFR Part 70 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 70.1(c) through (e), Purpose;
2. 10 CFR 70.4, definition of "Commission";
3. 10 CFR 70.5, Communications;
4. 10 CFR 70.8, Information collection requirements: OMB approval;
5. 10 CFR 70.13, Department of Defense;
6. 10 CFR 70.14, Foreign military aircraft;
7. 10 CFR 70.20a, General license to possess special nuclear material for transport;
8. 10 CFR 70.20b, General license for carriers of transient shipments of formula quantities of strategic special nuclear material, special nuclear material of moderate strategic significance, special nuclear material of low strategic significance, and irradiated reactor fuel;
9. 10 CFR 70.21(a)1, (c), and (f) through (h), Filing;
10. 10 CFR 70.22(b), (c), and (f) through (n), Contents of application;
11. 10 CFR 70.23(a)(6) through (12), and (b), Requirements for the approval of applications;
12. 10 CFR 70.23a, Hearing required for uranium enrichment facility;
13. 10 CFR 70.24, Criticality accident requirements;
14. 10 CFR 70.25(a), Financial assurance and recordkeeping for decommissioning;
15. 10 CFR 70.31(c) through (e), Issuance of licenses;
16. 10 CFR 70.32(a)(1), (4) through (7), (b)(1), (3), (4), and (c) through (k), Conditions of licenses;
17. 10 CFR 70.37, Disclaimer of warranties;
18. 10 CFR 70.40, Ineligibility of certain applicants;
19. 10 CFR 70.42(b)(6), Transfer of special nuclear material;
20. 10 CFR 70.44, Creditor regulations;
21. 10 CFR 70.51(c), Records requirements;
22. 10 CFR 70.52, Reports of accidental criticality;

23. 10 CFR 70.55(c), Inspections;
24. 10 CFR 70.56(d), Tests;
25. 10 CFR 70.59, Effluent monitoring reporting requirements;
26. 10 CFR 70.60, Applicability;
27. 10 CFR 70.61, Performance requirements;
28. 10 CFR 70.62, Safety program and integrated safety analysis;
29. 10 CFR 70.64, Requirements for new facilities or new processes at existing facilities;
30. 10 CFR 70.65, Additional content of applications;
31. 10 CFR 70.66, Additional requirements for approval of license application;
32. 10 CFR 70.72, Facility changes and change process;
33. 10 CFR 70.74, Additional reporting requirements;
34. 10 CFR 70.76, Backfitting; and
35. 10 CFR 70.82, Suspension and operation in war or national emergency.

(c) The following provisions of 10 CFR Part 70 are incorporated by reference with the specified changes:

1. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 70 of the Code of Federal Regulations that are incorporated by reference, mean the Department;
2. 10 CFR 70.4, in definition of "person," replace "Department" with "Department of Energy";
3. 10 CFR 70.11, replace "Department" with "Department of Energy";
4. 10 CFR 70.17(a), replace "Commission" with "Department, with approval of the Commission on Radiation Protection," and replace "by law and will not endanger life or property or the common defense and security and are otherwise in the public interest" with "in compliance with N.J.A.C. 7:28-2.8";
5. 10 CFR 70.19(c), delete "20," and add "and N.J.A.C. 7:28-6";
6. 10 CFR 70.21(d), replace "regulations contained in part 2 of this chapter" with "Open Public Records Act (N.J.S.A. 47:1A-1 et seq.)";
7. 10 CFR 70.25(g)(3)(i), replace " 10 CFR 20.1003" with "N.J.A.C. 7:28-6";
8. 10 CFR 70.25(g)(3)(iii), replace " 10 CFR 20.2108" with "N.J.A.C. 7:28-6," replace "10 CFR part 20, subpart E" with "N.J.A.C. 7:28-12" and replace " 10 CFR 20.2002" with "N.J.A.C. 7:28-6";
9. 10 CFR 70.25(g)(3)(iv) replace "10 CFR part 20, subpart E" with "N.J.A.C. 7:28-12" and replace " 10 CFR 20.2002" with "N.J.A.C. 7:28-6";
10. 10 CFR 70.38(j)(2), replace "10 CFR part 20, subpart E" with "N.J.A.C. 7:28-12";

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11. 10 CFR 70.38(k)(3)(i), replace "10 CFR part 20, subpart E" with "N.J.A.C. 7:28-12";
12. 10 CFR 70.38(k)(3)(ii), replace "10 CFR part 20, subpart E" with "N.J.A.C. 7:28-12";
13. 10 CFR 70.42(b)(1), replace "Department" with "Department of Energy";
14. 10 CFR 70.50(b)(1)(ii), replace "Appendix B of §§20.1001-20.2401 of 10 CFR part 20" with "N.J.A.C. 7:28-6";
15. 10 CFR 70.50(b)(4)(i), replace "appendix B of §§20.2001-20.2401 of 10 CFR part 20" with "N.J.A.C. 7:28-6";
16. 10 CFR 70.50(c)(2), delete "to the NRC's Document Control Desk," and replace "with a copy to the appropriate NRC regional office listed in appendix D to part 20 of this chapter" with "to the Department";
17. 10 CFR 70.51(a)(1), replace " 10 CFR 20.2002, (including burials authorized before January 28, 1981), 20.2003, 20.2004, 20.2005" with "N.J.A.C. 7:28-6";
18. 10 CFR 70.51(a)(2), replace " 10 CFR 20.2103(b)(4)" with "N.J.A.C. 7:28-6";
19. 10 CFR 70.51(b)(1), replace " 10 CFR 20.2002, (including burials authorized before January 28, 1981), 20.2003, 20.2004, 20.2005" with "N.J.A.C. 7:28-6";
20. 10 CFR 70.51(b)(2), replace " 10 CFR 20.2103(b)(4)" with "N.J.A.C. 7:28-6"; and
21. 10 CFR 70.56, replace "(b) facilities wherein special nuclear material is utilized, produced or stored," with "and."

(d) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

(e) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 61. PACKAGING AND TRANSPORTATION OF RADIOACTIVE MATERIAL

7:28-61.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 71, Packaging and Transportation of Radioactive Material.

(b) The following provisions of 10 CFR Part 71 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference.

1. 10 CFR 71.6, Information collection requirements: OMB approval;
2. 10 CFR 71.10, Public inspection of application;
3. 10 CFR 71.14(b), Exemptions for low-level materials;
4. 10 CFR 71.19, Previously approved package;
5. 10 CFR 71.31, Contents of application;
6. 10 CFR 71.33, Package description;

7. 10 CFR 71.35, Package evaluation;
8. 10 CFR 71.37, Quality assurance;
9. 10 CFR 71.38, Renewal of a certificate of compliance or quality assurance program approval;
10. 10 CFR 71.39, Requirement for additional information;
11. 10 CFR 71.41, Demonstration of compliance;
12. 10 CFR 71.43, General standards for all packages;
13. 10 CFR 71.45, Lifting and tie-down standards for all packages;
14. 10 CFR 71.51, Additional requirements for Type B packages;
15. 10 CFR 71.55, General requirements for fissile material packages;
16. 10 CFR 71.59, Standards for arrays of fissile material packages;
17. 10 CFR 71.61, Special requirements for Type B packages containing more than 10⁵A[2];
18. 10 CFR 71.63, Special requirement for plutonium shipments;
19. 10 CFR 71.64, Special requirements for plutonium air shipments;
20. 10 CFR 71.65, Additional requirements;
21. 10 CFR 71.71, Normal conditions of transport;
22. 10 CFR 71.73, Hypothetical accident conditions;
23. 10 CFR 71.74, Accident conditions for air transport of plutonium;
24. 10 CFR 71.75, Qualification of special form radioactive material;
25. 10 CFR 71.77, Qualification of LSA-III Material;
26. 10 CFR 71.101(c)(2), (d) through (e), Quality assurance requirements;
27. 10 CFR 71.107, Package design control;
28. 10 CFR 71.109, Procurement document control;
29. 10 CFR 71.111, Instructions, procedures and drawings;
30. 10 CFR 71.113, Document control;
31. 10 CFR 71.115, Control of purchased material, equipment and services;
32. 10 CFR 71.117, Identification and control of materials, parts and components;
33. 10 CFR 71.119, Control of special processes;
34. 10 CFR 71.121, Internal inspection;

35. 10 CFR 71.123, Test control; and
36. 10 CFR 71.125, Control of measuring and test equipment.

(c) The following provisions of 10 CFR 71 are incorporated by reference with the specified changes:

1. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 71 of the Code of Federal Regulations that are incorporated by reference, means the Department, except at:

- i. 10 CFR 71.0(a)2 and (d)1;
 - ii. 10 CFR 71.4, definitions for "Certificate Holder," "Certificate of Compliance(CoC)" and "Package (3) Type B Package";
 - iii. 10 CFR 71.85(c), Preliminary determinations;
 - iv. 10 CFR 71.88(a)4, Air transport of plutonium;
 - v. 10 CFR 71.93(c), Inspections and tests;
 - vi. 10 CFR 71.95(a)(1) and (a)(2);
 - vii. 10 CFR 71.97(c)(1), (c)(3)(iii), and (f), Advance notification of shipment of irradiated reactor fuel and nuclear waste; and
 - viii. 10 CFR 71.101(f), Quality assurance requirements;
2. 10 CFR 71.0(b), replace "parts of this chapter (e.g., 10 CFR parts 20, 21, 30, 40, 70 and 73)," with "State Regulations (e.g. N.J.A.C. 7:28-6, 51, 58, and 60)" and add "U.S. Nuclear Regulatory Commission (NRC)" into the list of other agencies;
 3. 10 CFR 71.1(a), replace rule text with "Except where otherwise specified, all communications and reports concerning the regulations in this part and applications filed under them should be sent to the Department as specified in N.J.A.C. 7:28-1.5.";
 4. 10 CFR 71.2, delete "Except as specifically authorized by the Commission in writing, no" with "No," and replace "by the General Counsel" with "signed and approved by the Commissioner of the Department,";
 5. 10 CFR 71.5(b), replace "Director, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555-0001" with "the Department in accordance with N.J.A.C. 7:28-1.5";
 6. 10 CFR 71.7(b), replace "Administrator of the appropriate Regional Office" with "Department";
 7. 10 CFR 71.9(c), replace "Commission licensee, certificate holder, applicant for a Commission license or a CoC" with "Department licensee, NRC certificate holder, applicant for a Department license or NRC CoC";
 8. 10 CFR 71.9(e)(1), replace "Each licensee, certificate holder, and applicant for a license or CoC must prominently post the current revision of NRC Form 3, 'Notice to Employees,' referenced in §19.11(c) of this chapter" with "Each licensee, certificate holder, and applicant for a license or CoC must prominently post the current revision of Department Form RPP-14, 'Notice to Employees, Standards for Protection Against Radiation,' referenced in Subchapter 50";
 9. 10 CFR 71.9(e)2, replace with "Copies of Department Form RPP-14 may be obtained from the Department in accordance with N.J.A.C. 7:28-1.5.";

10. 10 CFR 71.12, replace "Commission" with "Department, with approval of the Commission on Radiation Protection," and replace "by law and will not endanger life or property nor the common defense and security *[and security]*" with "in accordance with the provisions of N.J.A.C. 7:28-2.8";
11. 10 CFR 71.13, replace "10 CFR part 35" with "N.J.A.C. 7:28-55";
12. 10 CFR 71.47(b)(4), replace " 10 CFR 20.1502" with "N.J.A.C. 7:28-6";
13. 10 CFR 71.89, replace " 10 CFR 20.1906" with "N.J.A.C. 7:28-6";
14. 10 CFR 71.95(c), replace "§71.1(a)" with " N.J.A.C. 7:28-1.5" and replace "to: ATTN: Document Control Desk, Director, Spent Fuel Project Office, Office of Nuclear Material Safety and Safeguards" with "to the Department";
15. 10 CFR 71.101(c)1, replace "§71.1(a)" with " N.J.A.C. 7:28-1.5" and replace "to: ATTN: Document Control Desk, Director, Spent Fuel Project Office, Office of Nuclear Material Safety and Safeguards" with "to the Department"; and
16. 10 CFR 71.101(f), replace "NRC, in accordance with §71.1" with "Department, in accordance with N.J.A.C. 7:28-1.5."

(d) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

(e) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 62. EXEMPTIONS AND CONTINUED NRC REGULATORY AUTHORITY IN AGREEMENT STATES AND IN OFFSHORE WATERS UNDER SECTION 274 (42 U.S.C. §2021)

7:28-62.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 150, Exemptions and Continued Regulatory Authority in Agreement States and in offshore waters under Section 274 [42 U.S.C. §2021].

(b) The following provisions of 10 CFR Part 150 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 150.3, Definition of "Commission";
2. 10 CFR 150.4, Communications;
3. 10 CFR 150.7, Persons in offshore waters not exempt;
4. 10 CFR 150.8, Information collection requirements: OMB approval;
5. 10 CFR 150.10, Persons exempt;
6. 10 CFR 150.14, Commission regulatory authority for physical protection;
7. 10 CFR 150.15, Persons not exempt;
8. 10 CFR Part 150.15a, Continued Commission authority pertaining to byproduct material;

9. 10 CFR Part 150.16, Submission to Commission of nuclear material transfer reports;
10. 10 CFR Part 150.17, Submission to Commission of source material reports;
11. 10 CFR Part 150.17a, Compliance with requirements of US/IAEA safeguards agreement;
12. 10 CFR Part 150.19, Submission to Commission of tritium reports;
13. 10 CFR Part 150.21, Transportation of special nuclear material by aircraft;
14. 10 CFR 150.31, Requirements for Agreement State regulation of byproduct material; and
15. 10 CFR 150.32, Funds for reclamation or maintenance of byproduct material.

(c) The following provisions of 10 CFR Part 150 are incorporated by reference with the specified changes:

1. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 150 of the Code of Federal Regulations that are incorporated by reference, mean the Department; and
2. 10 CFR 150.20(b), references to specific sections of 10 CFR part 30, refer to N.J.A.C. 7:28-51, sections of 10 CFR part 40, refer to N.J.A.C. 7:28-58, and sections of 10 CFR part 70, refer to N.J.A.C. 7:28-60. Replace "parts 19, 20, and 71" with "N.J.A.C. 7:28-6, 50, and 61", and replace "part 34" with "N.J.A.C. 7:28-63."

(d) The incorporation by reference of 10 CFR 150.20(b) shall not include the ability to issue general licenses to operate in areas of exclusive Federal jurisdiction and offshore waters, but only to Agreement State and NRC licensees that wish to operate within New Jersey's jurisdiction in accordance with N.J.A.C. 7:28-50.1(d).

(e) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

(f) Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 63. LICENSES FOR INDUSTRIAL RADIOGRAPHY USING SEALED SOURCES AND RADIATION SAFETY REQUIREMENTS FOR SUCH INDUSTRIAL RADIOGRAPHIC OPERATIONS

7:28-63.1 Incorporation by reference

(a) Except as set forth in (b) and (c) below, this subchapter incorporates by reference 10 CFR Part 34, Licenses for Industrial Radiography Using Sealed Sources and Radiation Safety Requirements for Such Industrial Radiographic Operations.

(b) The following provisions of 10 CFR Part 34 are not incorporated by reference. If there is a cross reference to a Federal citation specifically entirely excluded from incorporation, then the cross referenced citation is not incorporated by virtue of the cross reference:

1. 10 CFR 34.8, Information collection requirements: OMB approval.

(c) The following provisions of 10 CFR Part 34 are incorporated by reference with the specified changes:

1. "Commission," "Nuclear Regulatory Commission," "NRC," and "U.S. Nuclear Regulatory Commission," as used in the provisions of Part 34 of the Code of Federal Regulations that are incorporated by reference, mean the Department, except in 10 CFR 34.41(c), and 34.27(a) and (c)(1);

2. 10 CFR 34.1, replace "parts 19, 20, 21, 30, 71, 150, 170, and 171" with "10 CFR Part 21 and N.J.A.C. 7:28-6, 50, 51, 61, 62 and 64";
3. 10 CFR 34.11, replace "on NRC Form 313, 'Application for Material License,' in accordance with the provisions of §30.32 of this chapter," with "an original application for a specific State license";
4. 10 CFR 34.13(a), replace "§30.33 of this chapter" with "N.J.A.C. 7:28-51";
5. 10 CFR 34.25(a), replace "10 CFR part 20" with "N.J.A.C. 7:28-6";
6. 10 CFR 34.27(d), replace "Director of Nuclear Material Safety and Safeguards" with "Manager, Bureau of Environmental Radiation";
7. 10 CFR 34.27(d), replace "Administrator of the appropriate Nuclear Regulatory Commission's Regional Office listed in appendix D of 10 CFR part 20 of this chapter 'Standards for Protection Against Radiation'" with "Manager, Bureau of Environmental Radiation";
8. 10 CFR 34.33(a)(1), replace "§20.1601(a)(1) of this chapter" with "N.J.A.C. 7:28-6";
9. 10 CFR 34.35(b), replace "10 CFR part 71" with "N.J.A.C. 7:28-61";
10. 10 CFR 34.42(c)(1), replace "10 CFR part 20 of this chapter" and "10 CFR part 20" with "N.J.A.C. 7:28-6" in both instances;
11. 10 CFR 34.42(c)(4), replace "§20.2203 of this chapter" with "N.J.A.C. 7:28-6";
12. 10 CFR 34.43(a)(1), replace "Director, Office of Nuclear Material Safety and Safeguards, by an appropriate method listed in §30.6(a)" with "Manager, Bureau of Environmental Radiation, by an appropriate method listed in N.J.A.C. 7:28-51";
13. 10 CFR 34.43(b)(1), replace "in §§30.7, 30.9, and 30.10" with "N.J.A.C. 7:28-51", replace "10 CFR parts 19 and 20" with "N.J.A.C. 7:28-6 and 50", and replace "10 CFR 71" with "N.J.A.C. 7:28-61";
14. 10 CFR 34.43(c)(1), replace "in §§30.7, 30.9, and 30.10" with "N.J.A.C. 7:28-51", replace "10 CFR parts 19 and 20" with "N.J.A.C. 7:28-6 and 50", and replace "10 CFR part 71" with "N.J.A.C. 7:28-61";
15. 10 CFR 34.45(a)(1), replace "10 CFR part 20" with "N.J.A.C. 7:28-6";
16. 10 CFR 34.51, replace "10 CFR part 20" with "N.J.A.C. 7:28-6";
17. 10 CFR 34.53, replace "§20.1902" with "N.J.A.C. 7:28-6" and replace "§20.1903" with "N.J.A.C. 7:28-6";
18. 10 CFR 34.89(b)(2), replace "19, 20," with "and N.J.A.C. 7:28-6, 50, and 63";
19. 10 CFR 34.89(b)(11), replace "§71.5" with "N.J.A.C. 7:28-61";
20. 10 CFR 34.89(b)(12), and replace "§150.20" with "N.J.A.C. 7:28-62";
21. 10 CFR 34.101(a), replace "§30.50 and under other sections of this chapter, such as §21.21, each licensee shall send a written report to the NRC's Office of Nuclear Material Safety and Safeguards, Division of Industrial and Medical Nuclear Safety, by an appropriate method listed in §30.6(a) of this chapter" with "N.J.A.C. 7:28-51 and under other sections of this subchapter or Federal rule such as 10 CFR §21.21, each licensee shall send a written report to the Manager, Bureau of Environmental Radiation, by an appropriate method listed in N.J.A.C. 7:28-51";

22. 10 CFR 34.101(b), replace " 10 CFR 20.2203" with "N.J.A.C. 7:28-6";

23. 10 CFR 34.101(c), replace "appropriate NRC regional office listed in §30.6(a)(2) of this chapter" with "Department"; and

[22.] *24.* 10 CFR 34.111, replace "Commission" with "Department, with approval of the Commission on Radiation Protection," and replace "by law and will not endanger life or property or the common defense and security and are otherwise in the public interest" with "in accordance with the provisions of N.J.A.C. 7:28-2.8."

(d) Reports that are to be submitted to the Department pursuant to this subchapter shall be submitted to the address at N.J.A.C. 7:28-1.5.

[(f)] *(e)* Requests for adjudicatory hearings shall be made in accordance with N.J.A.C. 7:28-4.17, and requirements governing requests for stay of the effective date of the Department decision for which an adjudicatory hearing is requested are set forth at N.J.A.C. 7:28-4.18.

SUBCHAPTER 64. RADIOACTIVE MATERIALS LICENSE FEES

7:28-64.1 Purpose and applicability

(a) This subchapter establishes fees for registration and licensing of radioactive materials. Annual license fees for radioactive materials are set forth in Tables 1 and 2 at N.J.A.C. 7:28-64.2.

(b) Fees will be effective on the (the operative date of the rules).

(c) Fees for NRC licenses that are transferred to New Jersey will be prorated to (July of the year following the operative date of these rules), when the Department will again issue invoices for annual fees.

7:28-64.2 Schedule of fees

(a) Except as set forth in (b) and (c) below, this section incorporates by reference the table in 10 CFR 171.16 entitled "Schedule of materials annual fees and fees for government agencies licensed by NRC."

(b) The Department does not regulate nuclear reactors, special nuclear materials in quantities sufficient to form a critical mass, high-level waste disposal facilities, or byproduct material defined in Section 11e(2) of the Atomic Energy Act of 1954, as amended (42 U.S.C. §2014).

(c) Insofar as the incorporated rules refer to the facilities and/or materials in (b) above, they do not apply. The following provisions of the table identified in (a) above are incorporated by reference with the specified changes:

1. Delete column 2, labeled "Annual fees";

2. Delete row labeled 2.A.(5);

3. Row labeled 3.A, replace "parts 30 and 33 of this chapter" with "N.J.A.C. 7:28-51 and 54";

4. Row labeled 3.C., replace "§§32.72 and/or 32.74 of this chapter" with "N.J.A.C. 7:28-53";

5. Row labeled 3.C., delete "This category does not apply to licenses issued to nonprofit educational institutions whose processing or manufacturing is exempt under 171.11(a)(1). The licenses are covered by fee under Category 3.D.";

6. Row labeled 3.J., replace "Subpart B of part 32 of this chapter" with "N.J.A.C. 7:28-53," and replace "part 31 of this chapter" with "N.J.A.C. 7:28-52";

7. Row labeled 3.K, replace "Subpart B of part 32 of this chapter" with "N.J.A.C. 7:28-53," and replace "part 31 of this chapter" with "N.J.A.C. 7:28-52";

8. Row labeled 3.L., replace "parts 30 and 33 of this chapter" with "N.J.A.C. 7:28-51 and 54";

9. Row labeled 3.M., replace "part 30 of this chapter" with "N.J.A.C. 7:28-51";

10. Row labeled 3.O., replace "part 40 of this chapter" with "N.J.A.C. 7:28-58";

11. Row labeled 3.R., replace " 10 CFR 31.12" with "N.J.A.C. 7:28-52";

12. Row labeled 3.R.2., replace " 10 CFR 31.12(a)(4), or (5)" with "N.J.A.C. 7:28-52";

13. Row labeled 7.A., replace "parts 30, 35, 40, and 70 of this chapter" with "N.J.A.C. 7:28-51, 55, 58, and 60";

14. Row labeled 7.B., replace "parts 30, 33, 35, 40, and 70" with "N.J.A.C. 7:28-51, 54, 55, 58, and 60";

15. Row labeled 7.C., replace "parts 30, 35, 40, and 70 of this chapter" with "N.J.A.C. 7:28-51, 55, 58, and 60"; and

16. Row labeled 14.A., replace "parts 30, 40, 70, 72, and 76 of this chapter" with "N.J.A.C. 7:28-51, 58, and 60."

(d) Fees for source, byproduct, and certain special nuclear materials are established in Table 1, Schedule of Source, Special Nuclear, and Byproduct Material Annual Fees, and are matched to the NRC categories, incorporated by reference in (a) and (b) above.

(e) Other specified fees, including fees for diffuse NARM, are established in Table 2, Schedule of Radioactive Materials Annual Fees.

(f) If, by amendment or otherwise, a license changes to another fee category, the fee for the new category will take effect on the anniversary date of the license.

(g) The fee for any category for which a fee is not provided at Table 1 below shall be calculated in accordance with N.J.A.C. 7:28-64.3(c) and 64.4(e).

Table 1

Schedule of Source, Special Nuclear, and Byproduct Material Annual Fees

FEE CATEGORY -----	LICENSE TYPE -----	ANNUAL FEE (\$) -----
1.	Special Nuclear Material	
A.-C.	(Reserved.)	
D.	All other special nuclear material except	4,275
	a) licenses authorizing special nuclear material in unsealed form in combination that would constitute a critical quantity, as defined in N.J.A.C. 7:28-62;	
	b) U-235 or plutonium for fuel	

40 N.J.R. 5196(b)

	<p>fabrication activities;</p> <p>c) spent fuel and reactor-related greater than Class C (GTCC) waste at an independent spent fuel storage installation (ISFSI);</p> <p>d) special nuclear material in sealed sources contained in devices used in industrial measuring systems, including x-ray fluorescence analyzers; or</p> <p>e) licenses or certificates for the operation of a uranium enrichment facility.</p>	
E.	(Reserved.)	
2.	Source Material	
A.	(Reserved.)	
B.	Licenses that authorize only the possession, use and/or installation of source material for shielding.	575
C.	All other source material licenses	9,825
3.	Byproduct material	
A.	Licenses of broad scope for possession and use of byproduct material issued under N.J.A.C. 7:28-51 and 54 for processing or manufacturing of items containing byproduct material for commercial distribution.	21,600
B.	Other licenses for possession and use of byproduct material issued under N.J.A.C. 7:28-51 for processing or manufacturing of items containing byproduct material for commercial distribution. This category also includes licenses for repair, assembly, and disassembly of products containing radium-226.	6,225
C.	Licenses issued under N.J.A.C. 7:28-53 authorizing the	8,850

processing or manufacturing and distribution or redistribution of radiopharmaceuticals, generators, reagent kits and/or sources and devices containing byproduct material.

This category also includes the possession and use of source material for shielding authorized under N.J.A.C. 7:28-58 when included on the same license.

D.	(Reserved.)	
E.	Licenses for possession and use of byproduct material in sealed sources for irradiation of materials in which the source is not removed from its shield (self-shielded units).	3,000
F.	Licenses for possession and use of less than 10,000 curies of byproduct material in sealed sources for irradiation of materials in which the source is exposed for irradiation purposes. This category also includes underwater irradiators for irradiation of materials in which the source is not exposed for irradiation purposes.	5,850
G.	Licenses for possession and use of 10,000 curies or more of byproduct material in sealed sources for irradiation of materials in which the source is exposed for irradiation purposes. This category also includes underwater irradiators for irradiation of materials in which the source is not exposed for irradiation purposes.	23,100
H.-I.	(Reserved.)	
J.	Licenses issued under N.J.A.C.	1,800

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7:28-53 to distribute items containing byproduct material that require sealed source and/or device review to persons generally licensed under N.J.A.C. 7:28-52, except specific licenses authorizing redistribution of items that have been authorized for distribution to persons generally licensed under N.J.A.C. 7:28-52.

K.	Licenses issued under N.J.A.C. 7:28-53 to distribute items containing byproduct material or quantities of byproduct material that do not require sealed source and/or device review to persons generally licensed under N.J.A.C. 7:28-52, except specific licenses authorizing redistribution of items that have been authorized for distribution to persons generally licensed under N.J.A.C. 7:28-52.	1,350
L.	Licenses of broad scope for possession and use of byproduct material issued under N.J.A.C. 7:28-51 and 54 for research and development that do not authorize commercial distribution.	11,000
M.	Other licenses for possession and use of byproduct material issued under N.J.A.C. 7:28-51 for research and development that do not authorize commercial distribution.	4,200
N.	Licenses that authorize services for other licensees, except: Licenses that authorize only calibration and/or leak testing services are subject to the fees specified in fee Category 3.P.	6,225
O.	Licenses for possession and use of byproduct material	10,575

issued under N.J.A.C. 7:28-63 for industrial radiography operations. This category also includes the possession and use of source material for shielding authorized under N.J.A.C. 7:28-58 when authorized on the same license.

P.	All other specific byproduct material licenses, except those in Categories 4.A through 9.D.	2,025
Q.	(Reserved.)	
R.	Possession of items or products containing radium-226 identified in N.J.A.C. 7:28-52 which exceed the number of items or limits specified in that section. (Persons who possess radium sources that are used for operational purposes in another fee category are not also subject to the fees in this category. This exception does not apply if the radium sources are possessed for storage only.)	
1.	Possession of quantities exceeding the number of items or limits in N.J.A.C. 7:28-52, but less than or equal to 10 times the number of items or limits specified.	1,575
2.	Possession of quantities exceeding 10 times the number of items or limits specified in N.J.A.C. 7:28-52.	2,025
S.	Licenses for production of accelerator-produced radionuclides.	8,100
4.	Waste Processing	
A.-C.	(Reserved.)	
5.	Well Logging	

40 N.J.R. 5196(b)

A.	Licenses for possession and use of byproduct material, source material, and/or special nuclear material for well logging, well surveys, and tracer studies other than field flooding tracer studies.	3,225
B.	(Reserved.)	
6.	Nuclear Laundry	
A.	(Reserved.)	
7.	Medical	
A.	Licenses issued under N.J.A.C. 7:28-51, 55, 58 and 60 for human use of byproduct material, source material, or special nuclear material in sealed sources contained in teletherapy devices. This category also includes the possession and use of source material for shielding when authorized on the same license.	10,125
B.	Licenses of broad scope issued to medical institutions or two or more physicians under N.J.A.C. 7:28-51, 55, 58 and 60 authorizing research and development, including human use of byproduct material except licenses for byproduct material, source material, or special nuclear material in sealed sources contained in teletherapy devices. This category also includes the possession and use of source material for shielding when authorized on the same license. Separate fees will not be assessed for pacemaker licenses issued to medical institutions who also hold nuclear medicine licenses under Category 7.B. or 7.C.	21,615
C.	Other licenses issued under	3,600

N.J.A.C. 7:28-51, 55, 58 and 60 for human use of byproduct material, source material, and/or special nuclear material except licenses for byproduct material, source material, or special nuclear material in sealed sources contained in teletherapy devices. This category also includes the possession and use of source material for shielding when authorized on the same license*.*
 Separate fees will not be assessed for pacemaker licenses issued to medical institutions who also hold nuclear medicine licenses under Category 7.B. or 7.C.

8.-13.	(Reserved.)	
14.	Decommissioning/Reclamation	
A.	Byproduct, source, or special nuclear material licenses and other approvals authorizing decommissioning, decontamination, reclamation, or site restoration activities under N.J.A.C. 7:28-51, 58 and 60.	Full Cost
B.	Site-specific decommissioning activities associated with unlicensed sites, whether or not the sites have been previously licensed.	Full Cost
15.	(Reserved.)	
16.	Reciprocity	
	Reciprocal recognition of an out-of-state license for a period of less than 180 days.	50 percent of annual fee of applicable category
17.-18.	(Reserved.)	

Table 2

Schedule of Radioactive Materials Annual Fees

40 N.J.R. 5196(b)

FEE CATEGORY -----	LICENSE TYPE -----	ANNUAL FEE (\$) -----
1.	Water Treatment Facilities as defined in N.J.A.C. 7:10-3.6	
A.	Very Small Community Water Systems	\$ 300
B.	Small Community Water Systems	\$ 875
C.	Medium Community Water Systems	\$ 1,250
D.	Large Community Water Systems	\$ 2,500
E.	Non-Transient Non-Community Water Systems treating equal to or less than 1,000 gallons per day	\$ 200
F.	Non-Transient Non-Community Water Systems treating more than 1,000 gallons per day	\$ 500
2.	Amendments	
A.	Request to amend a license requiring no license review including, but not limited to, facility name change or removal of a previously authorized user.	\$ 0
B.	Request to amend a license requiring review including, but not limited to, addition of isotopes, procedure changes, new authorized users, or a new radiation safety officer.	\$ 200
C.	Request to amend a license requiring review and a site visit, but not limited to, facility move or addition of a process.	\$ 400
3.	Inspections	
A.	Routine	\$ 0
B.	Non-routine Reinspection	Full Cost
C.	Pre-licensing	\$ 400

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D.	Reciprocity	\$ 400
E.	Inspection as a result of an incident	Full Cost
4.	Additional Use Sites (Non-contiguous)	
A.	Non-profit educational institutions	25 percent of appropriate fee
B.	Medical Private Practices	50 percent of appropriate fee
5.	Generally Licensed Devices	\$ 350
6.	Diffuse NARM License	\$ 2,500

7:28-64.3 Application fee

(a) An initial application for a license shall be accompanied by payment in the full amount of the fee specified in Tables 1 and 2 at N.J.A.C. 7:28-64.2.

(b) The Department may not process the application prior to the receipt of the required fee. The application fee is not refundable except in those cases where the Department determines that a license is not required.

(c) A license covering more than one of the categories in Tables 1 and 2 at N.J.A.C. 7:28-64.2 shall be accompanied by the prescribed fee for each category applicable to the license.

(d) The application fee for a category of NRC license that is not included in Table 1 at N.J.A.C. 7:28-64.2 shall be calculated as follows: NJ Fee = 0.75 (NRC Annual fee + 0.1 NRC application fee). NRC fees are established in 10 CFR Parts 170 and 171. The Department incorporates by reference the fee provisions of 10 CFR Parts 170 and 171, for purposes of calculating fees pursuant to this subsection.

7:28-64.4 Annual fee

(a) The annual fee is not refundable except in those cases where the Department determines that the fee is not required.

(b) Fees are payable 30 days after the date of the invoice.

(c) A license covering more than one of the categories in Tables 1 and 2 at N.J.A.C. 7:28-64.2 shall be invoiced for the prescribed fee for each category applicable to the license.

(d) The annual fee for a category of NRC license that is not included in Tables 1 and 2 at N.J.A.C. 7:28-64.2 shall be calculated as follows: NJ Fee = 0.75 (NRC Annual fee + 0.1 NRC application fee). NRC fees are established in 10 CFR Part 170 and 171. The Department incorporates by reference the fee provisions of 10 CFR Parts 170 and 171, for purposes of calculating fees pursuant to this subsection.

(e) No refund of a fee will be provided if a license is terminated.

7:28-64.5 Inspections

(a) The Department shall make periodic inspections of licensees.

(b) If the Department finds a violation that could have implications regarding worker or public dose limits at N.J.A.C. 7:28-6 during an inspection, the licensee must pay all Department costs associated with subsequent reinspection of the licensee. The costs shall be the actual costs incurred by the Department and include, but not limited to, labor, transportation, per diem, materials, legal fees, and monitoring costs.

7:28-64.6 Reciprocity fees

(a) A licensee submitting an application for reciprocal recognition of a materials license issued by another Agreement State or the NRC for a period of 180 days or less during a calendar year must pay one-half of the fee specified under Tables 1 and 2 at N.J.A.C. 7:28-64.2.

(b) The Department will not process the application for reciprocity prior to the receipt of the required fee.

7:28-64.7 Fees for licensees with additional use sites

(a) The Department will consider sites that are not contiguous or adjacent as additional use sites for non-profit educational institutions provided that:

1. The sites are operated by the same person;
2. The sites are in the same license category or categories;
3. The applicant for a license provides for one radiation safety officer, and if applicable, one radiation safety committee, as responsible for all sites; and
4. The Department is reasonably satisfied from the information provided in the application that the applicant will adequately control radioactive material at all sites listed in the application.

(b) Each additional use site as defined (a) above shall be charged 25 percent of the applicable fee for each applicable category.

(c) The Department will consider sites that are not contiguous or adjacent as additional use sites for private medical practices, provided that:

1. The sites are operated by the same person;
2. The sites are in the same license category or categories;
3. The applicant for a license provides for one radiation safety officer, and if applicable, one radiation safety committee, as responsible for all sites;
4. The Department is reasonably satisfied from the information provided in the application that the applicant will adequately control radioactive material at all sites listed in the application; and
5. There shall be no more than three additional use sites per license.

(d) Each additional use site as defined (c) above shall be charged 50 percent of the applicable fee for each applicable category.

7:28-64.8 Fees for license amendments

[An application for] ***A letter requesting*** an amendment to a specific license shall be accompanied by payment in full of the fee specified in Table 2 at N.J.A.C. 7:28-64.2.

40 N.J.R. 5196(b)

7:28-64.9 Failure to pay prescribed fees

(a) The Department will not process any application unless the licensee pays, on or before the due date, the fee prescribed by this subchapter.

(b) If the Department finds that a licensee has not paid a renewal fee prescribed by this section by the due date, the Department will take the appropriate enforcement action.

7:28-64.10 Annual adjustment of fees

(a) Each year the annual fees in Tables 1 and 2 in N.J.A.C. 7:28-64.2 will be adjusted by the previous 12-month inflation factor. The inflation factor is calculated from the Consumer Price Index, all urban consumers, U.S. city average (CPI-U), published monthly by the U.S. Department of Labor, Bureau of Labor Statistics. The CPI-U for purposes of calculating the inflation factor shall be the CPI-U for the 12-month period ending May 31.

(b) The inflation factor shall be the past year percent change for the United States city average, all items, all urban consumers.

(c) If the inflation factor for a 12-month period is negative, the fees will remain unchanged from the previous year.

(d) The adjusted fees shall be reflected through a notice of administrative change, published in the New Jersey Register; however, the adjusted fees shall be effective on July 1, whether or not a notice of administrative change has been published.



OFFICE OF THE
GENERAL COUNSEL

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

August 27, 2007

Marcia M. Waldron, Clerk
Office of the Clerk
United States Court of Appeals
For the Third Circuit
21400 United States Courthouse
601 Market Street
Philadelphia, Pennsylvania 19106-1790

ATTENTION: DANA M. MOORE

VIA FEDERAL EXPRESS

RE: *State of New Jersey v. U.S. Nuclear Regulatory Commission*, Nos. 06-5140, 07-1559, and 07-1756 (3d Cir.) (Consolidated).

Dear Ms. Waldron:

Enclosed please find the original and nine copies of the "Federal Respondents' Brief" for filing in the above-captioned consolidated case.

Would you please date-stamp the extra copy of this letter to indicate date of filing and kindly return it to me in the enclosed postage-pre-paid envelope at your convenience.

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles E. Mullins", written over a horizontal line.

Charles E. Mullins
Senior Attorney
Office of the General Counsel
U.S. Nuclear Regulatory Commission

cc: Kenneth W. Elwell, Esq.
Joseph J. McGovern, Esq.
Matias F. Travieso-Diaz, Esq.
Kathryn Kovacs, Esq., US DOJ

UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT

Nos. 06-540, 07-1559 and 07-1756

STATE OF NEW JERSEY,
Petitioner,

v.

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the UNITED STATES OF AMERICA,
Respondents.

On Petition For Review of Issuance of NUREG-1757 and
a Related Order by the U.S. Nuclear Regulatory Commission

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August 27, 2007

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August 27, 2007

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STATEMENT OF RELATED CASES

The Federal Respondents are aware of two related cases within the meaning of Third Circuit Rule 28.1(a)(2).

First, the issues in this lawsuit have been raised in an administrative proceeding currently pending before the Nuclear Regulatory Commission. *See In re Shieldalloy Metallurgical Corporation*, (Licensing Amendment Request for Decommissioning of the Newfield, New Jersey Facility); Docket No. 40-7102-MLA (ASLBP No. 07-852-01-MLA-BD01).

Second, the issues in this lawsuit are also raised in a petition for rulemaking currently pending before the Nuclear Regulatory Commission.

GLOSSARY OF TERMS AND ACRONYMS

LTR	--	License Termination Rule
POL	--	Possession Only License
POL/LTC	--	Possession Only License for Long Term Control
ALARA	--	As Low As is Reasonably Achievable
DP	--	Decommissioning Plan
EIS	--	Environmental Impact Statement
GEIS	--	Generic Environmental Impact Statement

JURISDICTION

This consolidated case consists of three petitions for review: Nos. 06-5140, 07-1559, and 07-1756. If this Court has jurisdiction over the petitions for review in this case, it lies under the Administrative Orders Review Act, 28 U.S.C. § 2341, *et seq.*, commonly known as the Hobbs Act. The Hobbs Act gives this Court jurisdiction over “*final orders* of the [Nuclear Regulatory] Commission” in licensing or rulemaking proceedings. 28 U.S.C. § 2342(4) (emphasis added). *See Florida Power & Light v. Lorion*, 470 U.S. 729 (1985). The Nuclear Regulatory Commission (“NRC”) is an independent regulatory agency that regulates the civilian use of radioactive materials and protects the public health and safety under its authorizing statutes – the Atomic Energy Act (“AEA”) of 1954, 42 U.S.C. § 2201, *et seq.*, and the Energy Reorganization Act (“ERA”) of 1974, 42 U.S.C. § 5801, *et seq.*

As our already-filed Motion to Dismiss (January 30, 2007), and our Reply Memorandum (March 14, 2007) show, and as we reiterate below, *see* Argument I, *infra*, this Court lacks jurisdiction; in the alternative, this Court should withhold review under prudential considerations. Assuming *arguendo* that this Court has jurisdiction, the petitions for review were timely filed, *see* 28 U.S.C. § 2344, and venue is proper in this Court. *See* 28 U.S.C. § 2343.

ISSUES PRESENTED

1. Whether NUREG-1757, as a non-binding NRC guidance document, constitutes a “final order” within the meaning of the Hobbs Act, causes “injury-in-fact” sufficient for standing, or is ripe for judicial review, when it has not yet been applied and is still under challenge in an ongoing NRC adjudicatory process.

2. Whether this Court has jurisdiction over a decision not to hold a hearing on issuance of a non-binding guidance document; and if so, whether issuance of that document is an action that requires a hearing under the Atomic Energy Act.

3. Whether a non-binding agency guidance document that does not amend any rule or regulation of the NRC and is compatible with existing rules and regulations violates the Atomic Energy Act.

STATEMENT OF THE CASE

I. Nature of the Case.

New Jersey’s petitions for review challenge NRC’s revised version of “NUREG-1757: Consolidated Decommissioning Guidance.” Two of the three petitions for review, Nos. 06-5140 (A1)¹ and 07-1559 (A7), directly challenge the NUREG’s revisions. The third petition, No. 07-1756 (A21), challenges a Commission decision not to hold a formal hearing under Section 189a of the AEA,

¹“A” refers to the Joint Appendix.

42 U.S.C. § 2239(a), on New Jersey's request that NRC rescind the revised NUREG.

NUREG-1757 provides guidance on how NRC licensees may satisfy certain decommissioning requirements in NRC regulations; thus, licensees may incorporate that guidance when they submit license amendments proposing plans to decommission their facilities. But before it may approve a proposed decommissioning plan ("DP"), NRC must offer a hearing opportunity to persons affected by the plan. Those persons may challenge the proposed plan – and the guidance on which it is based – before NRC's Atomic Safety and Licensing Board Panel ("Licensing Board"), the agency's administrative tribunal. They may appeal any adverse decision to the Commission itself and challenge any Commission final order in Federal Court.

The Shieldalloy Metallurgical Corporation ("Shieldalloy") operated a facility in Newfield, New Jersey, where it manufactured speciality steel and alloy products and additives using ores that contained uranium and thorium. Shieldalloy has now ceased operations and has submitted a DP that proposes actions incorporating guidance in revised NUREG-1757. NRC's Licensing Board has convened an administrative hearing on Shieldalloy's request for a license amendment to approve the DP and has admitted New Jersey as a full party to the

proceeding. In that administrative proceeding, New Jersey has challenged, *inter alia*, the validity of the NUREG guidance. The Board also invited Gloucester County to participate as an interested governmental entity. The NRC proceeding is currently ongoing.

In this lawsuit, New Jersey again challenges NUREG-1757 and its applicability to the Shieldalloy site. At the outset of the case, we sought its dismissal as premature and outside this Court's jurisdiction. A motions panel of this Court referred our motion to the merits panel. Subsequently, this Court permitted Shieldalloy and Gloucester County to intervene in this case.

II. Statutory and Regulatory Background.

Administrative hearings on NRC actions are governed by Section 189a(1)(A) of the AEA, 42 U.S.C. § 2239(a)(1)(A). Section 189a provides interested members of the public an opportunity for a hearing in licensing and rulemaking proceedings. NRC Licensing Boards preside at licensing hearings and the Commission hears appeals of Board decisions. *See generally*, 10 C.F.R. Part 2 ("Rules of Practice"). Section 189b of the AEA, 42 U.S.C. § 2239(b), provides for judicial review of "final orders" in licensing proceedings.

This case involves questions about the criteria contained in the NRC's License Termination Rule, found at 10 C.F.R. § 20.1401, *et seq.* That rule sets out

standards and procedures for decontaminating and decommissioning facilities that are no longer operating.

The Addendum to this brief reproduces pertinent statutes and regulations.

III. Factual Background.

A. License Termination Rule.

Generally, NRC issues a license for use at a specified location for a specified term of years. The licensee can seek to amend the license for additional activities or extend the life of the license. NRC generally issues materials licenses (such as Shieldalloy's license) for 5-year periods and can renew them an indefinite number of times. A license also contains terms and conditions specifying how the license is to be used and a licensee may only use the license in accordance with the terms and conditions in it. NRC may, in response to new events or the discovery of new information, impose additional "conditions" or limitations on the license. New conditions are added as "amendments" to the license and the NRC must offer the public an hearing opportunity when amending the license. *See* AEA, § 189a, 42 U.S.C. § 2239(a).

When a materials licensee (such as Shieldalloy) advises the NRC that it has ceased operations under the license, the agency generally issues a license condition limiting the license to "possession only," with the resulting amended

license generally known as a “possession only license” or “POL.” *See Shieldalloy Metallurgical Corporation*, LBP-07-05, 65 NRC 341, 343-44 (2007) (“LBP-07-05”). A POL usually allows limited decommissioning activities, but only to the extent that those activities will not foreclose any future decommissioning options for the licensed facility. The licensee then submits a DP describing how it proposes to remediate the facility and comply with the applicable requirements for license termination. NRC Staff reviews the plan, giving the public a chance to comment. Because the license is being amended, NRC offers the opportunity for an administrative hearing on its adoption. If the DP is approved, the license is amended to incorporate the approved DP by reference. The licensee then implements the approved DP. *See generally* NUREG-1757, Volume 1, Rev. 2, at Chapters 4, 5 and 6.²

Normally, a licensee will ask the NRC to terminate the license when it has completed actions in the approved DP and satisfactorily demonstrated compliance with it. The NRC established requirements for that process in the License Termination Rule (“LTR”), found in 10 C.F.R. § 20.1401, *et seq.* *See* 62 Fed.

²Petitioner filed a complete copy of NUREG-1757 with this Court. *See* Petitioner’s Brief at 1, n.1. This brief will provide only Appendix cites for those portions of NUREG-1757 included in Joint Appendix and will provide full citations for portions not included.

Reg. 39,058 (July 21, 1997). Many licensees seek termination for “unrestricted use,” meaning that the site can be released for general use by the public without restrictions. *See* 10 C.F.R. § 20.1402. However, the regulations also provide for “termination under restricted conditions,” meaning that controls remain in place to restrict use of the site. *See* 10 C.F.R. § 20.1403. The controls vary depending on the type of materials left at the site and specific site characteristics.

When seeking license termination with restricted conditions, the licensee must, *inter alia*, (1) reduce the radiation dose of the materials left on the site to a level “as low as is reasonably achievable” (“ALARA”), 10 C.F.R. § 20.1403(a); (2) provide institutional controls that will protect the public by restricting future land use, 10 C.F.R. § 20.1403(b); (3) provide “sufficient financial assurance to enable an independent third party” to ensure that the site is maintained if the licensee ceases to exist or goes bankrupt, 10 C.F.R. § 20.1403(c); and (4) reduce the dose levels to the public at the site. 10 C.F.R. §§ 20.1403(a) and (e).

The preamble for the final LTR rule states that for sites pursuing restricted release that have long-lived nuclides posing a hazard beyond a 100-year period,

More stringent institutional controls will be required . . .
such as legally enforceable deed restrictions and/or
controls backed up by State and local government
control or ownership, engineered barriers, and Federal
ownership, as appropriate.

62 Fed. Reg. at 39,070. This statement is not included in the regulations and thus is not a requirement. But NRC has included it in the agency's guidance for implementing the LTR to recognize that some form of government control or even ownership might be appropriate in cases of restricted release for sites with long-lived nuclides. The guidance has consistently suggested "control *or* ownership" by a government entity, not "control *and* ownership." *Compare* NUREG-1727, A357, with NUREG-1757, A282.

B. Issuance of NUREG-1757.

The LTR does not provide rigid, specific requirements for license termination; instead, it provides dose criteria and general requirements only. Agency guidance documents, such as NUREG-1757, provide more detailed information and acceptable methods for licensees to demonstrate compliance. Licensees are not required to follow the guidance to gain approval for a proposed action. Furthermore, guidance documents are not binding in the agency's administrative hearing process. They lack the force of law and specifically disclaim any binding effect. *See* A66, A73. NRC's Licensing Board is free to reject application of the guidance in a particular case and the Commission, likewise, is not bound by it when reviewing a Licensing Board decision. *See, e.g.,*

International Uranium Corp., CLI-00-1, 51 NRC 9, 19-20 (2000) (declining to follow Staff guidance document and directing Staff to revise the document).

NRC published guidance on possible methods of compliance with LTR in 2000. *See* NUREG-1727, A338. In 2001, NRC announced that it would prepare consolidated decommissioning guidance, including revised guidance on LTR compliance, *see* 66 Fed. Reg. 21,793 (May 1, 2001), and later issued draft Volume 1 of NUREG-1757 (primarily applicable to NRC materials licensees) for public comment. 67 Fed. Reg. 4,764 (Jan. 31, 2002). NRC issued Volume 1 in final form in 2002, while the drafts of Volumes 2 (generally applicable to all NRC licensees) and 3 were being prepared. *See* 67 Fed. Reg. 60,706 (Sept. 26, 2002). NRC then revised Volume 1 and issued Volumes 2 and 3 in final form, together with the revised Volume 1. *See* 68 Fed. Reg. 54,503 (Sept. 17, 2003).

C. Revision of NUREG-1757.

Initial efforts to implement the regulations and guidance for restricted release proved difficult for both NRC and licensees. States and other government entities generally have not been receptive to taking responsibility for institutional controls or undertaking independent third party responsibilities. In addition, NRC was not able to reach an agreement with the Department of Energy to provide federal ownership or control of the sites. A467-69. Thus, in June, 2002, shortly

before publication of NUREG-1757, Volume 1, the Commission directed NRC Staff to undertake a comprehensive review of the restricted release criteria and other LTR implementation issues. *See* A483. The Commission also directed the Staff to consider ways to involve the NRC as a durable entity to monitor compliance with a deed restriction or to allow a license to remain in force indefinitely. *Id.*

The Staff prepared a full analysis of restricted release and institutional control issues and other LTR implementation issues and recommended new options. A482-527. The analysis and recommendations were based on a thorough review of information about institutional controls from other Federal agencies, States, and the National Academy of Sciences. One of the recommendations was the use of a “possession-only” amendment to the existing license for “long term control” (“POL/LTC”). A514-16, 519. Under this option, NRC would view the license as an “institutional control, similar to EPA’s orders or permits, that provide the necessary restrictions on access or future land use. NRC would monitor, inspect, and enforce under the license authority.” A515. NRC would act as the “independent third party” to activate the trust fund if the licensee went “bankrupt or out of business.” *Id.*

The Commission approved the recommendations to move forward on the LTR implementation issues, including the POL/LTC, and the use of guidance on the approved options. A907. However, the Commission also directed the Staff to seek public comment on the draft guidance for the restricted release/institutional control issue and the POL/LTC. *Id.* The Staff summarized this process in a 2004 Regulatory Issue Summary, RIS-2004-08, A810, which informed all licensees and other stakeholders of the issues, the Staff analysis, and opportunities to provide feedback. In 2005, NRC held a workshop with over 200 attendees to obtain early public input on these issues. In addition, NRC invited all states to participate in the review process. Neither New Jersey nor Gloucester County attended the workshop nor participated in the review process.

Instead of including the new guidance in the initial version of NUREG-1757 then under development (thereby delaying issuance of that document), NRC used this separate process to develop the revised version at issue in this case. In September, 2005, NRC published the results of the separate guidance development process for public comment as "Draft Supplement 1" to NUREG-1757. This draft included the concept of a POL/LTC. NRC posted the draft on its public website and announced that the draft was available for public comment. *See* 70 Fed. Reg.

56,940 (Sept. 29, 2005). New Jersey submitted comments, A432-40; Gloucester County did not.

After analyzing the comments, the Staff advised the Commission of major comments (A909-13) and the Commission approved the Staff's recommendation to issue a POL/LTC by amendment instead of terminating the operating license and issuing a new license. A914. The Staff then prepared the final revisions of Volumes 1 and 2 of NUREG-1757, *i.e.*, Volume 1, Rev. 2 and Volume 2, Rev. 1. Those volumes were published in late September/early October of 2006 and bear a publication date of "September 2006." A67. NRC posted the revised versions of the NUREG on the agency's website on or about October 27, 2006, and notified New Jersey of the availability of the NUREG. NRC formally announced the availability of the revised NUREG on December 28, 2006, *see* 71 Fed. Reg. 78,234 (Dec. 28, 2006), when it had completed responses to the public comments on the draft revisions. *See Responses to Stakeholder Comments*, A829.

D. Guidance in Revised NUREG-1757.

The revised NUREG added two NRC institutional control options for a licensee to consider for decommissioning under restricted conditions. The two options, described below, are (1) a POL/LTC, and (2) an NRC Legal Agreement and Restrictive Covenant ("LA/RC"). *See generally* A227-51. *See also* A284-92

(POL/LTC); A292-97 (LA/RC). The addition of the POL/LTC and LA/RC options as “institutional controls” and NRC’s willingness to act as the “independent third party” are the major changes from previous decommissioning guidance.

These options would be available only for sites seeking decommissioning under restricted conditions, but which are unable to establish satisfactory institutional controls or unable to find an independent third party to ensure the controls and maintenance at the site. A229, A286-87. The options would provide acceptable institutional controls because the NRC, as a Federal government entity, would enforce the controls and act as the independent third party. NRC intends these options to be used as a “last resort.” A227.

Under the LA/RC option, after the licensee satisfies the other LTR requirements, the licensee and NRC would enter into a legal agreement on the restrictions and controls needed for license termination under restricted conditions. The agreement would include a restrictive covenant that would contain restrictions on site use and any maintenance, monitoring, and reporting. The licensee would have to record the covenant with the appropriate legal office before the license was terminated and the site released for restricted use. Because the legality of the LA/RC would depend on the laws of the local jurisdiction, the licensee would

have to demonstrate that the LA/RC would be legally enforceable before NRC would approve it. A227. NRC would then terminate the license.

Under the POL/LTC option, the NRC would *not* terminate the license. A286. Instead, if the licensee demonstrates in the DP that it will satisfy the other LTR criteria, *e.g.*, dose criteria, advice from affected parties, and sufficient financial assurance, at the time of DP approval, the NRC would amend the existing license to “possession only” with specific conditions for decommissioning as well as restrictions for “long term control.” After the licensee completes decommissioning activities and satisfies the LTR requirements, NRC would again amend the license to remove the completed decommissioning conditions but retain or update the LTC conditions for restrictions, monitoring and maintenance. A286.

The amended license would specify requirements for: restricted site access and land use; permitted site access and land use; physical controls such as fences and signs; surveillance; groundwater monitoring if needed; corrective actions; maintenance; reporting; and records retention and availability. A292. NRC would monitor, inspect, and enforce under its licensing authority. A285. The POL/LTC would act as an “institutional control” to maintain the land use restrictions on the site that are necessary to comply with the LTR dose criteria to satisfy 10 C.F.R. § 20.1403(b). A286. NRC would act as the independent third party in accordance

with 10 C.F.R. § 20.1403(c) to ensure control and maintenance of the site if the licensee becomes unavailable. A290, A300.

E. The Shieldalloy Site.

Shieldalloy has operated the Newfield facility since approximately 1951. Shieldalloy holds NRC License No. SMB-743, issued in 1963, which authorizes it to ship, receive, possess, use and store “source material” as defined by the AEA for use at the Newfield facility. During operation of the Newfield facility, Shieldalloy manufactured specialty steel and alloy products and additives, which resulted in an accumulation of radioactive slag and baghouse dust, currently stored at the Newfield site. *See* LBP-07-05, 65 NRC at 343-44.

In 2001, Shieldalloy notified NRC that it had ceased production activities and planned to decommission the facility. A458. In 2002, NRC amended the Shieldalloy license to limit authorized activities to “possession only” and to decommissioning activities previously authorized under the original license. A789-90. Shieldalloy submitted a DP, which NRC rejected. A375-83. In 2003, Shieldalloy informally proposed that NRC issue a “possession only” license for temporary storage, *i.e.*, without decommissioning the site to LTR criteria as envisioned by the POL/LTC option then under discussion by the NRC Staff. NRC Staff advised Shieldalloy that this proposal was unacceptable. A390-91.

In 2005, Shieldalloy submitted another DP proposing a POL/LTC based on the September, 2005 Draft of revised NUREG-1757. NRC rejected that plan because it lacked sufficient information. A461-65. In 2006, Shieldalloy submitted a revised DP, which responded to NRC's comments on its prior submission. A539.

After reviewing the revised plan, NRC Staff accepted the plan for docketing and issued a Notice of Opportunity for a Hearing on the requested license amendment.³ *See* 71 Fed. Reg. 66,986 (Nov. 17, 2006). Under that notice, any person "whose interest may be affected" could request to intervene in the proceeding and to participate as a party. *Id.* NRC received seven petitions to intervene in the proceeding, including petitions from New Jersey, which filed this lawsuit, and Gloucester County, which intervened in this lawsuit.

NRC's Licensing Board reviewed those petitions and granted formal intervention to New Jersey. *See* LBP-07-05, 65 NRC at 353-59 (2007). The Board specifically admitted for an NRC hearing a contention challenging the DP's "dose modeling" assumptions and deferred ruling on New Jersey's other contentions, including its facial and as-applied challenges to NUREG-1757,

³Acceptance of a proposed amendment for docketing is not approval. It simply means that the proposed amendment addresses the appropriate factors and can be evaluated in detail by NRC Staff. *See* NUREG-1757, Volume 1, at 5-9.

pending completion of NRC Staff's review of the DP and its completion of the Safety Evaluation Report and the Environmental Impact Statement. *Id.* at 359-61. The Board found that, based on prior experience, the "DP might undergo significant revision," *id.* at 360, which could require New Jersey "to withdraw, to amend, or to supplement" its contentions. *Id.* at 361.

The Board denied Gloucester County's petition to intervene as a party, finding its contentions inadmissible. *Id.* at 346-49. Specifically, the Board found the County's contention that approval of the plan would have a serious negative economic impact on the County's residents, including a loss of property values, inadmissible because it did not identify a portion of the proposed plan that was deficient. *Id.* at 346-47. Gloucester County did not appeal the Board's decision to the Commission.

However, the Board invited the County to participate in the hearing as a governmental entity under 10 C.F.R. § 2.315(c). *Id.* at 363. That provision gives governmental entities significant participation rights, including the right to introduce evidence and appeal Board decisions to the Commission, even if not admitted as a formal party. The County has not yet accepted the invitation.

F. Retraction of Portions of NUREG-1757.

While reviewing Shieldalloy's proposed DP, NRC Staff became aware that portions of the revised guidance were incorrect. The Staff has now issued public notice retracting portions of the guidance. 72 Fed. Reg. 46,102 (Aug. 16, 2007). The Staff corrected a printing error and retracted portions of guidance in NUREG-1757, Volume 2, Appendix N. *Id.* The retracted guidance deals with the discount rate, which is challenged by New Jersey in this lawsuit.

G. Commission Order of January 12, 2007.

When it filed No. 06-5140 in this Court, New Jersey also filed a Hearing Request with the Commission. The State asked NRC to hold a formal hearing to rescind portions of the revisions. New Jersey also filed a separate petition for rulemaking under 10 C.F.R. 2.802(a), asking the Commission to rescind the revised NUREG. Finally, New Jersey asked the Commission to stay the administrative hearing on Shieldalloy's proposed DP pending disposition of the petition for rulemaking. *See* 10 C.F.R. 2.802(d).

The Commission denied the request for a hearing and the request for a stay in an Order dated January 12, 2007, A327-29, and referred the Rulemaking Petition to NRC Staff for action in accordance with the NRC's normal practices. A327. NRC Staff responded to the Petition on June 22, 2007, advising New

Jersey that the petition was deficient and inviting the State to submit additional information. *See* 10 C.F.R. § 2.802(f).

With regard to the request for a hearing, the Commission first noted that NUREG-1757 was a guidance document and not binding on NRC licensees.

NUREG-1757 does not establish “binding” agency requirements; instead, it simply provides guidance on how a licensee may comply with various provisions of the Commission’s decommissioning regulations. *See* NUREG-1757, Vol. 1, Rev.2, xvii. No NRC licensee is required to comply with NUREG-1757.

A327-28. Second, the Commission pointed out that New Jersey had received notice of the revised NUREG, had submitted comments on the proposed revisions, and NRC had responded to those comments. A328.

The Commission further held that New Jersey could challenge the application of NUREG-1757 to the proposed Shieldalloy decommissioning plan in any hearing held to consider whether to grant a license amendment allowing Shieldalloy to implement the decommissioning plan.

[I]f a person successfully petitions to intervene in the proceeding to review [Shieldalloy’s] proposed decommissioning plan, that person may contest [Shieldalloy’s] attempt to rely on the disputed portions of NUREG-1757 in that proceeding.

A328. Accordingly, the Commission denied the request for a hearing.

Finally, the Commission denied New Jersey's request for a stay of the administrative proceeding. The Commission noted that, under its regulations, a petitioner could only request a stay pending disposition of a rulemaking "of a proceeding to which the petitioner is a *party*" A328 (emphasis in original). *See* 10 C.F.R. § 802(d). At that time, New Jersey had not been admitted as a party to the proceeding and was ineligible invoke this provision. A328-29.

SUMMARY OF ARGUMENT

A. This Court lacks jurisdiction over New Jersey's Petitions to review the revised NUREG. The Hobbs Act, 28 U.S.C. § 2341, *et seq.*, gives this Court jurisdiction over "final orders" issued by the Commission in licensing or rulemaking proceedings. But revised NUREG-1757 is not "final" and is not an "order" issued in a licensing or a rulemaking proceeding.

1. To be "final," an agency action must mark the "consummation" of a decision-making process; it must not be "tentative or interlocutory." It must also determine legal "rights and obligations." NUREG-1757 does not determine any "rights and obligations," and does not consummate any process. No licensee is required to follow it, and anyone who does, must obtain a license amendment – which allows interested persons a hearing opportunity on the guidance and its application. New Jersey is in fact challenging NUREG-1757 in an ongoing NRC

hearing on the Shieldalloy decommissioning. Furthermore, NUREG-1757 is “tentative or interlocutory” because NRC Staff is free to modify it at any time and, in fact, has already retracted part of the revised guidance as incorrect. Thus, the NUREG is not a “final” agency action.

The Hobbs Act gives this Court jurisdiction over NRC orders in licensing or rulemaking proceedings. New Jersey alleges that the NUREG “has the effect of a binding rule.” But New Jersey never explains what that “effect” is and even concedes that the NUREG is not a “binding norm.” The NUREG does not change any NRC regulations. Under factors established by this Court, the NUREG is non-binding agency guidance, not a substantive rule, and thus outside Hobbs Act jurisdiction.

2. Moreover, the NUREG does not require New Jersey (or any other person) to do anything and does not harm New Jersey. It is simply *guidance* whose validity and proper application remain to be tested. Thus, New Jersey has suffered no “injury in fact” from the NUREG and lacks standing to challenge it.

3. New Jersey’s real challenge is to Shieldalloy’s request for a license amendment incorporating the revised NUREG’s guidance. But that challenge is premature. Under factors established by this Court, New Jersey’s claims are unripe because they are not yet “fit for review,” and because postponing review

would cause no “undue burden” on New Jersey. The burden of ongoing agency litigation is not a judicially cognizable burden.

4. New Jersey has also not exhausted its administrative remedies. New Jersey has been admitted into the NRC proceeding reviewing Shieldalloy’s request for a license amendment incorporating guidance in the revised NUREG. In that proceeding New Jersey has filed a claim challenging whether the revised NUREG’s guidance complies with the NRC’s organic statutes and formal regulations. If granted, that claim would moot this entire case; thus, this Court should require New Jersey to complete that litigation. This Court would then have a complete NRC decision to review.

B. This Court also lacks jurisdiction over the petition for review challenging the Commission’s denial of New Jersey’s request for a hearing on the NUREG. As noted above, this Court has jurisdiction over Commission orders in licensing or rulemaking proceedings. But the NUREG was not issued in a rulemaking proceeding and is outside the grant of jurisdiction in the Hobbs Act. Moreover, “hearings” on rulemakings are held by notice and comment. Assuming *arguendo* the NUREG is a “rule,” New Jersey had the hearing to which it was entitled because it had notice of the revised guidance and filed comments on it.

C. This Court ought not reach the merits of New Jersey's NUREG challenge, but if it does, it should reject New Jersey's arguments. New Jersey has failed to demonstrate that, on the current record, the NUREG is illegal or "arbitrary or capricious."

1. Contrary to New Jersey's claims, NRC does not need to conduct a rulemaking to amend a license in accord with the NUREG's guidance. A POL/LTC is not a "new license;" instead, it is the same license with additional restrictions on its use. NRC's organic statutes allow the agency to amend a license to reflect new conditions without formal rulemaking. Furthermore, contrary to New Jersey's claim, the POL/LTC option is consistent with the LTR's criteria. NRC has never suggested that government "ownership *and* control" is necessary for an approved "institutional control" under the LTR. Instead, NRC has stated that government "control *or* ownership" is sometimes appropriate. Finally, New Jersey is wrong in claiming NRC "insulated itself" from the public when adopting the revised NUREG. NRC appropriately involved the public, including New Jersey, during the revision process.

2. The NUREG is not substantively arbitrary or capricious. First, contrary to New Jersey's claim, NRC did not have an improper relationship with Shieldalloy when issuing the document. NRC recognized that a class of licensees

was experiencing a problem implementing the LTR and took appropriate action to determine if a solution was available. Second, nothing in the LTR or its preamble supports New Jersey's claim that the 1,000-year modeling does not apply to long-lived nuclides. NRC has always used 1,000-year modeling for decommissioning. Finally, the NUREG reasonably adopted the financial assurance guidelines from NRC regulations at 10 C.F.R. Part 40, and reduced the previous guidance to ensure that any trust fund would provide adequate funds for future maintenance and control at a POL/LTC site.

3. The NUREG did not require review under the National Environmental Policy Act because it was covered by a "categorical exclusion" covering non-binding agency guidance. Moreover, contrary to New Jersey's view, there is no "program" that NRC has "segmented" or "tiered." Finally, NRC's Generic Environmental Impact Statement associated with the LTR explicitly found that it was impossible to do a generic study of environmental impacts of restricted release sites because the potential sites are so different.

4. Gloucester County's arguments are not properly before the Court and lack merit. First, the County is an intervenor and can raise only arguments raised by the main parties. The County's arguments were not raised by New Jersey. Second, contrary to the County's claim, the NUREG expects an analysis of the

economic impacts of a licensee's DP. Finally, the County's claim that NUREG-1757 violates the Resource Conservation and Recovery Act is barred because that statute explicitly does not apply to NRC-regulated materials.

STANDARD OF REVIEW

In our view, this case should be dismissed as premature and outside the Court's jurisdiction. This Court reviews jurisdictional issues *de novo*. *See, e.g., Nugent v. Ashcroft*, 367 F.3d 162, 165 (3d Cir. 2004).

Assuming *arguendo* that NUREG-1757 is a reviewable "order," the standard of review of an NRC order "is deferential; that order may not be overturned unless it is found to be 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.'" *Three Mile Island Alert, Inc. v. NRC*, 771 F.2d 720, 727 (3d Cir. 1985) (citation omitted). The NRC regulatory scheme is "virtually unique in the degree to which broad responsibility is reposed in the administering agency, free of close prescription in its charter as to how it shall proceed in achieving the statutory objectives." *Westinghouse Electric Corp. v. NRC*, 598 F.2d 759, 771 (3d Cir.1979), *quoting Siegel v. AEC*, 400 F.2d 778, 783 (D.C.Cir.1968).

Insofar as this Court reviews NUREG-1757 on the merits, it owes great deference to NRC's interpretation of its own statutes and regulations. *See*

generally *Chevron, U.S.A., Inc., v. NRDC*, 467 U.S. 837, 843-44 (1984); *Sommer v. Vanguard Group*, 461 F.3d 397, 399 n.2 (3d Cir. 2006). Insofar as New Jersey attacks NUREG-1757 “on its face,” it must demonstrate that the NUREG is invalid in all possible applications, not just at one site. *See, e.g., Reno v. Flores*, 507 U.S. 292, 301 (1993).

ARGUMENT

I. THIS COURT SHOULD DISMISS THE CHALLENGE TO NUREG-1757 FOR JURISDICTIONAL AND PRUDENTIAL REASONS.

Whether this Court analyzes this case in terms of finality, standing, ripeness, or exhaustion of administrative remedies, the result is the same: the first two petitions in this consolidated case are premature. The third petition, while not premature, challenges an Order that was not issued in a licensing or rulemaking proceeding under the Atomic Energy Act; thus, this Court lacks jurisdiction over it under the Hobbs Act.

Under the Hobbs Act, this Court has jurisdiction to review “final orders” issued by the Commission in licensing or rulemaking proceedings. 28 U.S.C. § 2342(4). The Petitions in Nos. 06-5140 and 07-1559 challenge the revised NUREG-1757. But NUREG-1757 is neither a “final” agency action nor a final “order” under the Hobbs Act. And as mere guidance it causes no “injury-in-fact”

to the State, so New Jersey lacks “standing” to challenge it. Both the final order requirement and standing are jurisdictional; thus, this Court lacks jurisdiction over Nos. 06-5140 and 07-1559. Moreover, New Jersey’s claims are not “ripe” for review and it has not exhausted its administrative remedies. Thus, this Court should dismiss these two Petitions for prudential reasons as well.

The Petition in No. 07-1756 challenges an Order that was not issued in a licensing or rulemaking proceeding; thus, this Court also lacks jurisdiction over that Petition as well.

A. The Revised NUREG-1757 Is Not a “Final Order.”

1. The Supreme Court has defined “final” agency action as action that completes the agency’s process and has binding effects:

As a general matter, two conditions must be satisfied for agency action to be “final”: First, the action must mark the “consummation” of the agency’s decisionmaking process, . . . it must not be of a merely tentative or interlocutory nature. And second, the action must be one by which “rights or obligations have been determined,” or from which “legal consequences will flow.”

Bennett v. Spear, 520 U.S. 154, 177-78 (1997) (citations omitted). See *Pinho v. Gonzales*, 432 F.3d 193, 200 (3d Cir. 2005). The revised NUREG does not satisfy those criteria. First, the NUREG determines no “rights or obligations;” no legal consequences flow from its issuance. NUREG-1757 states that it is a “guidance

document,” not a regulation, and explicitly disclaims any legal effect. “Legally binding regulatory requirements are stated only in laws; NRC regulations; licenses[;] or orders, not in NUREG-series publications.” A66. “This NUREG is not a substitute for NRC regulations, and compliance with it is not required.” A73. In fact, New Jersey concedes as much when it describes the NUREG as *not* being a rule or regulation. *See* Petitioner’s Brief (“Pet. Br.”) at 31.

New Jersey’s central challenge in this case is to Volume 1, Appendix M, which describes how, in unusual cases, NRC licensees may seek to decommission their sites and retain a possession-only license, with radioactive materials remaining onsite under specified restrictions. An NRC licensee may *choose* to follow the guidance in this document, but no licensee *must*.

Furthermore, NUREG-1757 is not self-executing, *i.e.*, compliance does not guarantee that a proposed license amendment will be granted. Instead, any interested person may argue that action in accordance with NUREG-1757 does not comply with the applicable statutory and regulatory requirements, as New Jersey itself is doing in the ongoing administrative proceeding.

Second, the revised NUREG did not consummate the NRC’s decision-making process at any facility seeking to follow the guidance in the NUREG. That decision-making process is consummated only with the issuance of a license

amendment approving a DP, which may or may not adopt the guidance contained in the NUREG. Here, it is Shieldalloy's decommissioning that concerns New Jersey and it is certainly not final. In fact, the Licensing Board deferred further consideration of the proposed DP precisely because it may well be changed after NRC Staff's technical review and environmental analysis. LBP-07-05, 65 NRC at 360-61.

Moreover, guidance documents such as NUREG-1757 are not "final" because they may be modified at any time without an NRC order or notice-and-comment rulemaking. In fact, NRC Staff has already retracted part of the revised NUREG-1757 based on experience in applying it to Shieldalloy's DP. *See* 72 Fed. Reg. at 46,102.

In sum, no "rights or obligations" are conclusively determined by revised NUREG-1757 and no "legal consequences" flow from it. Moreover, it does not "consummate" an NRC decision-making process. Thus, the revised NUREG is neither "final" nor an "order." *Bennett v. Spear, supra.*

2. Even if the revised NUREG-1757 were a "final" order, it is not the type of "order" that is reviewable under the Hobbs Act. The Hobbs Act gives this Court jurisdiction over "all final orders of the Atomic Energy Commission [now

NRC]⁴ made reviewable by section 2239 of title 42.” 28 U.S.C. § 2342(4). In turn, 42 U.S.C. § 2239(b), makes reviewable, as relevant here, “(1) Any final order entered in any proceeding of the kind specified in subsection (a) . . .” 42 U.S.C. § 2239(b)(1). Subsection (a) proceedings include the “granting, suspending, revoking, or amending of any license” and “the issuance or modification of rules or regulations dealing with the activities of licensees . . .” 42 U.S.C. § 2239(a)(1)(A). Thus, for Hobbs Act jurisdiction, the Commission order must be final and issued in either a licensing or rulemaking proceeding. *See generally Florida Power & Light v. Lorion*, 470 U.S. 729 (1985).

New Jersey argues that NUREG-1757 “has the effect of a substantive rule or regulation . . .” Pet. Br. at 2-3; *see also* Opposition by the State of New Jersey to Federal Respondents’ Motion to Dismiss (“Opposition”), filed February 22, 2007, at 2.⁵ But New Jersey never explains its argument. New Jersey’s semantic struggles are necessary because NUREG-1757 is plainly not a “substantive rule.” The revised NUREG does not make a single change to any rule or regulation. As

⁴In the Energy Reorganization Act of 1974, Congress transferred the Atomic Energy Commission’s power to regulate civilian uses of nuclear energy to the newly-formed NRC. *See* 42 U.S.C. § 5841.

⁵New Jersey’s Opposition to our Motion to Dismiss presents its jurisdictional arguments in full; its brief is nearly silent on the point. Hence, when referring to New Jersey’s position, our brief refers to its “Opposition.”

explained above, no licensee is required to comply with the guidance in NUREG-1757. Indeed, NUREG-1757 explicitly says so. A66, A73. In fact, New Jersey admits that “[a] rule or regulation imposes rights and obligations. . . . In contrast, NUREG-1757 explicitly states that it is a guidance document that does not establish a binding norm.” Pet. Br. at 31 (citations omitted). New Jersey contradicts its own position.

New Jersey cannot have it both ways. If NUREG-1757 is not a binding norm, as the state concedes, it is not subject to judicial review under the Hobbs Act. The document is simply a non-binding statement by the agency that has no legal impact on any party.

3. New Jersey claims (Opposition at 4, 7-8) that NUREG-1757 is reviewable as a substantive rule under the criteria used in *Limerick Ecology Action v. NRC*, 869 F.2d 719 (3d Cir. 1989), where this Court found an NRC policy statement non-binding and unreviewable. *See id.* at 735. But *Limerick* actually shows that NUREG-1757 is not a substantive rule.

First, like the policy statement considered in *Limerick*, NUREG-1757 is not “finally determinative of . . . the rights to which it is addressed.” *Limerick*, 869 F.2d at 734. The NUREG does not “determine” any rights; it simply provides licensees with options for seeking NRC approval of DPs. Second, the NUREG is

“subject to challenge in particular cases,” *id.* at 735, consistent with longstanding NRC practice. *See, e.g., International Uranium Corp.*, CLI-00-01, 51 NRC at 19-20. In fact, New Jersey has already challenged both the application of the NUREG to the proposed decommissioning of the Shieldalloy site, and NRC Staff’s alleged lack of compliance with the NRC’s organic statute and regulations in issuing the revised NUREG. Thus, NUREG-1757 does not meet the standards for a substantive rule set by this Court in *Limerick*.⁶

New Jersey relies on *Citizens Awareness Network v. NRC*, 59 F.3d 284 (1st Cir. 1995), and *Public Citizen v. NRC*, 845 F.2d 1105 (D.C. Cir. 1988), for the proposition that NRC “Policy Statements” are sometimes subject to challenge under the Hobbs Act. *See* Pet. Br. at 3-4; Opposition at 4. But NUREG-1757 is not a Policy Statement; even if it were, it would not be automatically reviewable. As the *Limerick* Court noted, “[g]eneral policy statements, because they are ineffective except as applied and defended in specific proceedings, are often insulated from judicial review at the time of issuance.” 869 F.2d at 735-36.

⁶This Court had jurisdiction in *Limerick* because that case involved review of a final order issuing an operating license, not review of a “Policy Statement,” but a Commission Policy Statement was an issue in the case. Applying the factors cited above, this Court held the Policy Statement was not a binding substantive rule. 869 F.2d at 733-35.

Additionally, both *Citizens Awareness Network* and *Public Citizen* are inapposite here. In *Public Citizen*, the Commission (as opposed to NRC Staff) issued an across-the-board Policy Statement implementing Section 306 of the Nuclear Waste Policy Act of 1982. That Policy Statement was final and established guidelines and standards for training of nuclear plant personnel that were generally applicable to the nuclear industry. *See* 50 Fed. Reg. 11,147 (Mar. 20, 1985).

Likewise, in *Citizens Awareness Network*, the Commission (not NRC Staff) issued a binding, across-the-board policy change, re-interpreting its regulations to hold the agency was not required to grant hearings to review proposed DPs. 59 F.3d at 289. The Commission denied a hearing request by Citizens Awareness Network based on the policy change. *Id.* at 290. Thus, the agency decision under review denied a request for a hearing, based upon a *de facto* change in a regulation.

In both cases the Commission (as opposed to NRC Staff) issued a binding, across-the-board ruling that was a “final” agency action and was applied as such. Here, by contrast, the Commission has yet to apply NUREG-1757 at all – much less issue a “binding rule.”

B. New Jersey Lacks Standing For A Facial Challenge To Revised NUREG-1757.

In the context of this case, the doctrines of “finality” and “standing” are inextricably intertwined. Because the revised NUREG is not a “final action” and lacks the force of law, New Jersey is not harmed by it. Thus, New Jersey lacks standing to challenge the NUREG.

To challenge NRC action in this Court, New Jersey must show that it has suffered an “injury in fact” from the action “likely” to be redressed by a favorable decision. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992); *Fair Housing Council of Suburban Philadelphia v. Montgomery Newspapers*, 141 F.3d 71, 74 (3d Cir. 1998). The Supreme Court has defined an “injury in fact” as “an invasion of a legally protected interest which is (a) concrete and particularized, . . . and (b) ‘actual or imminent,’ not ‘conjectural’ or ‘hypothetical.’” *Lujan v. Defenders of Wildlife*, 504 U.S. at 560 (citations omitted, footnote omitted). *See also Township of Piscataway v. Duke Energy*, 488 F.3d 203, 208 (3d Cir. 2007).

The revised NUREG, in and of itself, does not require New Jersey to do anything or authorize any other person to do anything that will harm New Jersey. The NUREG is not binding and does not (and could not) change any NRC regulations. It thus causes New Jersey no “injury in fact.”

The harm alleged by New Jersey is NRC's potential *future* approval of a DP for the Shieldalloy facility based on the revised NUREG. But that alleged harm is not "concrete," *i.e.*, "real or direct," or "imminent," because Shieldalloy cannot implement the DP, either in whole or in part, until it has been approved by NRC's administrative process – a process where the NUREG's guidance can be challenged and where New Jersey is a participant.

New Jersey will have ample opportunity to contest Shieldalloy's application for approval of its DP based on the disputed portions of the revised NUREG-1757 in NRC's administrative proceeding – including an appeal to the Commission and judicial review of any adverse decision. In the meantime, the cost or burden of participating in ongoing agency litigation is not a judicially cognizable "injury." *See, e.g., In re Briscoe*, 448 F.3d 201, 214 (3d Cir. 2006). New Jersey's lack of such injury deprives it of standing to challenge the NUREG.

C. New Jersey's Claim Is Not Ripe And The State Has Not Exhausted Available Administrative Remedies.

While New Jersey claims that it has filed a "facial" challenge to the revised NUREG-1757, it is apparent that New Jersey's actual goal is to challenge applying the revised NUREG to the proposed Shieldalloy DP. Any such challenge is premature. As we have stressed, NUREG-1757 is not a "binding" agency rule or

requirement. Moreover, New Jersey has been admitted into the NRC administrative proceeding reviewing Shieldalloy's proposed DP. There, New Jersey has raised many of the same claims that it raises here – and could have raised the rest. Thus, not only is this case not ripe for judicial review, but New Jersey also has failed to exhaust its administrative remedies.

“Ripeness and exhaustion are complementary doctrines . . . designed to prevent unnecessary or untimely judicial interference in the administrative process.” *John Doe, Inc., v. DEA*, 484 F.3d 561, 567 (D.C.Cir. 2007) (quotation marks omitted) (citations omitted). Although the doctrines overlap, they have distinct purposes. *Id.* “Exhaustion focuses on the process a litigant must follow; ripeness describes the fitness of the issues for review.” *Id.* These pragmatic doctrines protect “the agency’s interest in crystallizing its policy before that policy is subject to judicial review” and “the court’s interests in avoiding unnecessary adjudication and in deciding cases in a concrete setting.” *Id.* (quotation marks omitted) (citations omitted).

1. New Jersey’s Claims Are Not Ripe.

The basic rationale of the ripeness doctrine

is to prevent the courts, through avoidance of premature adjudication, from entangling themselves in abstract disagreements over administrative policies, and also to

protect the agencies from judicial interference until an administrative decision has been formalized and its effects felt in a concrete way by the challenging parties.

Abbott Laboratories, Inc. v. Gardner, 387 U.S. 136, 148-49 (1967), overruled on other grounds, *Califano v. Sanders*, 430 U.S. 99 (1977). See also *Ohio Forestry Association v. Sierra Club*, 523 U.S. 726, 732-37 (1998). When assessing the ripeness of a claim, “the court should examine whether the issues are fit for judicial resolution and whether withholding judicial resolution will result in hardship to the parties.” *New Hanover Township v. U.S. Army Corps of Engineers*, 992 F.2d 470, 472 (3d Cir. 1993). See also *CEC Energy Co. v. Public Service Commission of the Virgin Islands*, 891 F.2d 1107, 1109-10 (3d Cir. 1989).

Under the fitness prong, courts look to whether the dispute is purely legal and whether the agency action is final. *CEC Energy*, 891 F.2d at 1110. “Awaiting the termination of agency proceedings may obviate all need for judicial review.” *Id.* at 1109 (citations omitted). This furthers “the court’s interests in avoiding unnecessary adjudication and in deciding issues in a concrete setting.” *Venetian Casino Resort, L.L.C. v. EEOC*, 409 F.3d 359, 364 (D.C. Cir. 2005). Under the hardship prong, the court will consider “the plaintiff’s interest in prompt consideration of allegedly unlawful agency action,” *id.*, and “whether *postponing* judicial review would impose an undue burden on [the plaintiff] or would benefit

the court.” *Nat’l Ass’n of Home Builders v. U.S. Army Corps of Engineers*, 440 F.3d 459, 464 (D.C.Cir. 2006) (emphasis in original).

a. New Jersey’s Claims are Not Fit For Review.

This Court has held that “[f]inal agency actions involving purely legal questions satisfy the fitness requirement[,]” *CEC Energy*, 891 F.2d at 1110, but “finality is to be interpreted in a pragmatic way.” *Id.* (citations omitted). This Court has enumerated five factors that should be reviewed in assessing finality:

1) whether the decision represents the agency's definitive position on the question; 2) whether the decision has the status of law with the expectation of immediate compliance; 3) whether the decision has immediate impact on the day-to-day operations of the party seeking review; 4) whether the decision involves a pure question of law that does not require further factual development; and 5) whether immediate judicial review would speed enforcement of the relevant act.

Id.

Here, these finality factors cut strongly against finding New Jersey’s challenge to NUREG-1757 “fit for review.” We have already shown that NUREG-1757, as mere agency guidance, is not “definitive,” lacks the “status of law,” and has “no immediate impact” on New Jersey. And New Jersey’s suit does not raise a “pure question of law,” but rather a fact-specific Shieldalloy grievance. Finally, it is not self-evident that immediate judicial review of NUREG-1757,

which performance would interfere in the orderly NRC licensing (and judicial review) process established by statute, would “speed enforcement” of NRC decommissioning regulations; disruption and delay are equally likely.

In similar cases, this Court has found that the agency action under review was not “final” and thus, not fit for review. For example, in *CEC Energy*, this Court declined to review an agency assertion of jurisdiction to review a proposed contract because the agency had not ordered any specific action with regard to the contract. 891 F.2d at 1110. Likewise, in *Solar Turbines, Inc. v. Seif*, 879 F.2d 1073 (3d Cir. 1989), this Court found an order by the Environmental Protection Agency directing a company to “cease and desist” a construction project not final because the order carried no adverse consequences for non-compliance. 879 F.2d at 1080. This Court held that “the determinative factor on finality in this case is that the administrative order has no operative effect on Solar Turbines.” *Id.* at 1080-81.

Other courts have reached similar conclusions. For example, the D.C. Circuit dismissed as unripe a challenge to an NRC Policy Statement because NRC had not yet applied the Statement and its meaning and effect were as yet unclear. *See Public Citizen v. NRC*, 940 F.2d 679 (D.C.Cir. 1991). Likewise, the Ninth Circuit dismissed as unripe a challenge to Forest Service regulations because the

regulations had not yet been applied. *Earth Island Institute v. Ruthenbeck*, 490 F.3d 687, 695 (9th Cir. 2007).

b. Postponing Review Would Impose No Undue Burden on New Jersey.

Postponing review leaves New Jersey to challenge the guidance in NUREG-1757 in NRC's administrative process. No other burden is apparent or even claimed. But participating in an administrative proceeding is not an "undue" burden sufficient to make this dispute "ripe" for judicial review. "[T]he burden of participating in further administrative and judicial proceedings does not constitute sufficient hardship to overcome the agency's challenge to ripeness." *AT&T Corp. v. FCC*, 349 F.3d 692, 702 (D.C. Cir. 2003) (citations omitted). *See also Ohio Forestry Association v. Sierra Club, supra; FTC v. Standard Oil*, 449 U.S. 232, 244 (1980).

New Jersey claims that radioactive materials are escaping from the Newfield facility and contaminating the surrounding community. *See* Pet. Br. at 6-7. While omitting the issue from its brief, New Jersey implied in its Opposition that if this Court vacates the NUREG, the contamination might be removed sooner than if exhaustion of the administrative proceeding is required. *See* Opposition at 16. But New Jersey did not object to deferral of the proceeding (making the proceeding

last longer); in fact, the State recently advised the Board that deferral was “appropriate.”⁷

Furthermore, there is no connection between the issuance of the NUREG and any contamination allegedly leaving the Newfield facility. If New Jersey believes that the contamination leaving the facility is a threat to the public health and safety, or results from a violation of Shieldalloy’s license, it should report this matter, so that NRC can take appropriate enforcement action. New Jersey can either do that with a letter or an enforcement petition under 10 C.F.R. § 2.206. But NRC has no record of any claim by New Jersey to the NRC that Shieldalloy is in violation of its license or that any contamination that presents a threat to public health and safety is escaping the Newfield site.

Moreover, New Jersey does not allege, much less show, that application of the contested guidance will not resolve any alleged contamination. In other words, assuming *arguendo* that contaminated material *is* escaping the Newfield site, New Jersey does not argue that approval of a POL/LTC would allow the contamination to continue escaping. In fact, approval of Shieldalloy’s DP might well stop any additional alleged contamination from escaping the Newfield site.

⁷See <http://www.nrc.gov/reading-rm/adams.html>, “web-based access,” at ML072360192

In sum, there is no connection between the revised NUREG and the alleged contamination.

Finally, the Supreme Court has stated that “[a] claim is not ripe for adjudication if it rests upon contingent future events that may not occur as anticipated, or indeed may not occur at all.” *Texas v. United States*, 523 U.S. 296, 300 (1998) (internal quotation marks omitted) (citations omitted). New Jersey’s claim rests upon a ‘contingent future event,’ *i.e.*, the possible future NRC approval of a POL/LTC for the Shieldalloy facility. But as we show in the next section, New Jersey has challenged the application of NUREG-1757 to the Shieldalloy facility. If that challenge is upheld, New Jersey’s claim will be resolved.

2. New Jersey Has Not Exhausted Available Administrative Remedies.

New Jersey seeks to by-pass the ongoing NRC administrative hearing and proceed directly to this Court. But it is a well-settled principle of administrative law that

[a] reviewing court usurps the agency’s function when it sets aside the administrative determination upon a ground not theretofore presented, and deprives that Commission of an opportunity to consider the matter, make its ruling, and state the reasons for its action.

Unemployment Compensation Commission of Alaska v. Aragon, 329 U.S. 143, 155 (1946). “[T]he purposes of the exhaustion requirement are to promote

administrative efficiency, ‘respect[] executive autonomy by allowing an agency the opportunity to correct its own errors,’ provide courts with the benefit of an agency's expertise, and serve judicial economy by having the administrative agency compile the factual record.” *Robinson v. Dalton*, 107 F.3d 1018, 1020 (3d Cir. 1997), quoting *Heywood v. Cruzan Motors, Inc.*, 792 F.2d 367, 370 (3d Cir.1986).

1. New Jersey challenges NUREG-1757 in this Court before completion of the NRC’s administrative process. But New Jersey could have presented to the NRC’s Licensing Board every argument that it makes here. In fact, it already presented many of the exact same arguments to the Board in its Petition for Hearing that it raises in this lawsuit.⁸

Specifically, New Jersey argues before this Court that the NRC will violate the AEA if it issues a POL/LTC without first promulgating formal regulations governing the “new” license. *See* Pet. Br. at 30-34; Opposition at 6. But New Jersey’s Contention 17 before the Licensing Board is entitled “[t]he NRC may not issue a LTC license until it promulgates rules and regulations to establish its terms

⁸Compare, *e.g.*, Pet. Br. at 54-57 with Contention 6, A791-95. The State’s Petition for Hearing, with all 33 Contentions, is a public document and available on the NRC’s website. *See* <http://www.nrc.gov/reading-rm/adams.html>, “web-based access,” at ML070290433.

and conditions.” A804. And its supporting argument before the Board is essentially the same argument it makes here. *See generally* A804-07.

This is the key issue raised by New Jersey in this case and all other claims flow from it. If the Licensing Board and the Commission accept New Jersey’s arguments on this point, this case will become moot because the NRC will retract the contested guidance in NUREG-1757 and no POL/LTC could be issued. Thus, allowing the Commission to decide this issue in the first instance may moot this entire case. At the least, it would enable to Commission to respond to New Jersey’s claims in the first instance, and when the time for judicial review comes, give this Court a full record and reasoned Commission decision to review.

2. New Jersey argues that exhaustion would be “futile,” alleging that the agency will treat the NUREG as a rule or regulation that cannot be challenged in an administrative proceeding. As evidence, New Jersey cites to statements made in an NRC Staff filing before the Licensing Board. *See, e.g.*, Opposition at 19-20. However, those statements were made in a Staff pleading as an advocate before the Board; they should not be confused with decisions rendered by the Licensing Board or by the Commission on review of a Licensing Board decision. The Commission has repeatedly made clear that “NRC guidance documents are routine agency policy pronouncements that do not carry the binding effect of regulations.”

International Uranium Corp., CLI-00-01, 51 NRC at 19. Moreover, while the Commission has approved the POL/LTC concept as a general matter, it has not issued a considered decision on the issue in the context of a contested case.

New Jersey also claims that it cannot challenge NUREG-1757 “on its face” in the administrative proceeding, but is limited to an “as applied” challenge. *E.g.*, Opposition at 20-21. But New Jersey has *already* filed a facial challenge to the NUREG before the Licensing Board. *See, e.g.*, Contention 17, A804-07. If that challenge succeeds before NRC, New Jersey will have no need for judicial relief. New Jersey should await the outcome of NRC’s administrative hearing before coming to this Court.

II. THIS COURT LACKS JURISDICTION OVER NO. 07-1756 AND NEW JERSEY WAS NOT ENTITLED TO AN ADJUDICATORY HEARING ON RESCINDING REVISED NUREG-1757.

In case number 07-1756, New Jersey challenges a 2007 Commission Order (A327) denying a request for an adjudicatory hearing on NUREG-1757 seeking to rescind portions of it. This Court lacks jurisdiction over that petition; assuming this Court has jurisdiction, the Commission reasonably denied the request.

A. This Court Lacks Jurisdiction Over New Jersey’s Challenge.

As demonstrated above, NUREG-1757 was not entered in a proceeding for the issuance of a license or a rule – a prerequisite to Hobbs Act jurisdiction. *See*

28 U.S.C. § 2342; 42 U.S.C. § 2239(a)(1)(A). Therefore, this Court lacks jurisdiction to review NUREG-1757's procedural lineage, just as it lacks jurisdiction to review NUREG-1757's substantive validity. *See* Argument I, *supra*. New Jersey's challenge to NUREG-1757 should follow the orderly route of NRC adjudication (already underway), followed by judicial review as prescribed in the Hobbs Act.

B. The Commission Reasonably Denied New Jersey's Hearing Request.

Assuming *arguendo* that this Court has jurisdiction over New Jersey's hearing claim, it should find that the Commission reasonably denied the request for a hearing.

1. In its Petition for Hearing to the Commission, New Jersey admitted that its interest was based on Shieldalloy's application for approval of the DP. "NJDEP has an interest in rescinding these NUREG-1757 provisions because this guidance document has been utilized by Shieldalloy in developing their [decommissioning plan] for their facility in Newfield." Petition at 2.⁹ Thus, New Jersey's challenge to the NUREG was based solely on Shieldalloy's use of the NUREG's guidance in its proposed DP. The Commission pointed out that the propriety of applying NUREG-1757 to the Shieldalloy DP is a proper subject for

⁹This Record document was omitted from the Joint Appendix.

hearing before an NRC Licensing Board. A327-28. This is now being done. Thus, the Commission properly denied New Jersey's request for a *separate* hearing on the revised NUREG.

2. Furthermore, even if NUREG-1757 were considered a binding rule, New Jersey has actually had the pre-approval "hearing" to which it would be entitled. Under the NRC's Rules of Practice, "hearings" in rulemaking proceedings are conducted by notice and comment. *See* 10 C.F.R. § 2.805; *see generally* 10 C.F.R. §2.800, *et seq.* New Jersey not only had notice of the proposed revisions to NUREG-1757, but it also commented on them. *See* A432-440. Under long-established precedent, no further rulemaking "hearing" is necessary. *See, e.g., Siegel v. AEC*, 400 F.2d 778, 785-86 (D.C.Cir. 1968).

III. ON THE CURRENT RECORD, REVISED NUREG-1757 IS LAWFUL AND NOT ARBITRARY OR CAPRICIOUS.¹⁰

Despite our strong view that jurisdictional and prudential doctrines bar New Jersey's lawsuit, we cannot leave New Jersey's challenge to NUREG-1757

¹⁰ New Jersey did not challenge the guidance related to the discount rate (Pet. Br. at 45), the investment rate (*id.* at 49), or the lack of an environmental review (*id.* at 50), when filing its comments on the revised NUREG in 2005. *See generally* A432-40. Thus, New Jersey has waived these arguments and this Court should not consider them. *E.g., National Wildlife Federation v. EPA*, 286 F.3d 554, 562 (D.C.Cir. 2002) (collecting cases).

unanswered. But New Jersey cannot claim that by defending the NUREG, we render NRC's ongoing hearing process biased or futile. Obviously, our arguments in this Court constitute a litigating position responding to New Jersey's claims. As the D.C. Circuit noted when facing an analogous situation, agency counsel must be given latitude to present arguments supporting the agency's actions without binding the agency itself to any ultimate result on the merits.

The Department's litigating position at this stage does not necessarily reflect a deliberative adjudication of appellant's claims. Were we to decide otherwise the Department, faced with such a complaint and not certain whether a court would "waive" the exhaustion requirements, would be in a difficult litigating position. The Department cannot be disadvantaged for contesting [the] claim that the Department's interpretation of its regulation is unreasonable.

Career Education v. Department of Education, 6 F.3d 817, 820 (D.C.Cir. 1993).

Like the Department of Education, NRC cannot be "disadvantaged for contesting the claim" that the NUREG's provisions are unlawful or "arbitrary and capricious." It is possible that after a full review, NRC's independent Licensing Board, or the Commission itself, ultimately will view NUREG-1757 differently, but as we argue below, it is far from self-evident that New Jersey's challenge to the NUREG will – or should – succeed.

A. The POL/LTC Does Not Require A Formal Rulemaking.

New Jersey argues that adopting the POL/LTC option requires NRC to conduct a formal rulemaking. Pet. Br. at 30. New Jersey characterizes the POL/LTC as a “new license” and says that NRC can adopt a “new license” only by a rulemaking establishing the “terms and conditions” of that license. *Id.* at 31.

1. But the POL/LTC is not a “new license.” Instead, it is the *original* license amended to authorize “possession only” of the same radioactive materials authorized under the current license at the same site, those activities in any DP approved by the NRC administrative hearing process, and conditions to protect the public during the term of possession. In fact, one comment on the revised NUREG suggested that NRC terminate the original license and issue a POL/LTC as a “new license.” A533. The Commission explicitly approved NRC Staff’s recommendation to issue a POL/LTC by amendment, not by a “new license.” A914.

For example, Shieldalloy currently holds NRC License SMB-743. If the NRC grants the requested POL/LTC at the end of the administrative process, Shieldalloy will still have License SMB-743, which will be the same license amended to contain greater restrictions on Shieldalloy’s authority than currently provided. Neither the AEA, 42 U.S.C. § 2011, *et seq.*, nor the ERA, 42 U.S.C.

§ 5801, *et seq.*, limits the NRC's power to amend an existing NRC license's authority. Likewise, nothing in either statute limits the number of times NRC can extend the term of a materials license.

2. Next, New Jersey argues that issuing a POL/LTC without requiring government ownership is a "major policy reversal for the NRC." Pet. Br. at 31. But NRC has approved alternative approaches similar to a POL/LTC on several occasions in cases that involve government "control," but not government "ownership," of sites with long-lived nuclides. For example, NRC approved Ohio's plans to use a similar POL process at a Shieldalloy facility in Cambridge, Ohio when that facility ceases operations. A496-97; *see also* 64 Fed. Reg. 15837, 15838-39 (April 1, 1999).

In addition, the Staff has approved Wisconsin's adoption of the "possession only" license approach for restricted use termination. A496. NRC also approved a reclamation plan for a uranium mill tailings site in Wyoming that contained an easement and a restrictive covenant giving the Department of Energy access to the site and authority to enforce restrictions. A501. In sum, the POL/LTC process is not unprecedented.

3. New Jersey also argues that NRC's decision lacked "rational analysis," and that NRC changed its policy of requiring "Federal or state ownership and

control” to one of merely exercising “control” when it developed the POL/LTC. Pet. Br. at 32-33. But New Jersey misstates NRC policy as well as the guidance, and fails to demonstrate a “contradictory” analysis.

No NRC regulation or guidance document says that government “ownership *and* control” are necessary for approval of restricted release under the LTR. Instead, as we noted on page 8, *supra*, the preamble to the LTR suggested that, in some situations, government “control *or* ownership” may be appropriate. 62 Fed. Reg. at 39,070. The guidance provides flexibility in meeting the general LTR requirements for “legally enforceable institutional controls.” A232-40.

In the case of a POL/LTC, NRC will exercise Federal “control” over the license by inspecting the facility, requiring formal license renewals at five-year intervals, and exercising enforcement throughout the duration of the license. A285. The licensee cannot sell or transfer the property without NRC approval. A289. If the licensee becomes bankrupt, NRC could oversee use of the trust fund, which cannot be reached in bankruptcy, to hire the necessary contractors to ensure controls and maintenance of the facility. A290. This “institutional control” is in accordance with the restricted release provisions of the LTR. A284.

Moreover, contrary to New Jersey’s claim, Pet. Br. at 32-33, there is no “contradiction” between the need for a “durable institutional control” and NRC

providing that control by licensing, inspection and enforcement. NRC agrees that “a private entity cannot be expected to endure for millions . . . of years[.]” Pet. Br. at 33. It is precisely for that reason that NRC will oversee control of the site. NRC will ensure that the site is inspected and maintained and that the trust fund is adequately maintained and expended appropriately. As long as there is a Federal government, it is reasonable to expect that there will be an NRC – or a similar agency – responsible for enforcing the terms and conditions of the POL/LTC.

4. Finally, New Jersey argues that by failing to conduct a rulemaking process, “NRC insulated itself from obvious public health and safety concerns.” Pet. Br. at 33. This argument approaches the frivolous. NRC’s documents analyzing these issues, including SECY-03-0069 (A482-527) and the 2004 RIS (A810-28), were all publicly available. In addition, NRC noticed the 2005 draft revisions of the NUREG in the Federal Register for public comment, just as it had the drafts of the original NUREG. *See* 70 Fed. Reg. at 56,940. NRC conducted a public workshop which was announced in the Federal Register. 70 Fed. Reg. 19,109 (April 12, 2005). NRC also established a special state working group to review these issues, but New Jersey did not participate in this group and did not attend the workshop.

NRC's efforts to involve the public in issuing the revised NUREG were the functional equivalent of a full notice-and-comment rulemaking. During this process, New Jersey had both notice and a chance to comment. *See generally* 10 C.F.R. § 2.800, *et seq.* And New Jersey submitted comments, A432-40, to which the NRC responded. A829-906. NRC has not "insulated itself."

B. The NUREG's Guidance Is Not Arbitrary or Capricious.

1. Ownership and Control.

New Jersey argues that the options for POL/LTC and "legal agreement and restricted covenant" as institutional controls are arbitrary and capricious. Pet. Br. at 36-43.¹¹ But New Jersey simply repeats many of the questionable arguments that we addressed above.

1. New Jersey again refers to the mistaken mantra of "ownership *and* control." *E.g.*, Pet. Br. at 36, 38. But New Jersey cites no authority for requiring "both" government ownership *and* government control. As we noted above, the LTR's preamble suggests there may be either "control *or* ownership" in certain

¹¹New Jersey's brief mentions but does not address the LA/RC option; we have focused our response on the POL/LTC.

situations, not necessarily both. *See, e.g.*, 62 Fed. Reg. at 39,070 (emphasis added).¹²

And contrary to New Jersey's assertion, NRC does not expect private entities to "endure . . . in perpetuity." Pet. Br. at 36. Instead, NRC must assume that the Federal government, which will exercise "control" through NRC's monitoring and oversight of the license, will endure to protect the public health and safety.

2. New Jersey implies that NRC had an improper relationship with Shieldalloy, which influenced its decision. Pet. Br. at 41-43. But NRC – like any regulatory agency – must maintain an open relationship with its licensees. If a licensee or class of licensees has a problem, a regulatory agency must review the problem and determine whether a solution is available.

Here, NRC recognized that a few licensees were encountering problems that were delaying decommissioning and undertook a very public review to address those problems – as befits any government agency. But Shieldalloy received no special treatment. In fact, in 2003 NRC denied an Shieldalloy request for a POL

¹²New Jersey's frequent use of the misleading phrase "control *and* ownership" (Pet. Br. at 14, 15, 16, 21, 32, 36, 38, 52) appears deliberate as New Jersey occasionally uses the correct wording, "control *or* ownership," but only when forced to quote NRC documents accurately. *E.g.*, Pet. Br. at 14, 15, 18, 39.

for temporary storage precisely because Shieldalloy's proposal would not decommission the site to the limits specified in the LTR. A390-91. There was no "improper" relationship with Shieldalloy.

2. One Thousand-Year Modeling.

New Jersey argues that the guidance in NUREG-1757 is arbitrary and capricious because it requires licensees seeking any form of restricted release "to model the health and safety risks for *only* 1,000 years, regardless of whether the materials remain a radioactive hazard well after 1,000 years." Pet. Br. at 43 (emphasis added).

1. The guidance challenged by New Jersey is consistent with the LTR's requirements, which specify only that modeling be done for a 1,000-year period. *See* 10 C.F.R. § 20.1401(d). In fact, NRC regulations have *never* required modeling for more than 1,000 years in the decommissioning process. Thus, New Jersey is actually challenging NRC's LTR regulation, which is not at issue in this litigation. In fact, if the NUREG's guidance had suggested modeling for *more* than 1,000 years it would have been outside the regulation.

2. New Jersey also claims that "NRC stated . . . that [the LTR] is intended to apply only to short-lived nuclides." Pet. Br. at 43. There is no such statement in the LTR or any NRC guidance; in fact, there are several statements in the LTR

preamble that explicitly support the application of 1,000 years to long-lived nuclides. The LTR, as proposed, contained the 1,000-year modeling requirement. 59 Fed. Reg. 43,200, 43,212-13 (Aug. 22, 1994). The proposed rule noted that 1,000-year modeling was the current staff practice. 59 Fed. Reg. at 43,224. The final rule reaffirmed the agency's position. 62 Fed. Reg. at 39,083. *See also id.* at 39,070 (institutional controls should be established with the objective of lasting 1,000 years); *id.* at 39,059 (total effective dose equivalent should be calculated for 1,000 years to show compliance with standard).

Checking the citation provided by New Jersey in support of its assertion that the LTR was to be applied only to "short-lived nuclides," 62 Fed. Reg. at 39,083, Pet. Br. at 44, the closest discussion on point is:

Unlike analyses of situations where large quantities of long-lived radioactive material may be involved (e.g., a high-level waste repository) and where distant future calculations may provide some insight into consequences, in the analysis for decommissioning, where the consequences of exposure to residual radioactivity at levels near background are small and peak doses for radionuclides of interest in decommissioning occur within 1000 years, long term modeling thousands of years into the future of doses that are near background may be virtually meaningless.

62 Fed. Reg. at 39,083. If this is the statement to which New Jersey refers, it has been misinterpreted. The statement merely says that decommissioning is different

from high-level waste disposal, and that for decommissioning (as opposed to high-level waste disposal, such as at Yucca Mountain), the dose consequences are small and peak doses generally occur within 1,000 years. That is not equivalent to “the LTR is intended to apply only to short-lived nuclides.”

3. Finally, New Jersey relies on *Nuclear Energy Institute v. EPA*, 373 F.3d 1251 (D.C. Cir. 2004), for the proposition that this Court should overturn the NRC’s 1,000-year modeling period as that Court overturned the EPA’s 10,000-year modeling assessment. Pet. Br. at 44. But that case turned on EPA’s failure to adopt modeling “consistent with” a study conducted by the National Academy of Science, as required by Section 801(a) of the Energy Policy Act of 1992. *See* 373 F.3d at 1273. Here, there is no similar statutory requirement.

3. Discount Rate.

New Jersey alleges that the revised NUREG’s use of a discount rate for the monetary value of averted radiation doses in the future is “arbitrary and capricious.” Pet. Br. at 45-48. This claim is moot, because NRC has recently retracted the guidance challenged by New Jersey. During the processing of the Shieldalloy DP, NRC found that the revised guidance was incorrect. Accordingly, NRC has retracted the NUREG guidance on the discount rate and will issue new guidance in the future. 72 Fed. Reg. at 46,102. This action confirms that the

revised NUREG is not a regulation but a flexible guidance document that can be adjusted promptly and informally.

4. Financial Assurance.

NUREG-1757 provides that applicants seeking the restricted release option (and, by implication, a POL/LTC) may assume a 1% rate of return to determine the amount of the trust fund to assure adequate maintenance and control of the site. A244. The licensee may reduce the amount of money it initially deposits in the trust fund by the amount of the interest calculated. New Jersey alleges that the guidance in the revised NUREG regarding financial assurance for restricted release – not just for a POL/LTC – violates 10 C.F.R. § 20.1403(c) because it does not provide “sufficient financial assurance” to allow a third party to carry out responsibility for control and maintenance of a site. Pet. Br. at 49. Specifically, New Jersey claims that NRC has not justified allowing the 1% rate. Pet. Br. at 50.

The guidance in the revised NUREG does not violate Section 1403(c) of the LTR. As New Jersey concedes, the NUREG uses the value adopted for uranium mill tailings sites in notice-and-comment rulemakings in both 1980 and 1985. *See* 10 C.F.R. Part 40, Appendix A, Criterion 10; 45 Fed. Reg. 65,521 (Oct. 3, 1980); 50 Fed. Reg. 41,862 (Oct. 16, 1985). Thus, the revised NUREG applied the investment rate for the class of sites with the longest-lived nuclides, *i.e.*, uranium

and thorium, to all restricted release sites, regardless of the nuclides involved. NRC took the “conservative” approach, *i.e.*, applying the provision for long-lived nuclides to all sites, to ensure that there will be sufficient financial assurance for future maintenance operations.

Moreover, the revised NUREG *reduced* the allowed investment rate from the previous allowance of not greater than 2%, *see* NUREG-1757, Vol. 3 at p. 4-17,¹³ down to 1%. Thus, the revisions make it *more* likely that there will be sufficient funds for site maintenance because a lower assumed rate of return requires a larger initial trust fund to cover estimated future expenses. Moreover, the 1% rate is a “real” rate, meaning that it is the rate obtained after subtracting inflation. And the 1% rate is a conservative rate in view of the research performed for the Social Security Administration that shows that the rate of return for stocks over the past 200 years has been 7%. *See Social Security Bulletin*, Vol. 63, No. 2, 38 (2000).¹⁴ The Staff’s suggested investment rate, in short, has a basis and is not unreasonable.

¹³NRC regulations governing funding for power reactor decommissioning explicitly allow a 2% annual real rate of return on decommissioning funds set aside in external sinking funds. 10 C.F.R. § 50.75(e)(1)(ii).

¹⁴*See* <http://www.ssa.gov/policy/docs/ssb/v63n2/v63n2p38.pdf>

C. NUREG-1757 Did Not Require Review Under The National Environmental Policy Act.

New Jersey claims that the NRC violated the National Environmental Policy Act (“NEPA”), 42 U.S.C. § 4321, *et seq.*, when it failed to issue an Environmental Impact Statement (“EIS”) for the revised NUREG. Pet. Br. at 50-57.

1. NRC’s NEPA regulations contain a categorical exclusion from the requirements to prepare an EIS for:

Issuance or amendment of guides for the implementation of regulations in this chapter [i.e., 10 C.F.R.], and issuance or amendment of other informational and procedural documents that do not impose any legal requirements.

10 C.F.R. § 51.22(c)(16). New Jersey concedes that the revised NUREG is a guidance document, *i.e.*, an “amendment of [a] guide[] for the implementation of regulations in this chapter,” *supra*, and is not a “binding norm.” Pet. Br. at 31. Thus, by New Jersey’s own admission, the document is covered by a categorical exclusion under NRC’s regulations, and NRC was not required to prepare an EIS for it.

2. NRC will conduct an environmental review for each application of the NUREG, which New Jersey concedes. Pet. Br. at 53. Still, New Jersey argues that only conducting environmental reviews of each application of the NUREG

amounts to a “segmentation” of the “program.” *Id.*, citing *Sierra Club v. U.S. Forest Service*, 843 F.2d 1190 (9th Cir. 1988). New Jersey claims that the revised NUREG authorizes a “program” to license “facilities all over the country to store long-lived nuclides . . .” Pet. Br. at 55.

But *Sierra Club* and similar cases are inapposite here because there is no “program” that has been segmented. New Jersey’s “programmatic EIS” argument presumes that there will be a flood of POL/LTCs. In fact, NUREG-1757 states that POL/LTCs are a “last resort,” and few are expected. A227.

In *Sierra Club*, by contrast, the Forest Service let nine specific contracts to cut timber in a single national forest. The Court held that the nine projects were part of a consolidated “whole” which required a comprehensive environmental review. 843 F.2d at 1191-92. Here, the only licensee that is seeking a POL/LTC is Shieldalloy and NRC is not aware of any other licensee actively planning to exercise this option. If there are future applications, they would not be part of a “program,” but independent actions. Even if NUREG-1757 receives broader applicability than currently anticipated, there will be time enough for NRC to act. An “agency must have considerable discretion in picking the right moment” to prepare an EIS. *Public Citizen v. NRC*, 940 F.2d at 684.

For the same reason, New Jersey's claim that NRC should provide a "tiered" NEPA analysis is misplaced. *See* Pet. Br. at 55, citing *Nevada v. DOE*, 457 F.3d 78, 91-92 (D.C. Cir. 2006). A "tiered" approach is appropriate where there is a project "with many sub-projects [that] will take many years." *Id.* at 91. Here there is no "project" with "sub-projects" to be separated.

3. In addition, conducting individual, case-by-case, environmental reviews of restricted release sites, including POL/LTC sites, is supported by the Generic Environmental Impact Statement ("GEIS") issued by NRC in conjunction with the LTR. There, NRC found it was impossible to do a generic study of the environmental impacts of sites released for "restricted" use because the institutional controls would have to be specifically targeted to the particular characteristics of each case, *i.e.*, the nature of the nuclides involved and the geology of each site. Thus, the GEIS concluded that the environmental impacts of these cases cannot be analyzed on a generic basis and an independent environmental review should be conducted for each site-specific decommissioning decision. *See* 62 Fed. Reg. at 39,086.

In sum, even if there were a "program," which there is not, the sites at which a POL/LTC would be used are so different that it would be impossible to provide a generic or "programmatically" environmental analysis of them.

D. Gloucester County's Arguments Are Impermissible and Lack Merit.

Gloucester County raises two arguments in its brief: (1) that the NUREG does not require an evaluation of the economic impact of the POL/LTC on the community, Gloucester County ("GC") Brief at 9; and (2) that the NUREG does not require compliance with guidelines in the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6901, *et seq.*, for the siting of new solid and hazardous waste landfills GC Brief at 23.

1. The County is an intervenor in this case and may only raise arguments raised by the Petitioner. *Southwestern Pennsylvania Growth Alliance v. Browner*, 121 F.3d 106, 121 (3d Cir. 1997) (citing cases). New Jersey did not raise either argument raised by the County. Thus, this Court should summarily reject the County's arguments. Moreover, the County's arguments focus exclusively on implementing the revised NUREG at the Shieldalloy facility in Newfield. Thus, they are more appropriate for the NRC's hearing process, not for the threshold review that New Jersey claims to seek here.

2. The County's arguments, in any event, are not well-taken. The County accuses Shieldalloy of creating a "waste landfill" at the Newfield facility. *E.g.*, GC Brief at 9, 18, 25, 26. But while not defined by statute or regulation, the term "waste landfill" is generally used for a facility where materials are brought into the

facility from the outside. The only materials to be present at the Newfield facility are materials that originated there.

The County complains that the NUREG does not require an analysis of the economic impacts of leaving waste in a community for a POL/LTC. GC Brief at 13-22. But that complaint is simply wrong; NUREG-1757 explicitly recommends that licensees address the consequences of changes in land values, aesthetics, and reduction in public opposition in preparing its cost-benefit analysis of each decommissioning option. A314.

Moreover, the County raised the identical claim before the Licensing Board, where it was rejected. *See* LBP-07-05, 65 NRC at 346-47. The County did not appeal that decision to the Commission; thus, it failed to exhaust its administrative remedies. It should not be heard to raise the same argument here.

3. The County argues that NUREG-1757 violates RCRA, 42 U.S.C. § 6901, *et seq.*, and associated New Jersey regulations because it does not require the licensee to consider RCRA siting criteria for solid waste landfills. *See* GC Brief at 23. But the NUREG does not advise licensees on compliance with all possible requirements; instead, it provides guidance on possible methods to comply with AEA requirements. Moreover, Congress explicitly provided that RCRA does not apply to NRC-licensed activities. *See* 42 U.S.C. § 6905(a). *See generally* *U.S. v.*

Commonwealth of Kentucky, 252 F.3d 816, 822-25 (6th Cir.), *cert. denied*, 534 U.S. 973 (2001); *State of Missouri v. Westinghouse*, 487 F.Supp. 2d 1076, 1080 n.2 (E.D. Mo. 2007). NRC has exclusive jurisdiction over radiological materials at the Shieldalloy site and neither the State nor the County have demonstrated that New Jersey's RCRA regulations apply here.

CONCLUSION

For the foregoing reasons, this Court should dismiss the petitions for review for lack of jurisdiction or, alternatively, deny them.


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August 27, 2007.

STATUTORY AND REGULATORY ADDENDUM

42 U.S.C. § 2239(a) and (b)

10 C.F.R. § 20.1401

10 C.F.R. § 20.1402

10 C.F.R. § 20.1403

SECTION 189 of the ATOMIC ENERGY ACT

42 U.S.C. § 2239. Hearings and judicial review

(a)(1)(A) In any proceeding under this chapter, for the granting, suspending, revoking, or amending of any license or construction permit, or application to transfer control, and in any proceeding for the issuance or modification of rules and regulations dealing with the activities of licensees, and in any proceeding for the payment of compensation, an award or royalties under sections 2183, 2187, 2236(c) or 2238 of this title, the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding. The Commission shall hold a hearing after thirty days' notice and publication once in the Federal Register, on each application under section 2133 or 2134(b) of this title for a construction permit for a facility, and on any application under section 2134(c) of this title for a construction permit for a testing facility. In cases where such a construction permit has been issued following the holding of such a hearing, the Commission may, in the absence of a request therefor by any person whose interest may be affected, issue an operating license or an amendment to a construction permit or an amendment to an operating license without a hearing, but upon thirty days' notice and publication once in the Federal Register of its intent to do so. The Commission may dispense with such thirty days' notice and publication with respect to any application for an amendment to a construction permit or an amendment to an operating license upon a determination by the Commission that the amendment involves no significant hazards consideration.

* * * * *

(b) The following Commission actions shall be subject to judicial review in the manner prescribed in chapter 158 of Title 28 and chapter 7 of Title 5:

- (1) Any final order entered in any proceeding of the kind specified in subsection (a) of this section.
- (2) Any final order allowing or prohibiting a facility to begin operating under a combined construction and operating license.
- (3) Any final order establishing by regulation standards to govern the Department of Energy's gaseous diffusion uranium enrichment plants,

including any such facilities leased to a corporation established under the USEC Privatization Act.

(4) Any final determination under section 2297f(c) of this title relating to whether the gaseous diffusion plants, including any such facilities leased to a corporation established under the USEC Privatization Act, are in compliance with the Commission's standards governing the gaseous diffusion plants and all applicable laws.

The License Termination Rule

10 C.F.R. § 20.1401 General provisions and scope.

(a) The criteria in this subpart apply to the decommissioning of facilities licensed under Parts 30, 40, 50, 60, 61, 63, 70, and 72 of this chapter, and release of part of a facility or site for unrestricted use in accordance with § 50.83 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, 61, 63), the criteria apply only to ancillary surface facilities that support radioactive waste disposal activities. The criteria do not apply to uranium and thorium recovery facilities already subject to Appendix A to 10 CFR Part 40 or to uranium solution extraction facilities.

(b) The criteria in this subpart do not apply to sites which:

(1) Have been decommissioned prior to the effective date of the rule in accordance with criteria identified in the Site Decommissioning Management Plan (SDMP) Action Plan of April 16, 1992 (57 FR 13389);

(2) Have previously submitted and received Commission approval on a license termination plan (LTP) or decommissioning plan that is compatible with the SDMP Action Plan criteria; or

(3) Submit a sufficient LTP or decommissioning plan before August 20, 1998 and such LTP or decommissioning plan is approved by the Commission before August 20, 1999 and in accordance with the criteria

identified in the SDMP Action Plan, except that if an EIS is required in the submittal, there will be a provision for day-for-day extension.

(c) After a site has been decommissioned and the license terminated in accordance with the criteria in this subpart, or after part of a facility or site has been released for unrestricted use in accordance with § 50.83 of this chapter and in accordance with the criteria in this subpart, the Commission will require additional cleanup only, if based on new information, it determines that the criteria of this subpart were not met and residual radioactivity remaining at the site could result in significant threat to public health and safety.

(d) When calculating TEDE to the average member of the critical group the licensee shall determine the peak annual TEDE dose expected within the first 1000 years after decommissioning.

10 C.F.R. § 20.1402 Radiological criteria for unrestricted use.

A site will be considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from background radiation results in a TEDE to an average member of the critical group that does not exceed 25 mrem (0.25 mSv) per year, including that from groundwater sources of drinking water, and that the residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA). Determination of the levels which are ALARA must take into account consideration of any detriments, such as deaths from transportation accidents, expected to potentially result from decontamination and waste disposal.

10 C.F.R. 20.1403 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 § 20.1402 would result in net public or environmental harm or were not being made because the residual levels associated with restricted conditions are ALARA. Determination of the levels which are ALARA must take into account consideration of any detriments, such as traffic accidents, expected to potentially result from decontamination and waste disposal;

(b) The licensee has made provisions for legally enforceable 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 25 mrem (0.25 mSv) per year;

(c) The licensee has provided sufficient financial assurance to enable an independent third party, including a governmental custodian of a site, 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;

(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; or

(4) When a government [FN1] entity is assuming custody and ownership of a site, an arrangement that is deemed acceptable by such governmental entity.

(d) The licensee has submitted a decommissioning plan or License Termination Plan (LTP) to the Commission indicating the licensee's intent to decommission in accordance with §§ 30.36(d), 40.42(d), 50.82(a) and (b), 70.38(d), or 72.54 of this chapter, and specifying that the licensee intends to decommission by restricting use of the site. The licensee shall document in the LTP or decommissioning plan how the advice of individuals and institutions in the community who may be affected by the decommissioning has been sought and incorporated, as appropriate, following analysis of that advice.

(1) Licensees proposing to decommission by restricting use of the site shall seek advice from such affected parties regarding the following matters concerning the proposed decommissioning—

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

(A) Will provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background to the average member of the critical group will not exceed 25 mrem (0.25 mSv) TEDE per year;

(B) Will be enforceable; and

(C) Will not impose undue burdens on the local community or other affected parties.

(ii) Whether the licensee has provided sufficient financial assurance to enable an independent third party, including a governmental custodian of a site, to assume and carry out responsibilities for any necessary control and maintenance of the site;

(2) In seeking advice on the issues identified in § 20.1403(d)(1), the licensee shall provide for:

(i) Participation by representatives of a broad cross section of community interests who may be affected by the decommissioning;

(ii) An opportunity for a comprehensive, collective discussion on the

issues by the participants represented; and

(iii) A publicly available summary of the results of all such discussions, including a description of the individual viewpoints of the participants on the issues and the extent of agreement or disagreement among the participants on the issues; and

(e) 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 is as low as reasonably achievable and would not exceed either—

(1) 100 mrem (1 mSv) per year; or

(2) 500 mrem (5 mSv) per year provided that the licensee—

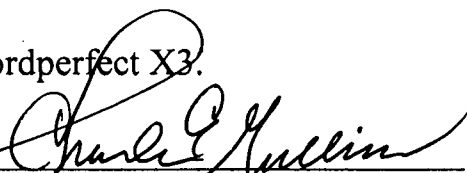
(i) Demonstrates that further reductions in residual radioactivity necessary to comply with the 100 mrem/y (1 mSv/y) value of paragraph (e)(1) of this section are not technically achievable, would be prohibitively expensive, or would result in net public or environmental harm;

(ii) Makes provisions for durable institutional controls;

(iii) Provides sufficient financial assurance to enable a responsible government entity or independent third party, including a governmental custodian of a site, both to carry out periodic rechecks of the site no less frequently than every 5 years to assure that the institutional controls remain in place as necessary to meet the criteria of § 20.1403(b) and to assume and carry out responsibilities for any necessary control and maintenance of those controls. Acceptable financial assurance mechanisms are those in paragraph (c) of this section.

CERTIFICATE OF COMPLIANCE

Counsel for Respondent hereby certifies that the foregoing Brief for the Federal Respondents satisfies the requirements of Rule 32(a)(7) of the federal Rules of Appellate Procedure. The Brief was prepared in proportional Times New Roman font of 14 characters per inch, and, excluding the parts of the brief exempted by Rule 32(a)(7)(iii) of the Federal Rules of Appellate Procedure, contains 13,996 words, according to Corel Wordperfect X3.



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U.S. Nuclear Regulatory Commission
Counsel for Federal Respondents

CERTIFICATE OF SERVICE

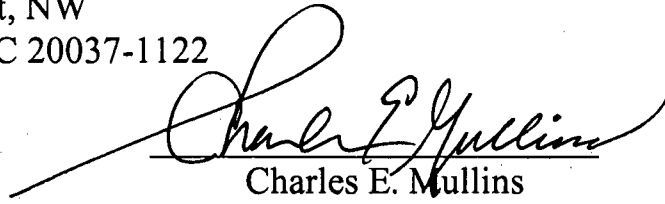
I declare under penalty of perjury that I filed the "Federal Respondents' Brief" in consolidated Case Nos. 06-5140, 07-1559, and 07-1756 by causing ten (10) paper copies to be sent to this Court by overnight delivery service, and an electronic copy in PDF format via electronic mail. I hereby certify that the electronic brief served on this Court has been scanned for viruses using Symantec AntiVirus Program 10.1.5.5010 and is virus-free, and that the text of the electronic brief and the paper briefs are identical.

I also served two paper copies of the brief on the following counsel by overnight delivery service:

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Dated: August 27, 2007.

Reg'd
1/6/09



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JON S. CORZINE
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MARK N. MAURIELLO
Acting Commissioner

December 23, 2008

Hoy Frakes, President
Shieldalloy Metallurgical Corporation
60790 Southgate Rd.
Cambridge, OH 43725-9414

Dear Mr. Frakes:

I would like to thank you and your staff for meeting with us on December 10, 2008. We appreciate being able to have a frank discussion regarding our impending Agreement with the US Nuclear Regulatory Commission (NRC).

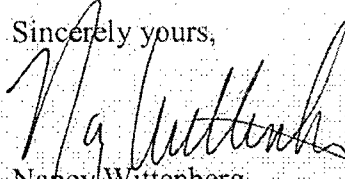
To reiterate, the Department is on schedule to sign an Agreement with the NRC by September 30, 2009 (possibly sooner). After the Agreement is signed, the Department will be the licensing authority for your source material license and the NRC will no longer be the responsible agency to approve or deny your proposed decommissioning plan. As such, Shieldalloy Metallurgical Corporation (SMC) will be required to comply with the New Jersey Radiation Protection Code regarding decommissioning at N.J.A.C. 7:28-12. We explained that your current approach to decommissioning will not comply with our regulations and that the slag pile, as currently characterized, would have to be removed. You reiterated that you believe that the current approach is the safest alternative. You also commented that you cannot change your course of action because of your scheduling commitments to the NRC.

We recommended that you make a request to the NRC to put any further work on the engineered barrier design on hold. As we stated at the meeting, we believe that your work on the characterization of the slag pile, characterization of the site and surrounding areas, dose modeling, and investigating alternative disposal options should continue. You stated that business planning necessitated that you continue with the current plan. Putting a hold on certain aspects of your decommissioning plan for nine months seems like a reasonable compromise to us.

While we did not come to a consensus regarding your current or future actions for decommissioning and terminating your license, we agreed that further meetings would be

beneficial as the date of the Agreement approaches. We look forward to our continued discussions.

Sincerely yours,



Nancy Wittenberg
Assistant Commissioner

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