STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
Toni Hardesty, Director

February 7, 2005

Theodore B. Smith
Decommissioning Directorate
Division of Waste Management and Environmental Protection
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Re: Comments on the draft Environmental Assessment for Exemption of Material in Accordance with 10 CFR 20.2002 for Proposed Disposal Procedures for the Connecticut Yankee Atomic Power Company (Docket Number 50-213)

Dear Mr. Smith:

The Idaho Department of Environmental Quality (IDEQ) provides the following comments on NRC's above-referenced Environmental Assessment (EA).

Requirements for IDEQ Approval and NRC Waste Exemption
The EA's proposed action is the shipment of approximately 50,000 tons of decommissioning waste from the Connecticut Yankee reactor for disposal at US Ecology's (USEI) RCRA Subtitle C disposal facility near Grand View, Idaho.

The EA should clarify that disposal at USEI of radioactive waste exempted from NRC regulation is regulated by IDEQ, and that USEI could not dispose of any NRC-exempted Connecticut Yankee waste without IDEQ's separate approval. IDEQ regulates the disposal of radioactive waste exempted from NRC regulation under IDAPA 58.01.10, Rules Regulating the Disposal of Radioactive Materials not Regulated under the Atomic Energy Act of 1954, as Amended (attached). Disposal would also have to comply with the conditions of USEI's Subtitle C permit.

NRC and IDEQ agree that only Atomic Energy Act materials exempted from NRC regulation are eligible for disposal at USEI. (See letter dated December 16, 2004, from Paul Lohaus, Director of NRC's Office of State and Tribal Programs to IDEQ.) NRC's evaluation of whether to exempt from its regulation all or some of the proposed Connecticut Yankee waste is therefore a connected action to its authorization of alternate disposal. The EA should identify what exemption(s) NRC proposes to apply to Connecticut Yankee decommissioning waste, as well as the criteria for the exemption and when and where the exemption would take effect.

Transuranic Regulation
The Connecticut Yankee decommissioning waste is projected to contain transuranic elements only in fairly small concentrations. NRC does not currently have a general exemption for quantities or concentrations of transuranic elements other than in consumer products (see 10 CFR 30.15). NRC should clarify how the proposed action relates to its regulation of transuranic elements in waste from NRC-licensed facilities.

Current Permit Requirements at USEI
The EA should clarify to what extent NRC's alternate disposal evaluation relies on USEI's current performance assessment, waste acceptance criteria and verification, health and safety plan, post-closure requirements, radiation monitoring, and waste handling procedures.

NRC should be aware that the specific radionuclide aspects of USEI's Subtitle C permit are currently based on TENORM/NORM radionuclides (e.g., uranium, thorium and decay products), not reactor-produced radionuclides (e.g., strontium, cesium, technetium, and transuranics). Radioactive waste streams disposed at USEI to date have primarily involved TENORM/NORM waste, with a limited amount of generally exempt quantities of source and byproduct material.

Current USEI Waste Acceptance Criteria (WAC) do not include concentration limits for reactor-produced radionuclides, and radiation-monitoring program is limited to TENORM/NORM radionuclides. Should NRC determine Connecticut Yankee decommissioning waste is exempt from its regulation, IDEQ would have to assess the cumulative effects of the additional waste and what regulatory and permitting changes may apply to this specific waste stream.

The EA's proposed action involves two regulatory relationships, NRC's relationship with licensee Connecticut Yankee, and IDEQ's relationship with permittee USEI. IDEQ is willing to meet with NRC and/or its licensee and USEI if that would be helpful to reduce confusion that might otherwise occur in our respective evaluations and communications with the regulated entities.

I have also enclosed a letter from IDEQ to NRC Chairman Nils Diaz regarding the relationship of NRC's analysis of specific decommissiong waste proposals to national policy making.

Please contact Doug Walker, Idaho's NRC liaison, at 208-528-2600 if NRC needs additional information or wishes to discuss these comments.

Sincerely,

Toni

Toni Hardesty
Director

Enclosures (2)

Table of Contents

58.01.10 - Rules Regulating The Disposal Of Radioactive Materials Not Regulated Under The Atomic Energy Act Of 1954, As Amended

000. Legal Authority. 2
001. Title And Scope. 2
002. Written Interpretations. 2
003. Administrative Appeals. 2
004. Incorporation By Reference. 2
005. Office -- Office Hours -- Mailing Address And Street Address. 3
006. -- 009. (Reserved). 3
010. Definitions. 3
011. -- 018. (Reserved). 4
019. Notification Of Radioactive Materials. 4
020. Radiation Protection Standards. 4
021. -- 029. (Reserved). 5
030. Records. 5
031. -- 039. (Reserved). 5
040. Violations. 5
041. -- 999. (Reserved). 6

(3-15-02)

c. U.S. Government Printing Office, Superintendent of Documents, Washington, D.C. 20402, or U.S. Government Bookstore, Room 194 Federal Bldg., 915 Second Ave., Seattle, WA 98174. (3-15-02)

005. OFFICE -- OFFICE HOURS -- MAILING ADDRESS AND STREET ADDRESS.
The state office of the Department of Environmental Quality and the office of the Board of Environmental Quality are located at 1410 N. Hilton, Boise, Idaho 83706-1255, telephone number (208) 373-0502. The office hours are 8:00 a.m. to 5:00 p.m. Monday through Friday. (3-15-02)

006. -- 009. (RESERVED).

010. DEFINITIONS.

01. Accelerator-Produced Radioactive Material. Any material made radioactive by exposing it to the radiation from a particle accelerator. (3-15-02)

02. Board. The Idaho Board of Environmental Quality. (3-15-02)

03. Byproduct Material. Byproduct Material means: (3-15-02)

a. 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; and (3-15-02)

b. The tailings or waste produced by the extraction or concentration of uranium or thorium from ore processed primarily for its source material content. (3-15-02)

04. Department. The Idaho Department of Environmental Quality. (3-15-02)

05. Exempt Quantities And Concentrations Of Byproduct Materials. Radioactive materials defined as byproduct by the U.S. Nuclear Regulatory Commission (10 CFR 30.14 through 30.16, 10 CFR 30.18 through 30.21, 10 CFR 32.11 and 10 CFR 32.18) in which the quantity and concentration of radionuclides are considered exempt from regulation. (3-15-02)

06. Naturally Occurring Radioactive Material (NORM). Any material containing natural radionuclides at natural background concentrations, where human intervention has not concentrated the naturally occurring radioactive material or altered its potential for causing human exposure. NORM does not include source, byproduct or special nuclear material licensed by the U.S. Nuclear Regulatory Commission under the Atomic Energy Act of 1954. (3-15-02)

07. Operator. Any person(s) currently responsible, or responsible at the time of disposal, for the overall operation of a hazardous waste treatment, storage or disposal facility or part of a hazardous waste treatment, storage or disposal site. (3-15-02)

08. Owner. Any person(s) who currently owns, or owned at the time of disposal, a hazardous waste treatment, storage or disposal facility or part of a hazardous waste treatment, storage or disposal site. (3-15-02)

09. Person. Any individual, association, partnership, firm, joint stock company, trust, political subdivision, public or private corporation, state or federal government department, agency, or instrumentality, municipality, industry, or any other legal entity which is recognized by law as the subject of rights and duties. (3-15-02)

10. Radioactive Material. Radioactive Material includes: (3-15-02)

a. Technologically Enhanced Naturally Occurring Radioactive Material; (3-15-02)

b. Accelerator Produced Radioactive Material; (3-15-02)

of one hundred (100) millirem per year (1 milliseivert/year); and (3-15-02)

c. No person shall release radioactive materials for unrestricted use in such a manner that the reasonably maximally exposed individual will receive an annual TEDE in excess of fifteen (15) millirem per year (fifteen one-hundredths (0.15) milliseivert/year) excluding natural background. (3-15-02)

02. **Protection Of Workers During Operations.** All owners and operators shall conduct operations in a manner consistent with radiation protection standards for occupation workers contained in 10 CFR 20. (3-15-02)

03. **Disposal Of Radioactive Material.** No person, owner, or operator shall dispose of radioactive materials by any method other than: (3-15-02)

a. At a permitted treatment, storage or disposal facility under the authority of the Idaho Hazardous Waste Management Act, Chapter 44, Title 39, Idaho Code, provided that the facility owner or operator complies with each of the following: (3-15-02)

i. Department-approved waste acceptance criteria for radioactive material defined in Section 010; (3-15-02)

ii. A Department-approved closure program that provides reasonable assurance that the radon emanation rate from the closed disposal unit will not exceed twenty (20) picocuries per square meter per second averaged across the entire area of the closed disposal unit and meets the requirements in Subsection 020.01.b.; and (3-15-02)

iii. A Department-approved environmental monitoring program that monitors air, ground water, surface water and soil for radionuclides and ambient radiation levels in the environs of the facility and which demonstrates that no member of the general public is likely to exceed a radiation dose of one hundred (100) millirem (one (1) milliseivert) per year from operations conducted at the site. (3-15-02)

b. By transferring wastes for disposal to a facility licensed under requirements for uranium or thorium byproduct materials in either 40 CFR 192 or 10 CFR 40 Appendix A; (3-15-02)

c. By transferring wastes for disposal to a disposal facility licensed by the U.S. Nuclear Regulatory Commission, an agreement state, or a licensing state; or (3-15-02)

d. In accordance with alternate methods authorized by the Department upon application or upon the Department's initiative, consistent with Section 020.01 and all applicable state statutes and regulations. (3-15-02)

04. **Prohibit Disposal At A Municipal Solid Waste Landfill.** No person shall dispose of radioactive material as defined in these rules at a municipal solid waste landfill, except for individual consumer products containing radioactive material. (3-15-02)

021. -- 029. (RESERVED).

030. RECORDS.
Records of disposal, including manifest, shall be maintained for three (3) years in accordance with 40 CFR 262.40 and 40 CFR 262.23. (3-15-02)

031. -- 039. (RESERVED).

040. VIOLATIONS.

01. **Failure To Comply.** Failure by any person, owner, or operator to comply with the provisions of these rules shall be deemed a violation of these rules. (3-15-02)

02. **Falsification Of Statements And Records.** It shall be a violation of these rules for any person, owner, or operator to knowingly make a false statement, representation, or certification in any document or record

Subject Index

A

Accelerator-Produced Radioactive Material 3

D

Definitions, IDAPA 58.01.10, Rules Regulating The Disposal Of Radioactive Materials Not Regulated Under The Atomic Energy Act Of 1954, As Amended 3

Disposal Of Radioactive Material, Radiation Protection Standards 5

E

Exempt Quantities & Concentrations Of Byproduct Materials 3

F

Falsification Of Statements & Records, Rules Regulating The Disposal Of Radioactive Materials Not Regulated Under The Atomic Energy Act Of 1954, As Amended 5

N

Naturally Occurring Radioactive Material (NORM) 3

Notification Of Radioactive Materials 4

P

Prohibit Disposal At A Municipal Solid Waste Landfill, Radiation Protection Standards 5

Protection Of Workers During Operations, Radiation Protection Standards 5

R

Radiation Protection Standards 4

Radioactive Material, Rules Regulating The Disposal Of Radioactive Materials Not Regulated Under The Atomic Eneregy Act Of 1954, As Amended 3

Reasonably Maximally Exposed Individual 4

Records, Radiation Protection Standards 5

T

Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) 4

U

Unimportant Quantities Of Source Material 4

V

Violations, Rules Regulating The Disposal Of Radioactive Materials Not Regulated Under The Atomic Energy Act Of 1954, As Amended 5

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Dirk Kempthorne, Governor
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February 7, 2005

The Honorable Nils J. Diaz
Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Chairman Diaz:

NRC licensee Connecticut Yankee recently submitted a proposal to NRC for authorization for alternate disposal of reactor decommissioning waste at US Ecology Idaho's (USEI) facility near Grand View, Idaho. USEI's facility has a Resource Conservation and Recovery Act Subtitle C permit from the State of Idaho for disposal of hazardous waste, but is not licensed by NRC for disposal of radioactive waste.

NRC and IDEQ agree that only Atomic Energy Act materials exempted from NRC regulation are eligible for disposal at USEI. (See letter dated December 16, 2004, from Paul Lohaus, Director of NRC's Office of State and Tribal Programs to IDEQ). IDEQ regulates the extent to which NRC-exempted waste may be disposed at USEI.

I have enclosed a copy of our comments on NRC's draft Environmental Assessment for the alternate disposal authorization under 10 CFR 20.2002. IDEQ's comments on the EA do not prejudge IDEQ's regulatory decisions as to the appropriateness and applicable conditions for disposal at USEI of any Connecticut Yankee decommissioning waste the NRC may exempt.

I write to the Commission under separate cover because of the lack of clarity as to what extent NRC is integrating its consideration of such specific requests with its national policymaking. NRC and USEPA are currently considering the appropriateness and potential criteria for use of RCRA Subtitle C and other classes of disposal facilities for low-activity radioactive waste and solid waste from NRC-licensed facilities.

IDEQ wants to avoid conflict between decisions NRC and IDEQ may make in the specific Connecticut Yankee case with upcoming national policy decisions.

USEPA issued an Advanced Notice of Proposed Rulemaking on low-activity radioactive waste in November 2003 (68 Federal Register 65120). The Notice identified a desire to evaluate integrated regulation of this waste on a national basis, including the potential use of RCRA Subtitle C disposal facilities for waste streams such as decommissioning waste.