

OUTLINE OF COMMENTS RECEIVED ON
NRDC PETITION (PRM-20-7)

ABSTRACT

Overall response to the petition was that it not be adopted as proposed. All of the 15 commenters were industrial or state groups and only one consistently supported the petition. In addition, the original petitioner (NRDC) filed comments and an "analysis of comments" on the other comments received by the Commission. Material in the NRDC analysis that was not directly linked to a comment that another commenter had made was treated by the staff in the same manner as the other comments on the petition. A cross-reference of NRDC comments is included in this outline.

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LIST OF COMMENTERS

- (1) State of Alabama Department of Public Health
- (2) South Carolina Nuclear Advisory Council
- (3) Chem-Nuclear Systems Inc.
- (4) Yankee Atomic Electric Company
- (5) Edison Electric Institute
- (6) Commonwealth Edison
- (7) Allied-General Nuclear Services
- (8) Atomic Industrial Forum, Inc.
- (9) Exxon Nuclear Company, Inc.
- (10) Westinghouse Electric Corporations Power Systems
- (11) Utility Waste Management Group
- (12) Nuclear Engineering Company, Inc.
- (13) Florida Power and Light Company
- (14) Tennessee Valley Authority
- (15) State of New York Energy Office

I. Comments on the Necessity of Immediate Adoption of Interim Regulations

2 positive commenters (9,15), and 10 negative commenters (3,4,5,6,8,9,11,12,13,14)

Positive Comments:

- TRU retrievable storage supported, no reason given.
- Support given for the interim regulations, but no reason given.

Negative Comments:

- No danger to the public health and safety exists that requires immediate action.
- Adequate protection of public health and safety is already provided by the NRC regulations.
- The NRC should not be hasty--new regulations should come out of studies.
- There is no legal basis or need for the interim regulations.
- The interim regulations will result in unjustified costs and delays, and needlessly threaten operation of the sites as no real benefit will be gained.
- There is insufficient basis given to justify the interim regulations.
- The EPA report used to partially justify the petition is grossly in error and the GAO report used only incomplete data and was biased.
- The NRDC is ignoring responsible action taken by the NRC and the States.

II. Comments on the Necessity of a GEIS

1 positive commenter (15)
3 negative commenters (1,7,11)
2 other commenters (2,3)

Positive Comments:

- A GEIS should be done because LLW has potential significant environmental impact and a comprehensive evaluation has not been made.

Negative Comments:

- There is no reason for a GEIS just because a type of license is issued unless the same considerations would apply for several licensees.
- There is no harm to the public health and safety.
- The case law cited may not apply as NRC approval is not required for an Agreement State licensee.
- The EIS should be a part of the ERDA GEIS for the entire waste management program--not a separate fragment.
- A GEIS is not required and other methods of evaluation are possible.
- This would be a premature decision. One should wait for completion of studies of existing sites, Federal vs. State regulation, and waste classification.

Other Comments:

- NRC should adopt general rules and if this adoption warrants an EIS, then one should be done.
- No opposition to EIS so long as it does not interfere with licensing actions for new sites where investigations show adequate criteria.

III. Comments on NRDC Allegations summarized from the Memorandum of Points and included in the Petition for Rulemaking.

Allegation A. Two out of 6 sites have experienced migration in less than 15 years of operation.

All commenters say this is false or distorted (3,6,11,13)

- Minor spills probably caused the evidence.
- No evidence is attributable to completed trenches--surface runoff is blamed.
- No threat to public health and safety exists.
- Corrective actions can be taken.
- Criteria are being developed and standards are in existence.
- Absolute containment was never intended or required.
- Massive groundwater movement or sudden contaminations are not likely.
- Capping procedures may have caused the evidence of migration.

Allegation B. Evidence of Plutonium migration at one site.

All commenters say this is false or distorted (3,6,11,13)

- No public health and safety threat (Highest measured off-site Pu-239 contamination at Maxey Flats was $5 \text{ E } -04$ nanocuries per gram.)
- Corrective action has already been taken.
- There is no justification for the conclusion of migration.

Allegation C. The 6 sites were selected without adequate study.

All commenters say that this is untrue (3,6,11,13)

- The site selections were based on extensive and long-term studies and the degree of study has been increased since the initial site selections.
- Only the studies at some sites were questioned by the GAO, and corrections are already in the NRC plan.
- No defect is given that shows up any inadequacies.
- The allegation is untrue at all sites.

Allegation D. The environmental monitoring programs at several sites are seriously inadequate.

Commenters say this is untrue or distorted (3,6)

- Could not speak for all, but the program at Barnwell is more than adequate and the system is being improved.
- The references cited as a basis for this allegation say only that there is room for improvement, not that the programs are "seriously inadequate".

Allegation E. Improper practices are corrected slowly and sometimes not at all.

Commenter says this is untrue (3)

- Any borderline improper practices are immediately corrected.
- No serious license violations have been observed.

Allegation F. A liquid waste storage tank has already been sabotaged or vandalized.

No comments received.

Allegation G. Plans for funding for long-term care are grossly inadequate at several burial grounds.

Commenter says this is untrue (3)

- South Carolina has made a study that concludes that present charges and plans are adequate at the South Carolina site.

Allegation H. No site selection criteria or other standards governing the operation of LLW burial sites exist.

Both commenters say this is untrue (3,6)

- South Carolina has adequate criteria imposed on the South Carolina site.
- Although the NRC program will bring uniformity, the program is not needed because of health reasons.
- The standards in Appendix B (10 CFR 20) are quite adequate.

Allegation I. ERDA has prohibited TRU burial

1 commenter says that the limits set by ERDA are interim limits. (6)

Other commenters (6,9,11,14)

- No evidence for 10 nCi/gm limit; it was an arbitrary limit.
- ERDA is currently re-evaluating the limit.
- The 10 nCi/gm limit was adopted without study, and there is evidence that it is orders of magnitude too low for LLW.

Allegation J. The AEC proposed regulations for TRU in September 1974 but never made them final.

Both commenters say this is true (3,7) but:

- The TRU concentration limit should be based on scientific data and hazards.
- The EIS done by the AEC set the 10 nCi/gm limit.

IV. Comments on the Regulations Proposed by NRDC.

A. Transfer TRU licensing from the States to NRC.

2 Positive Commenters (12,15)

- New York feels that the site, contents, and responsibility for the New York site should all be assumed by the Federal Government (no reason given).
- Support given for Federal control for all LLW for uniformity.

5 Negative Commenters (1,2,9,10,11)

- The states are qualified.
- The states have done a good job.
- Disruption of the Agreement State program is a bad idea.

B. Immediate end to non-retrievable TRU burial.

2 Positive Commenters (9,15)

- Support due to the toxicity and long half-lives of TRU.

2 Negative Commenters (2,11)

- Action is not warranted if predicted migration rates result in TRU concentrations less than 10 nCi/gm at public access points.
- There is no urgency; since there are no reprocessing plants, there is no TRU generation.
- Both the definition of TRU and the disposal mode should be defined by study.

1 other commenter (1)

- An amendment to the one license permitting TRU burial would be more appropriate.

C. Payment of fees by producers for long-term care.

2 Positive Commenters (2,15)

- Private firms should not be relieved of liability of maintenance.

2 Negative Commenters (1,14)

- ERDA must guarantee that the price covers storage.
- Charge rates should not be set in regulations because they will change.

2 Other Commenters (9,10)

- The costs are very uncertain at this point.
- The original construction costs of a nuclear facility should be excluded from the items considered when determining disposal charges on a 'pro rata' basis.

D. Establishment of an inspection, enforcement, and reporting system for the classification of TRU.

2 Positive Commenters (2, 12)

- Establishment of such a system is at least implicit in the regulations.

1 Negative Commenter (7)

- The NRC already has the authority to inspect operations licensed by Agreement States.

E. Suspend licensing of new or enlarged sites until the following is done:

1 Positive Commenter (15)

- Supports suspension of licensing of new sites (no reason given).

9 Negative Commenters (1,2,6,9,10,11,12,14)

- No new license applications pending.
- No health hazard.
- Licenses are under Agreement State control.
- No reason given.
- Such a suspension may also preclude NRC issuance of amendments to existing licenses.
- Does not allow other action if it is in the best interest to license.
- May need more sites or room for waste disposal.
- Extensive license reviews are currently ongoing.

1 other Commenter (15)

- Opposes suspension of licensing of enlarged sites because of possible need for additional capacity.

a. Site selection criteria established

1 Commenter (2)

- Agrees that NRC should promptly establish low-level burial site selection and operating criteria, but does not agree to necessity for adoption of an interim rule. NRC and Agreement States already have adequate regulatory authority to ensure safe operation of low-level burial grounds.

b. Maximum migration rates set

2 Negative Commenters (7,9,

- NRC has sufficient regulations.
- The hazards (of waste burial) are related to other criteria.

c. Minimum standards for environmental monitoring set

1 Negative Commenter (7)

- NRC has sufficient regulations.

d. Standards for long-term care and financing set

1 Positive Commenter (2)

- The licensee should maintain liability for payment.

4 Negative Commenters (9,11,12,13)

- Charge rates are not the responsibility of the NRC.
- This precludes other methods.
- Can be against State laws.
- All sites are on Federal lands.
- More consideration of multiple legal and policy factors are needed.
- Funds cannot be set generically; charges must be specific according to needs.

1 Other Commenter (1)

- All sites should assure adequate funding.

F. Solidify all LLW prior to Shipment

6 Negative Commenters (2,7,11,12,14,15)

- Many factors should be considered before requiring solidification of all wastes. (i.e. concentrations, quantities, probabilities of release, consequence, packaging, costs, and benefits)
- Shipment of non-solidified low-level waste is not a major risk.
- Liquid waste shipment is a limited occurrence and is already regulated.

1 Other Commenter (13)

- Solidification is already required.

V. Miscellaneous Comments Not Directly Addressing Points on the Petition.

- Add a comparative toxicity discussion to the EIS including non-radiological hazards. (1)
- Disposal capacity of LLW is at a premium, the commissions efforts should be directed towards assuring public health and safety through timely licensing activities. (5)

- The NRDC proposal would unjustifiably increase costs to consumers. (5)
- The petition and the GAO report referenced in the petition make the error of treating commercial and military wastes as if they are basically the same. The potential military waste problems are derived from very early disposal practices which are not followed at commercial sites. (6)
- In future, the regulations should require compaction or other treatment of TRU to solid form for placement in a Federal repository (9).
- A ban on adding dilutants to waste is not acceptable. Dilution as encapsulation is acceptable. (9).
- The criteria defining the regulations are not properly included in the regulations. Determination of standards and criteria for formulation and content of regulations is a commission prerogative carried out by internal policies. (10)
- The NRC should complete a review of all disposal sites as well as State vs. Federal regulatory roles and publish the results and recommendations for public comment. (11)
- The NRC should make available for public comment the reports and conclusions of studies underway relating to waste classification. (11)
- The NRC should aggressively promulgate regulations and criteria only after the two comments discussed immediately above are completed. (11)
- The NRC should not take action that would adversely affect the availability of low-level burial capacity. (11)

VI. Comments specifically addressed to the TRU regulation proposed by AEC in 1974.

6 Commentors (3,6,7,9,13,14)

- The 10 nCi/gm limit is unrealistic and should be higher to reflect actual hazards.
- Reactor wastes are generally much less than 10 nCi/gm and since there is no reprocessing there is no real problem.
- Measurement of 10 nCi/gm is impractical leading to burial of much non-TRU waste as TRU waste.
- A detailed study is needed to set a TRU limit and the NRC is doing one now.

CROSS REFERENCE OF NRDC COMMENTS

I.

- Petition and memorandum have not shown past or imminent health effects.
- Petition and memorandum have demonstrated potential danger from mismanagement and deficiencies in the waste management program.
 - NRDC has documented the toxicity of long-lived radionuclides in low-level wastes
 - There is a need for effective long-term isolation
 - Soil knowledge is too inconclusive for shallow land burial of low-level wastes.
- It is not NRDC's burden to show harm; it is the site operator's burden to legitimize current methods.
- The interim regulations will allow for application of new techniques.
- The interim regulations merely preserve the status quo until a studied decision is reached.
- The interim regulations are in keeping with NEPA.

III. (A&B)

- The absolute containment of radioactive material on a long-term basis is not necessary or realistic.
- There are no standards for radioactive material migration.
- There is not adequate scientific knowledge about the degree of containment required to insure protection of the public.
- All radwaste should be placed in retrievable storage with absolute containment pending standards development.
- Off-site movement of radionuclides has occurred.
- Wastes in trenches will probably have to be exhumed.
- Continued burial will prejudice retrieval.
- The EPA report says that West Valley failed to contain and confine wastes and radioactivity is migrating at Maxey Flats.
- It is clear that current disposal techniques cannot contain radioactive wastes.

III. (C)

- NRDC does not contend that existing sites were chosen without evaluation.
- NRDC does not contend that the burial sites are necessarily inappropriate.
- NRDC wishes specific uniform geological criteria to be applied in site selections.
 - No criteria for environmental conditions exist for land burial of low level waste.
 - Disposal sites are chosen on an "ad hoc" rather than an environmental basis.
 - West Valley has water problems due to high precipitation.
 - The Richland site is inappropriate for shallow land burial of low level waste since the operator of the Hanford Reservation has discontinued TRU burial.

III. (D)

- NRC regulation has been inconsistent, spotty, and grossly inadequate.
- The NRC task force investigation is only the first step in upgrading current practices.
- Investigations have found current regulations inadequate.
 - The worst deficiencies include:
 - 1) The lack of Federal review of Agreement State sites.
 - 2) The lack of standards for the type of low-level waste that can be buried in trenches.
 - There are inconsistent state burial standards due to a lack of uniform regulations.
 - NRC monitoring will probably be inadequate if regulation is left to the States.
 - Commercially-generated TRU waste is disposed of by shallow land burial but Federally-generated TRU waste is not.

III. (I)

- Plutonium is more toxic than radium and bioconcentrates to a greater degree, thus requiring greater isolation.
- Background levels do not necessarily provide an appropriate test for acceptability of a disposal method.
- ERDA's definition of TRU is the only uniform standard defined by a government agency.
- Segregation of waste would preserve options for a new definition of TRU.

III. (J)

- The AEC proposed to make commercial burials follow Federal practice.

IV. (B)

- Immediate regulation of TRU waste is appropriate due to the probability of a large increase in production through reprocessing.
- Since the industry is on the verge of producing more TRU, it is the most opportune time to revamp existing disposal techniques.
- Interim storage will save costs of correcting past improper burial practices.

IV. (E)

- It is not clear why immediate expansion of disposal sites is needed.
 - There is substantial space at existing sites for many years.
 - An artificial limit on storage space is in effect and supports the interim ban.
 - Existing sites could increase capacity by storing waste in surface structures.
 - An interim ban would only be in effect a few years with no effect on nuclear power generation.

IV. (F)

- It is impermissible to bury liquid waste at any commercial disposal site.
- It is clearly easier to contain solids than liquids during transport.

IV. (E)(b)

- There are no standards to limit off-site migration.

ENCLOSURE 3

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