



A Consortium of Radioactive Materials Users.

January 31, 1991

James Kennedy
Office of Nuclear Materials Safety and Safeguards
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: NELRAD Comments on SECY 90-318 and questions included
in Federal Register Volume 55, No. 233, December 4, 1990.

Dear Mr. Kennedy,

Members of NELRAD, an organization of radioactive materials licensees from the New England region, appreciate the opportunity to comment on SECY 90-318, NRC's proposed actions regarding the title transfer and possession provisions of the Low-level Radioactive Waste Policy Amendments Act. NELRAD supports the NRC Staff recommendations to provide guidance to governors on this matter. We harbor grave concerns over the current trends in low-level radioactive waste (LLW) management policy, and we welcome the opportunity to air those concerns through the questions included in the December 4, 1990 Federal Register. Our comments are enclosed.

State plans for long-term storage, either centralized or on-site, as an interim solution, are contrary to all our instincts about waste management. We appreciate the NRC statement that does not favor extended long term storage. Furthermore, we urge NRC to maintain their proven standards for safe waste management.

Members of NELRAD will continue to work toward responsible LLW management policy. If you have questions regarding our comments or our position on the LLW issue in general, please do call, 617-350-9023.

Sincerely,

NELRAD

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NELRAD Comments

The following are NELRAD's comments on the Nuclear Regulatory Commission (NRC) staff's recommendations in SECY 30-318 and reactions to the questions included in the "Federal Register" notice, December 4 1990.

NELRAD is an organization of radioactive materials licensees from New England. Our members include hospitals and universities, research and development laboratories, manufacturers, biotechnology and electric power companies. Radioactive materials users are committed to safe management and excellence in our products and services, and we apply those same values to management of the inevitable waste by-products, low-level radioactive waste (LLW). We seek waste management policy that protects those same values.

Recommendations of SECY 30-318

NELRAD agrees with both staff recommendations in regard to preparing for LLW storage and "take title transfer and possession" provisions. Furthermore, NELRAD concurs with the attitude and appreciates the expression that "NRC does not look favorably on extended long term storage of LLW". We suggest that that statement be made more prominent, becoming the theme of NRC policy and comment on the overall LLW situation. Licensees, also, do not look favorably on long-term storage.

Use Existing Guidance - Radioactive materials users have a strong history of safe management of both materials and LLW. Disposal has been the practice and preferred management option for a large part of the LLW throughout that history. Existing NRC and state regulations and guidance, coupled with availability of reliable disposal capacity, have been the cornerstone of that record.

NELRAD agrees that present NRC guidance and LLW management regulations are sufficient for the additional LLW storage that may result from the current trend in implementation of the LLRWPA. Not only has that body of guidance proven to be adequate, but as Chairman Carr's draft letter to governors points out, planning for 1993 must begin now, and new or additional guidance would not be completed in time to be useful.

The general public appears to believe that the LLW issue operates in a regulatory void; NRC's and state reliance on existing guidance makes a simple statement to the contrary.

Letters to Governors

Letters to governors address the offices that must take responsibility if the LLW situation is to be resolved. This letter appears to assume that most states will move into a LLW storage mode. To reverse the trend and steer discussion toward rational

alternatives, such as using disposal capacity that already exists and has proven to be sound, will require action by governors themselves. Other options, compact consolidation or innovative interstate cooperation, can be accomplished only by governor to governor discussion and negotiation.

NELRAD urges that the letter be sent to all governors - agreement state and non-agreement states alike.

Sending copies of the appropriate regulations is useful, showing once again that effective guidance exists. Providing the guidance in one concise package will be helpful, and would be even moreso if a summary and index list is included.

At the same time, many of the governors are newly elected and new to the issue. We suggest that the letter provide all governors with more background on the LLW issue. To that end, we offer the following suggestions:

- Include the NRC advice that "NRC does not look favorably on extended long term storage of LLW" in the first paragraph, perhaps saying: "Although "NRC...", we offer the following advice to states facing the possibility of assuming LLW storage or title responsibility."
- In paragraph two, include the thought that disposal capacity might be arranged or negotiated as well as developed, e.g. at end of line four, add: "through new facility development or by agreement with other compacts or state facilities..."
- In paragraph four, the letter might summarize Brookhaven's report on possible technical problems attendant to LLW storage, or include a list drawn from the report.

If NELRAD correctly understands NRC's position on this issue, we agree. The approach appears to be carefully thought out with actions that offer support and advice to states, yet it does not condone reliance on long-term storage as a management option, an attitude that licensees share.

Reactions to the Federal Register Questions

1. Factors to consider in authorizing on-site storage of LLW:

- o Although the following questions on conditions are not consistent with the explicit goals of the Low-level Radioactive Waste Act of 1980 and Amendments of 1985 (LLRWPA), NELRAD asserts that they are consistent with the broader, more embracing goal of safe LLW management:
 - Is safe disposal capacity available - as a preferred alternative to extended on-site storage - either in existing disposal operations or newly developed?

- Has the licensee and the respective state/compact regions made effort to use that capacity?
- o With the above said, we concede that on-site storage may actually be necessary in order to continue operations. This method of waste management is not altogether a new concept in LLW management. Licensees currently store to accommodate operations, to consolidate for shipment for treatment or disposal, and storage for decay. That current practice yields a history to draw upon in allowing longer term storage. Extension or issuance of on-site storage conditions will rely on individual history of effective LLW management. NRC might require that licensees show the following:
 - History of proper management, demonstrated by absence of citation for less than proper management or correction of cited practice.
 - Compliance with license conditions for meeting existing requirements for worker and public health and safety and environmental protection, included in existing guidance of Part 20 and counterpart agreement state regulations; again demonstrated by absence of citation or correction.

2. Potential health and safety and environmental impacts of increased reliance on on-site storage of LLW:

Although most licensees are confident that on-site storage can be accomplished with minimal direct impact, all prefer the time-tested methods of off-site, centralized disposal because of the following potential disadvantages of on-site storage:

- o On-site storage will necessarily require licensee resources that would otherwise be used for other purposes. Many licensees deliver products and services that are critical to life science research or contribute directly to health care and medical product research and development. On-site storage of LLW may detract from these important health and safety missions of the projects.
 - A part of research grant money and institution and company budgets that would otherwise be assigned to primary projects will be assigned to waste management.
 - Space that would be used in product development, research or delivery of service may have to be used for LLW on-site storage. (Eg.: a hospital with plans to upgrade an operating room has postponed that renovation to allow the room to be prepared for LLW storage.)
 - Staff that has other responsibility will have to be trained for on-site LLW management.

- Money that would be spent for actual disposal will be spent for on-site space and LLW management, deferring the cost of disposal to a later date, thus, requiring another round of resources - time, effort and money - for the very same LLW.
- o The most direct health and safety impact would result from packaging specifications that may be different for storage, and for eventual transportation and disposal. The different requirements may require repackaging at the end of the storage period, thus exposing workers to a second round of waste handling, not in keeping with ALARA and 10CFR61, which shows strong preference for one-time handling.
- o Businesses may close or management may change, leaving custody of LLW to an unknown entity; or, business may be forced to remain on line in order to maintain LLW vigil, even as those business priorities may change.
- o Regulating and monitoring such decentralized operations will demand additional government resources.
 - Would be added burden to existing regulatory responsibility; this will be new responsibility in the cases where all waste has been, in the past, shipped to disposal facilities.
 - Would require additional staff and monitoring equipment and procedures, at a time when most states are seeking ways to cut back on both staff and operating budgets.
 - The alternative to additional staff, equipment and training, clearly, is less effective monitoring.
- o Disbursed regulatory responsibility will be less effective than the current reliance on stringent regulation at the disposal facility, which is passed along as stringent requirements to the licensees who ship waste.
- o Although, perhaps not with real health and safety impact, it goes without saying, that LLW will be stored in locations chosen for very different purposes, often near population centers, near workers or service areas or patients - in the case of hospitals and medical centers, in the heart of communities.
 - Permitting procedures for LLW storage may alert neighbors to new activity at the licensee location, causing alarm and resistance, not only to LLW storage, but to the whole operation itself. This resistance may go so far as disruption of operations which are for many licensees critical to life science research and life-saving health care options.

3. Would LLW storage... have an adverse impact on incentive for timely development of permanent disposal capacity?

1996 has been a target date for new facility completion, based on conditions of the LLRWPA. Judging from current status of siting effort, it is unlikely that new facilities will be available by 1996. However, the course is established, and on-site storage permits are not likely to change the pace of that course. On the other hand, as licensees invest in on-site storage capability, they may feel less pressure for disposal and may even show a preference for continued on-site storage as a way to recover investment, reducing future demand for centralized disposal capacity and thus removing that urgency for agency action toward new facility development.

Relieving pressure on states to forge ahead with siting may actually have a beneficial effect. The reprieve may allow states to carefully assess the emerging distribution of facilities and how that pattern exceeds the demand for disposal capacity. At the same time, states may assess the availability of LLW treatment facilities as preferred management options; i.e. if present trends in waste treatment continue (and there is no reason to believe that they will not), less disposal and more treatment will probably best meet LLW management needs of 1996 and beyond.

On-site storage for other than operational purposes should be viewed as a second best or next best option in all regions, and should not deter viable plans for responsible permanent disposal.

4. What specific administrative, technical or legal issues are raised by the requirements for transfer of title?

Most importantly, licensees will require clear definition of responsibility of "transfer of title"; in the long run, licensees will not be relieved of their own liability in LLW management. If that is the case, licensees, themselves, may resist transfer of title.

At the state level, not enough is known about the responsibility incumbent in the "take title" provision. That responsibility will require thorough examination by individual states.

5. What are the advantages and disadvantages of transfer of title and possession as separate steps?

Licensees will require assurance that the states take both actions. State title without possession would leave licensees storing LLW that belongs to the state. On the other hand, state possession without title leaves the licensee with title and liability, without control over management decisions.

6. Could any State or local laws interfere with or preclude transfer of title or possession of LLW?

Yes. Individual state laws and precedent will apply to take title and possession actions; however, not all states have state statutory authority. A state resistant to such transfer will find both regulatory and statutory ways to avoid both ownership and possession. Actions will undoubtedly be challenged, requiring time and resources. Those resources would be more appropriately directed toward facility development and maintenance and proper safe management, or toward securing a cooperative arrangement.

7. What assurances of the availability of safe and sufficient disposal capacity for LLW should the Commission require and when should it require them? What additional conditions, if any, should the Commission consider in reviewing such assurances?

Most importantly, everyone should be poignantly aware that licensees do not favor on-site LLW storage. Their history of good management has relied on responsible centralized off-site disposal. Licensees will use safe and secure disposal capacity if it is available at a price they can pay. Assurances of availability must come from states and compacts, and progress in that regard will be well known. Plans for disposal capacity are discussed generally and have been submitted to NRC as well as the U.S. Department of Energy and the sited states at each milestone date.

- o NELRAD proposes that governor certification (similar to the Milestone compliance certification) that states and regions are making progress toward providing for centralized disposal capacity - either by development within the state/region or by arrangement with other states/regions - be required. Requirements should be relatively simple so as not to beg time and resources from the effort itself.

- Certification should be available to licensees to submit with the license-to-store or possession limit amendment applications.

- o NELRAD proposes that NRC require the above governor certification to include estimates of the costs for the disposal capacity - both total development cost and projected cost to individual licensees. Facility availability to many licensees will depend on the cost of using that facility. The cost to licensees of access to disposal facilities will be added to the cost of preparing for and maintaining on-site storage operations. Licensees need accurate estimates of the cost of access in order to determine the full cost of LLW management. Licensees will base decisions on continued licensed operations on this cost information. As many uses of radioactive materials are critical to life science research or to disease detection diagnosis and treatment, these decisions will have significant health and safety implications.

8. Are there any other specific issues that would complicate the transfer of title and possession, as well as on-site storage of LLW and mixed waste?

Licensing for custody of waste will be necessary; if states become custodians of waste, they will require licenses to possess the radioactive materials in the LLW and to operate the storage facility. On-site storage will require license amendments and increases in possession limits. These will all come to the licensing agencies - either NRC or agreement states - at the same time, straining staff resources.

Mixed waste is clearly problematic to the whole LLW management program. As state title and/or possession is planned and as on-site storage is institutionalized, there will be increased demand for agreement on practical requirements for management of mixed waste.

In the recent past, mixed waste has been the single long-term resident in licensee property; if on-site storage is employed for all waste, several waste types may have to be accommodated in the same location. If title and possession transfer actually take place, will mixed waste be included in the transfer? What facility will be used?

Other waste types - including biomedical, research animal carcasses, and NORM and NARM - will require both space and management accommodation, either on-site or centralized.

Research animal carcasses that contain radioactive materials impose major storage requirements, most importantly freezer capacity. Long-term storage will require more freezer space to accommodate the accumulation - true of on-site storage, or centralized, state owned storage arrangements. It goes without saying, that the transfer from storage to disposal - by either licensee or state facility operator - is an unsavory prospect.

NELRAD members and radioactive materials licensees from throughout the country are distressed over the prospect of interim storage plans. We urge NRC to join effort to avoid the interim storage option by maintaining access to existing facilities until new facilities are available. If storage becomes the only option, we then urge NRC to seek reasonable assurance that such management options meet everyone's high standards for waste management.

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NELRAD MEMBERS - 1991

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