



NRC NEWS

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“The Key to Future Low Level Waste Disposal Solutions – Public Involvement”

Prepared Remarks for

The Honorable Gregory B. Jaczko
Commissioner
U.S. Nuclear Regulatory Commission

at the

Second Annual RadWaste Summit
Las Vegas, Nevada

September 3, 2008

Thank you for the invitation to be here today.

I am pleased to be able to participate in a forum where stakeholders can come together and share their views on these complex radioactive waste issues. Transparency is critical, and it is these kinds of forums that foster new thinking. In the area of low-level waste (LLW), new thinking is exactly what’s needed.

I believe that public involvement and policy decisions must go hand in hand. After all, what we are doing is making *public* policy. If the public does not feel heard, understood and represented, even the best technical solutions will not come into being.

Before I go any further -- let me say that I am one of four Commissioners of the NRC and the views I offer here today are my own – not necessarily the Agency’s.

As a Commissioner I have worked to encourage discussion of LLW issues. When it comes to low-level waste, we are not talking about a crisis situation, but a long-term problem that will require a complex solution. It is a solution that will involve many stakeholders -- the communities that may host disposal sites, the producers of the waste, the entities that will do the disposal, and many agencies at all levels of government.

In the early 1990s it was thought that a lot of the nuclear power reactors would decommission in the near future. With a wave of power plants decommissioning there would be an increased need for disposal of LLW. But the need for disposal of greater amounts of LLW from nuclear power reactors has been put off as a result of license renewal for a large portion of the current fleet of reactors.

Thus, license extension for existing power reactors has eased the demand for LLW disposal in the short term. I believe we have the time to find a solution to the waste disposal issues, but that will only happen if we maintain focus and keep the dialogue going.

Everyone here today knows, however, that much needs to be done in the area of LLW disposal. With the closure of Barnwell, the disposal options for Class B and C waste have become even more limited. In fact, almost all power reactors now have to store their Class B and C waste onsite -- and the majority of materials facilities are in the same situation.

Unfortunately, there are limited prospects on the horizon to remedy the situation. It remains to be seen what will happen with the Texas site and we know of no other new sites under development. This situation touches on many areas, from nuclear research to well logging. So we have no ability to permanently dispose of the orphan sources being collected by an excellent State program.

Much work has been done in this area. In 2001 the National Academies commissioned a study on "The Impact of Low-Level Radioactive Waste Management Policy on Biomedical Research in the United States." The committee found the cost of disposal to be a major driver in medical research. Additionally, the committee indicated that if access was further restricted by closure of a disposal facility, then that would mean increased need for on-site storage. This is just what has happened. They also indicated that further stress on the medical community beyond what already exists "might not be as well tolerated." I understand that the bulk of medical waste decays in storage, but I am concerned that medical and biomedical facilities will have to store additional Class B and C waste.

In 2004 the Government Accountability Office (GAO) published a report concerning LLW disposal availability and gave testimony before the Senate Committee on Energy and Natural Resources that same year. GAO concluded that, "Although no shortfall in disposal availability appears to be imminent, uncertainties remain about the future access to disposal facilities." The report also concluded that the development of any new facilities may not address national needs for the disposal of Class B and C. While the report recognized that generators have options for disposal of their waste and storage, waste storage is not a viable long-term option.

A more recent GAO study released in March 2007 evaluated foreign experience with LLW to look for ways to improve the U.S. system. In this report GAO again raised concerns about disposal options. GAO concluded that disposal options were needed for very-low-level radioactive waste "by either removing this waste from review by the nuclear regulatory authority as LLRW, or providing special disposal options for this waste."

All of these reports are interesting and useful to help understand where we are and the challenges that exist, but they do not provide the ultimate solutions we need. An effort to successfully find those answers will be dependent upon public involvement. Before I turn to my ideas for new approaches to this problem, let us briefly review the relevant regulatory history.

In July 1997, the NRC published in the *Federal Register* its final rule for Radiological Criteria for License Termination. This new rule amended 10 CFR 20 to include Subpart E. Section 20.1406, "Minimization of Contamination," was added to require new applicants (after August 1997) to describe how their facility design and procedures for operations will reduce contamination to the facility and the environment. The NRC staff is gaining experience with this new rule and recently proposed to amend this provision to include nuclear facilities currently operating and existing materials licensees.

The NRC staff published the proposed Decommissioning Planning Rule on Jan. 22, 2008 for public comment. The staff has received many public comments on the proposed rule and is scheduled to have the final rule to the Commission this fall. I look forward to seeing it.

The NRC staff also initiated a strategic assessment of the NRC's LLW program aimed at evaluating what actions the staff could take to ensure a stable, reliable and adaptable regulatory framework for management of LLW. The staff completed the assessment and informed the Commission on Oct. 17, 2007.

So, with the perspective of these expert studies and this regulatory background, how do we get something done? First (and second, and third...) we need to involve the public. Without that public involvement, any suggested improvements to LLW disposal will be like a train without an engine, it will go nowhere.

Within that context, one potential option I have suggested pursuing a national debate about is to look at current hazardous waste sites as options for the disposal of LLW. Back in January 2007, the Commission met with its Advisory Committee on Nuclear Waste (ACNW). We discussed the various challenges facing generators of LLW if Barnwell were to close. As a result of that meeting the Commission directed the ACNW to work with the staff to provide recommendations on what could be done to increase disposal options for LLW. In looking at various alternatives the Commission directed the ACNW and staff to consider in its analysis the use of Resource Conservation and Recovery Act (RCRA) Subtitle C hazardous waste sites as a potential option for disposal of certain LLW.

On April 30, the ACNW issued their report and it raised additional items that will need to be addressed to move forward, such as land ownership and institutional controls, human intrusion mitigation measures, financial assurance requirements, and predictive performance assessments.

And this brings us to the related broader issue of decommissioning, which I have also focused on since joining the Commission. I have worked to make sure that sites undergoing

decommissioning can be returned to productive use in the communities where licensed operations took place. Decommissioning sites so that communities are not restricted in the future use of these locations builds public confidence.

I recognize that waste disposal options, particularly at non-power plant sites, have become so expensive that some licensees may not have the resources to fully clean up and return decommissioning sites to green fields. Not having this option is unacceptable to many of the communities where these facilities exist and to the regulator. Developing alternatives to deal with this problem will take a concerted effort to communicate and listen to the public in communities around the nation. It is important to have these discussions about broad comprehensive solutions, rather than waiting until they are centered, in isolation, around the approval or disapproval of a specific facility.

Decommissioning sites and establishing waste disposal facilities are intertwined issues that affect a majority of states. We must have a national dialogue that allows us to listen to concerns and base a new system on public health and safety. While there may be other alternatives, such as opening up disposal at government facilities, I believe all options should have at their foundation a requirement to meet standards comparable to those in NRC's regulations. Developing greater disposal options that meet with acceptable safety standards will be critical to ensuring these alternatives gain the support of the public, which in turn is critical to the success of any future approach. Increasing disposal options that are protective of public health and safety and the environment will go a long way to improving outcomes at decommissioning sites and meeting any demand placed on waste disposal by the potential construction of new nuclear facilities.

In the end, I am committed to finding viable alternatives to LLW disposal at facilities that demonstrate the same level of safety as NRC standards require. As we continue to meet the many challenges facing LLW disposal in the nation, I would encourage you to engage the NRC staff and to look for publicly acceptable approaches to this important national issue.