

NEW YORK STATE'S LOW LEVEL RADIOACTIVE WASTE LAW

AND REGULATORY CONTROL PROGRAM

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ABSTRACT

In July 1986, the New York Legislature passed and Governor Cuomo signed into law the Low-Level Radioactive Waste (LLRW) Management Act(1). This law provides for the establishment of a LLRW Siting Commission which will narrow the state to one or two proposed sites and one or more LLRW disposal methodology(ies) per site. The law requires the NYS Dept. of Environmental Conservation (DEC) to establish the siting criteria for which the proposed site(s) and facilities must meet. DEC is to approve, deny, or modify the proposed site(s)/methodology(ies) via a certification which is a conceptual approval. The NYS Energy Research and Development Authority (NYSERDA) then files for all the necessary approvals for the certified site(s)/method(s). The State Dept. of Health (DOH) is responsible for implementing a program to inform and educate the public on LLRW. The state's actions and current schedules are intended to achieve its objective of meeting the mandates of the federal LLRW Policy Act, as amended.

BACKGROUND

New York became an Agreement State in 1962, one of the earliest states to do so. The state has had extensive experience with LLRW disposal as a result of having the only commercially operated LLRW disposal site in the Northeast at West Valley. The NRC Agreement States Program in NYS is split among four agencies. The Dept. of Labor (DOL) licenses the possession and use of radioactive material (RAM) for commercial and industrial facilities; the New York City (NYC) Dept. of Health that for academic and medical facilities in the City, the NYS-DOH that for all academic and medical facilities outside NYC, and the DEC which regulates the discharge of radioactive effluents and the disposal of LLRW and NARM. Over our 25 years as an Agreement State, NYS has observed the controversy over radiation uses develop, much of this controversy coming forth in licensing and operations related to proposed or existing nuclear facilities in the state.

Responding to the federal LLRW Policy Act of 1980, the Coalition of Northeast Governors developed a proposed regional compact which encompassed the 11 northeastern states. The NYS Legislature adopted Chapter 978 of the Laws of 1983 which required the State Energy Office (SEO) with the assistance of an Advisory Committee, to recommend an appropriate course of action for NYS to comply with the federal LLRW Policy Act. In April 1984 the SEO issued its report(2) which contained the recommendations of the Advisory Committee. The Committee, on which I was the DEC Commissioner's designee, recommended against NYS joining the Northeast Compact mainly due to the following considerations:

- .. If no state volunteered to be the host for the LLRW disposal site, the majority would select the host state.
- .. If the host state's environmental statutes are inconsistent with the compact, they are automatically repealed.
- .. Liabilities of the Northeast Commission are not liabilities of the party states.

New York had the only previously operated commercial LLRW disposal site in the northeast.

Many members of the Committee thus felt that NYS would be voted host; possibly have its laws overridden; and at the same time be liable for any problems at the site. Thus, NYS has not joined the Northeast Compact.

The 1984 SEO report estimated that the total LLRW volume to be shipped to disposal sites from NYS in 1993 would be 255,000 cubic feet(3). Recent trends indicate that this estimate is high. However, NYS is one of the largest generators of LLRW among the 50 states.

As a result of the recommendations against joining the Northeast Compact (of which Connecticut and New Jersey are presently the only members), the Governor proposed legislation which assures NYS will meet the federal LLRW milestones. The bill was passed in the 1986 legislative session, only after a companion bill was also enacted. The companion law requires DEC to establish and enforce a LLRW transportation permit and manifest program for all LLRW transported "into, within or through" the state. This program became effective on 1/1/87.

Siting Process

The State's Low Level Radioactive Waste Management Act splits much of the responsibility for siting, environmental regulation, public participation and construction/operation among four separate and distinct agencies:

- 1) Siting Commission - responsible for proposing one or two disposal sites and one or more disposal methodologies for use at each site. Once the Siting Commission makes these selections it must prepare an Application for Certification of the proposed facility(ies)/site(s) and submit it to DEC for approval.
- 2) DEC - responsible for adopting siting criteria; certifying proposed site(s) and method(s); issuing a report on recommendations for "Aid to

Local Governments"; promulgating regulations on financial assurance, closure plans, site safety plans, and environmental monitors; and issuing the necessary environmental and LLRW disposal permits for the construction, operation, closure and post closure phases of the project.

3) NYSERDA - responsible for assessing LLRW generator regulations; filing applications for DEC-certified site(s) and method(s); submitting an annual waste generator report to the Governor and State Legislature; and collecting fees. It also has such site specific duties as preparing applications for construction and operation approvals; acquiring a site or sites; constructing the facility(ies) and operating and maintaining said facility(ies) throughout its projected life in accordance with the regulatory requirements of DEC, DOL, and NRC.

4) DOH - responsible for conducting a statewide information and public health program to inform the public with respect to the properties of LLRW materials and the safeguards which the State is promulgating to maintain safety and, equally important, to provide a meaningful interaction between the State and those to whom it serves concerning a sensitive and often misunderstood issue.

Fiscal 86-87 appropriations in support of these mandates have allotted \$3.5 million to be apportioned among the four distinct state agencies as follows:

Energy, Research & Development Authority	\$250,000
Department of Environmental Conservation	\$1,520,000
Department of Health	\$100,000
Siting Commission	\$1,630,000

The law establishes a siting process in NYS which will result in the selection, construction, and operation of a low level radioactive waste disposal facility. Such a site is necessary by January 1, 1993 so that NYS will have a means to dispose its LLRW (which may then be excluded from the nation's three existing disposal sites pursuant to federal law).

The law establishes a five member Siting Commission in the NYS Department of Environmental Conservation. This Commission will conduct a statewide site selection and disposal methodology analysis narrowing the State to one or more site(s) and method(s) of disposal. By December 1988, the Commission must submit its preferred site(s)/method(s) to the Dept. of Environmental Conservation for review, public hearing, and certification (if acceptable) within eight months. The certified site(s) and method(s) would then be utilized by the NYS Energy Research and Development Authority as the basis for an application to DEC which must be submitted by 1/1/90. After public hearings and upon receiving the necessary approvals during 1990 from DEC, and other state agencies, NYSERDA must construct the facility and commence operation by 1/1/93.

To implement the law, DEC must develop and adopt regulations; prepare reports; certify or deny the Siting Commission's preferred site(s)/method(s); license the LLRW facility proposed by NYSERDA; and regulate the operation of the facility when it commences operation. The law requires that by July 31, 1987, DEC prepare draft regulations on the siting

criteria. By December 31, 1987, the Department must have the regulations finalized. These regulations shall specify the minimum characteristics a disposal site and method must have to conform with existing state and federal law. They must address (1) above-ground engineered monitored disposal, (2) underground mined repository disposal, and (3) any other methods found practicable, with the exception of shallow land burial as defined in the law.

Within 18 months of enactment, DEC must have adopted regulations on financial assurance. These regulations will identify financial requirements, to be included as conditions of any permits issued, to provide for the remediation of failures during operation and after closure, as well as pre- and post-closure monitoring. They must provide for the establishment, administration, terms, and conditions for each of five different types of financial instruments.

By April 1, 1987, DEC must prepare a report on aid to local governments affected by a LLRW site. This report must describe the probable impacts to be expected from both normal and abnormal or emergency operation of the facility, describe the kinds of aid that might be appropriate to mitigate or off-set those impacts, and recommend specific mitigation and compensation measures for the Governor's and Legislature's consideration.

The Low-Level Radioactive Waste Law creates a five-member Siting Commission charged with choosing a site(s) and method(s) to be used for LLRW disposal by December 1, 1988. The Commission must propose one or two preferred sites and methods of LLRW disposal to be used by NYSERDA to develop the state's LLRW disposal facility. The Siting Commission shall submit an application with its selections to DEC for Certification. DEC will hold public hearings to determine consistency with the siting criteria; prepare a final environmental impact statement; and issue a decision on this Certification within six months of the Commission submission.

Upon certification of the site(s) and method(s) for LLRW disposal by DEC, the NYSERDA will prepare the necessary detailed applications to meet the certified site/method. The NYSERDA must file a complete application to DEC by January 1, 1990. DEC will conduct joint public hearings on the application with other state agencies and issue a final EIS and decision. NYSERDA will then commence construction of the approved facility(ies).

DEC must also review and approve site safety plans, closure and post-closure monitoring, and annual cost estimates of closure to assure adequate funds are available upon closing of the facility at the end of its useful life (at least 30 years).

The law also establishes an Advisory Committee within the Siting Commission. This Committee consists of:

- State Geologist
- Commissioner of Health, or designee
- Commissioner of Labor, or designee
- Commissioner of State Energy Office, or designee
- Commissioner of Transportation, or designee
- Commissioner of State, or designee
- Two representatives of environmental groups
- Two health physicists or radiological medical doctors

- Two representatives of LLRW Generators
- Private citizens knowledgeable on LLRW site, when proposed)
- (three citizens from county of each proposed

The Advisory Committee is responsible for reviewing and making recommendations on reports from the Siting Commission, DEC, and NYSERDA on plans and progress in implementing the law. It also advises the Commissioner of Health on the Health Department's public information and education program on LLRW.

The New York State Energy Research and Development Authority is responsible under the law to:

- o Prepare applications for state licenses, permits, or other approvals required for construction and operation of LLRW disposal facility.
- o File complete application for DEC certified site(s) and method(s) for LLRW disposal facility by January 1, 1990.
- o Acquire site(s).
- o Construct, operate, and maintain permanent LLRW disposal facility pursuant to licenses and approvals.
- o Commence operation of LLRW disposal facility by January 1, 1993. Take title to LLRW accepted.
- o Adopt regulations for collection of fees and reporting requirements on LLRW generators.
- o Submit by July of each year (starting in 1987) annual reports to Governor and Legislative Leaders on LLRW generated in NYS during previous year.
- o Collect fees from LLRW generators.

The critical dates in the NYS LLRW program can be summarized as:

1/1/87	Manifest/Permit Program for Transporters begins
4/1/87	DEC Report on Aid to Local Govt.
7/31/87	DEC Draft siting criteria + DEIS
12/31/87	DEC Final siting criteria + FEIS
2/1/88	DEC Final Financial Assurance Regs. + FEIS
12/1/88	Siting Comm. Application + DEIS to DEC
5/89	DEC Certification + FEIS of 1 or 2 sites/methods
1/1/90	ERDA Application + DEIS to DEC
1/91	DEC Decision + FEIS
1/1/93	LLRW Facility Commences Operation

Thus, by January 1, 1993, NYS will have commenced operation of its LLRW disposal facility in order to provide disposal after the state possibly loses access to the three existing sites in the country pursuant to the federal LLRW law of 1980, amended in

1985. The law also assures NYS will meet the milestones contained in the amendments of 1985 to the LLRW Policy Act.

Assistance to Local Government

The first substantive requirement of New York's LLRW law was a report containing recommendations for assistance to local governments. The recommendations, which must be prepared by the Department of Environmental Conservation and submitted to the Governor and the Legislature on April 1, 1987, provide for offsetting benefits to governments and individuals which or who may be affected by the siting of an LLRW management facility. It is perhaps unusual that the Legislature required local assistance issues to be addressed before a site is designated and even before siting criteria are established. However, the Legislature believed that it was more important to develop a generic benefits package early in the process, rather than to wait until a site is selected and then attempt to create a benefits proposal specific to that site.

To meet the aid to local government recommendations requirement, DEC went through a formal bidding process and hired a consultant in November, 1986. The consultant has submitted a draft report to the Department and we are now in the process of finalizing the draft for submission on April 1, 1987. The report will emphasize local empowerment (providing local governments with the opportunity to participate in the process and to determine what local needs are, and how they will be addressed). In addition, the recommendations may include:

1. Creation of a Host Area LLRW Committee (HALC) to oversee local needs and the local distribution of benefits.
2. Establishment of an educational outreach program.
3. Establishment of a mechanism to maximize local participation in new jobs and local industry participation in supplying materials both during and after construction.
4. Provision of funds for: the HALC operating budget; local site review; local participation in licensing; local construction monitoring; emergency preparedness; any local cost increases for providing services (fire, police, etc.); property value guarantees; and payments in lieu of taxes.
5. Creation of a special host community payment fund which is not related to the potential impacts of the LLRW management facility, but rather would be a community gift to the town in which the facility is sited.

Even though these factors are likely to be included in our recommendations, the final form of the benefits package and the dollar amounts which would effectuate it, have not yet been fully determined. Those of you who are familiar with the operation of local government may perceive that establishing a Host Area LLRW Committee may not be difficult; but that giving such a committee broad powers to control and distribute substantial sums of money may conflict with the objectives of local officials. In other words, local people in power tend to want to keep their power rather than to have a new group created which might conflict with their objectives. There-

fore, the final package will have to include not only consideration of local needs but also, consideration of local political realities.

A final point with respect to the aid to local government report concerns how it will be utilized. It is my understanding that some states or compacts are developing benefits packages and then asking for communities to volunteer as sites. In New York it is not our intention to do that. Rather, we intend to select the best site or sites on environmental and safety criteria and then offer the benefits package. In that way we will ensure that the analysis will not be skewed and that a major environmental error will not be made.

Financial Assurance Regulations

In terms of developing a financial assurance plan for the LLRW disposal facility, DEC must promulgate regulations on broad financial requirements after analyzing and comparing five financial packages - trust funds, surety of performance bonds, letters of credit, liability insurance or annuities or guarantees - in terms of their singular qualities and as combinations. Those regulations which may also result in the preparation of a related Environmental Impact Statement, must be enacted by February 1, 1988. The DEC is currently working on this program and expects to meet the 2/1/88 enactment date.

The Department is required to periodically review the methods and instruments of financial assurances to determine whether they are adequate in light of changed circumstances.

Siting Criteria

Regulations concerning siting criteria must be drafted by July 31, 1987, finalized and published by December 31, 1987. These criteria must specify the minimum regulatory requirements that the proposed LLRW disposal facility must meet. Conventional shallow land burial or the use of the West Valley site are precluded from consideration.

In order to seek public input early in our LLRW regulatory control program, DEC conducted a public scoping meeting in January of 1987 on the siting criteria and the scope of the related environmental impact statement. Input was received from the industry, environmental groups, private citizens and other governmental agencies on these issues.

Early in February, the Department distributed to 100 potential bidders a Request for Proposals for development of siting and technology criteria for the LLRW facility. The New York State Low-Level Radioactive Waste Management Act requires those criteria to be released as draft regulations by July 31, 1986, and the final rules to be promulgated by December 31, 1987. Siting and technology criteria must be developed for 1) above ground, engineered, monitored disposal, 2) underground mined repository disposal, and 3) other practicable methods such as below ground vaults, above ground vaults, and earth mounded concrete bunkers. The criteria will address not only the requirements of 10 CFR 61, but also additional factors that must be considered pursuant to State law. These include the probability and impacts of fires or explosions at the facility, retrieval and recovery of the waste, the adequacy of transportation routes, the probability and impacts of transportation accidents, economic considerations, and environmental impacts.

The contract will also call for the preparation of a draft and final environmental impact statement pertaining to promulgation of the regulations, a Regulatory Impact Statement (RIS), and a Regulatory Flexibility Analysis (RFA). The RIS will describe the need for and benefits of the regulations, the costs to state and local governments and the regulated parties, any paper work created, and the alternatives, including no-action. The Regulatory Flexibility Analysis will describe the effect of the regulations on small businesses.

We expect to award the contract before April 1, 1987, and to begin holding public hearings on the draft regulations in late summer and early fall. The criteria that are adopted as a result of this process will be used to evaluate the site(s) and methodology(ies) to be proposed by the State Siting Commission in 1988.

LLRW Transportation

The Legislature recognized in the Summer of 1986 that in order to have a comprehensive and continuous system to ensure the safe handling and disposal of low level radioactive waste (LLRW) it was necessary to create a program to govern its transportation. Governor Cuomo signed on August 1, 1987, Chapter 508 of the Laws of NYS which law directed and authorized the New York State Department of Environmental Conservation (NYSDEC) to adopt rules and regulations with respect to the institution of a system of permits and manifests associated with the transportation of LLRW.

Specifically the law directed NYSDEC to develop regulations, prepare reports, establish a LLRW transportation manifest system, inspect trucks, and issue permits to the transporters of LLRW into, within, or through New York State. The manifest system was to be consistent with the requirements of the United States Nuclear Regulatory Commission (NRC) and the Agreement that exists between NRC and New York State. The regulations implementing these measures were effective January 1, 1987.

Unfortunately, between the time the Bill was signed on August 1, and January 1, 1987, there was no release of funds or approval received to hire the staff needed. As a result, it was not possible to develop, or do, all those things that were necessary in the most methodical or timely manner. We had to quickly relearn the meaning of flexibility and innovation.

As the January deadline approached the Department was forced to make an Emergency Action Amendment to its existing 6 NYCRR Part 364 "Waste Transporter Permits" modifying them to function as interim regulations until such time that separate and distinct regulations could be promulgated. New LLRW transportation regulations, 6 NYCRR Part 381, are being promulgated to resolve many of the problems encountered in attempting to utilize our hazardous waste transporter regulations.

Many issues remain to be resolved including the establishment of a reasonable exemption policy. Such a policy will provide both a means to assist those generators, such as universities and hospitals, who collect and compile LLRW on their own properties until final shipment, while ensuring that the health and welfare of the population is protected. Another issue to be addressed involves the permitting of vehicles travelling through the state. Once

resources become available, it is expected that significant and rapid progress will be made in implementing the most practical and effective program possible.

CONCLUSION

While the next 12 months are going to be especially hectic for DEC in establishing the regulatory framework for the LLRW disposal facility siting program, we anticipate meeting the legislative mandates. During this period we will be letting several large contracts to assist us in the development of our regulatory program. We are also increasing the DEC radiation control program staff. Hopefully, if the work of our own staff and our consultants is timely and of high quality, NYS will have developed a licensing process for the alternative disposal methodologies to conventional shallow land burial. At the same time, we will have met the mandates in the federal LLRW Policy Act to resolve our LLRW disposal

problem in a manner consistent with federal and state laws, but also sensitive to the needs of the local host community.

It should be pointed out that even with a successful LLRW siting effort as envisioned in our LLRW Management Act, NYS will still have many unresolved LLRW problems. This is due to the fact that the LLRW Act only addresses disposal of NRC defined LLRW. Thus, NARM and DOE wastes are not being considered under this program and await resolution in the future.

REFERENCES

1. Chapter 673 of the Laws of NYS, 1986.
2. State Energy Office, New York State Low-Level Radioactive Waste Management Study, Final Report, April 1984.
3. Ibid, Volume Two, p. V-12.