

ACCESS TO BARNWELL AFTER 1992: CONDITIONS AND CONSEQUENCES

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This paper explores the near future of low-level radioactive waste disposal -- November, 1992 through June 30, 1994 -- in the context of historical developments as well as plans for the distant future when a new generation of regional disposal sites is expected to be in operation.

THE LOW-LEVEL RADIOACTIVE WASTE PLAN AS ENVISIONED BY CONGRESS

When the United States Congress enacted the Low-Level Radioactive Waste Policy Act (LLWPA) in 1980, it envisioned that a new regionalized system of disposal sites would be operating by 1986. This would enable the existing three national facilities to close down or exercise their congressionally granted authority to restrict use of their sites to in-region use only. By 1985, it was clear that the new generation of sites would not be ready by 1986, so Congress extended the deadline to December 31, 1992, allowing other regions access to the existing facilities for seven more years.

As we approach the December 31, 1992 deadline, there are still no new disposal facilities in operation. Time is running out and the compacts/ regions with existing facilities are preparing to exercise the authority granted to them by Congress beginning January 1, 1993. The facility in Beatty, Nevada will close on December 31, 1992. The facility in Hanford, Washington will only accept waste from states within the Northwest Compact and the Rocky Mountain Compact. Although South Carolina has authority from Congress to shut its facility down entirely, access to the facility in Barnwell, South Carolina will be allowed for a limited period with restrictions (we'll say more about this later).

What happened to Congress's great vision? Where is the New Generation of Sites? While great progress has been made in implementing the plan set out by Congress, we are still probably at least five years away from having a new system of regional disposal sites to serve most of the nation, and it will probably be ten years beyond that before the system serves the entire nation.

As shown in Exhibit A, according to current siting schedules, new facilities are scheduled to be open in CA, NB, TX and NC by 1996. Together with the facility which will continue to operate in Hanford, Washington, these sites will serve five regional compacts including 29 states, and representing approximately 46% of the nation's waste¹.

¹"Distribution of NRC Documents to the States Concerning the Low-Level Radioactive Waste Policy Amendments Act of 1985" (Public Law 99-240), Sept. 1, 1992. USNRC, Washington, D.C.

Exhibit B shows the number of facilities which should be open by the year 2006. During this second stage of development, facilities are scheduled in Pennsylvania, New York, Ohio, Connecticut, New Jersey, Vermont, Massachusetts and Maine to serve 10 states. This brings the total number of states served to 45, representing approximately 92% of the nation's waste².

Thus, by 2006, the vast majority of states and the vast majority of waste would be served.

THE NEW GENERATION OF SITES: GETTING THERE

The LLWPA served as a helpful guide for site development activities by providing milestones by which to measure siting progress through 1992. However, because Congress envisioned that the implementation of the regional compact system would be complete by then, they provided little legislative guidance as to how to proceed during the interim period between 1992 and the opening of the Next Generation of Sites.

In the summer of 1991, the Southeast region began plans to cope with a period of three or more years when no disposal facility would be available. In October, 1991 the Southeast Compact Commission publicly requested South Carolina Governor Carroll Campbell, in the interest of public health and safety, to keep the Barnwell site open as a regional facility until the North Carolina facility was up and operating. But feeling strongly that the decision was a South Carolina issue, the Commission made a deliberate decision to stay out of the political process which unfolded during the 1992 legislative session.

Under South Carolina law, the Southeast Compact's regional disposal facility in Barnwell, South Carolina, was scheduled to close on December 31, 1992. Only the South Carolina General Assembly had the power to authorize an extension of the closure date. Development of the Southeast Compact's second regional facility in North Carolina was several years behind schedule and not expected to open until 1996. In late 1991 Governor Carroll A. Campbell, Jr. of South Carolina indicated his support for keeping the facility in Barnwell open. His recommendation to the South Carolina Budget and Control Board for FY 1992-1993 proposed raising millions of dollars in additional revenues for the state by increasing the surcharges on wastes from both inside and outside the region disposed at the facility after 1992.

During the ensuing months, Governor Campbell and Governor James G. Martin of North Carolina worked together to develop a proposal that would allow Barnwell to remain open. They negotiated a plan which would provide for compensation to South Carolina for assuming a greater burden of low-level radioactive waste (LLRW) disposal and incentives for the timely completion of the next regional facility in North Carolina. In February 1992 the Southeast Compact Commission adopted a motion incorporating the proposal of the two governors. However, the final decision to extend operations at Barnwell rested with the state legislature.

²"Distribution of NRC Documents to the States Concerning the Low-Level Radioactive Waste Policy Amendments Act of 1985" (Public Law 99-240), Sept. 1, 1992. USNRC, Washington, D.C.

Success in implementing the Governors' proposal was thus not guaranteed. Many in the General Assembly believed that South Carolina had done more than its fair share by providing a disposal facility for the region and the nation since 1971 and should no longer bear that burden. There was strong sentiment across the state for getting South Carolina out of the LLRW disposal business.

Many South Carolinians believe that North Carolina is dragging its feet in siting the next LLRW disposal facility and they are skeptical that North Carolina will ever open a disposal facility for the region. This skepticism is increased by North Carolina's failure in 1990 to fulfill its part of a regional agreement for the management of hazardous waste. The skeptics maintain that continued access to the Barnwell facility will only serve to ease the pressure on North Carolina and cause them to slow down the development of their facility.

Tempers have always run hot on this issue in the General Assembly and the 1992 session was no exception. Although legislators from Barnwell and its surrounding counties continued to be supportive of the extended operation of the disposal facility, these legislators have limited power in the state. Robert J. Sheheen, the powerful Speaker of the House, and other legislators, especially those representing districts across the border from one of the proposed sites in North Carolina, were adamant in their opposition to keeping the facility open. Several of the bills which emerged during the 1992 legislative session authorizing continued operation of the facility were defeated by narrow margins on the floor of the House.

Finally, on the last day of the legislative session, the General Assembly voted to accept an appropriations bill for fiscal year 1992-1993 which included a provision to allow the Barnwell facility to continue to serve as the disposal facility for the Southeast Compact until January 1, 1996 under specific conditions.

While the legislation deals primarily with the continued operation of Barnwell as the regional disposal facility, it authorizes the facility to remain open to out-of-region waste subject to the approval of the Southeast Compact Commission. The General Assembly also required that any agreements to accept out-of-region waste must provide for a fee of at least \$160 per cubic foot to go to South Carolina. The anticipated revenue flow to South Carolina's treasury from this fee was critical to building support in the General Assembly for continued operation of the facility.

The General Assembly took two actions to ensure that South Carolina would not remain in the waste disposal business indefinitely. First, they limited the importation of out-of-region waste to the eighteen month period January 1, 1993 through June 30, 1994. Under the bill, the General Assembly must specifically authorize the importation of out-of-region waste after July 1, 1994. Second, the General Assembly designated that the funds collected at the Barnwell facility be used specifically for non-recurring expenditures, such as the payment of the debt from rebuilding after Hurricane Hugo, to ensure that the state would not become dependent upon the fees to pay for annual budget expenditures.

South Carolina's General Assembly may have been influenced by North Carolina's failure to act in the hazardous waste arena when it placed additional restrictions on the continued operation of

Barnwell. A provision added to the final version of the legislation calls for the immediate closure of Barnwell to waste generated outside South Carolina if North Carolina issues a permit for either a *hazardous* or *solid waste* facility at a site located within one mile of the border of a neighboring state. Most likely this provision is aimed at a specific solid waste facility being considered directly across the border near Charlotte, North Carolina.

In addition to the hazardous or solid waste facility siting provision, the bill contains a number of other provisions that could trigger the closure of the facility to both regional and out-of-region generators. To ensure that North Carolina proceeds with the development of the next regional facility, the South Carolina General Assembly established two milestones that must be met by North Carolina, those being December 31, 1993 for submitting a license application and March 15, 1995 for approval of the license application. If either of the milestones is not met, the Barnwell site will close one year from the milestone date that was missed.

The General Assembly included a "good neighbor" provision designed to deter North Carolina from selecting the potential site in Richmond County, North Carolina, that is within ten miles of South Carolina. If North Carolina fails to exclude that site by December 31, 1993 or if North Carolina selects a site where it "will pose a threat to human health, the environment, or water resources in contiguous states" the facility will close immediately to waste generated in North Carolina and will close to waste generated outside South Carolina on June 30, 1994.

The final closure provision requires the facility to close to waste generated in North Carolina immediately and from outside South Carolina on July 1, 1994 if the continued use of the facility after December 31, 1992 is declared by the courts to be in violation of, or inconsistent with the compact law.

The bottom line in the South Carolina legislation was that the Barnwell facility would continue to operate as a regional facility for the Southeast Compact until 1996. Out-of-region wastes could continue to be accepted for at least the first eighteen months, as long as the Southeast Compact Commission agreed.

Factors Influencing Import Policy

Thus the Southeast Compact Commission was faced with the difficult decision of whether to allow import into the region, and if so, to whom and under what conditions. The Commission found itself quite unprepared for this task, as it was not at all certain that South Carolina would elect to keep the facility open for out-of-region waste. Because no state or compact has had the power to exclude waste before 1993, there was no model to follow in this decision-making process. No one has ever done this before. After December 31, 1992, the LLWPA allows compacts to exclude out-of-region LLRW from their disposal sites. In fact, the Northwest and Rocky Mountain compacts had publicly announced their decisions to exercise that right. In the years between 1985 and 1992, the LLWPA system of milestones and penalties served as incentives for states and compacts to develop their own LLRW management facilities. After 1992, however, the LLWPA provides little, if any specific guidance to compacts in deciding whom to allow, or not to allow, to import waste into the region. Even the Commission was divided on its interpretation of the authority granted to the Commission by the Act. Individual commissioners ranged from liberal to conservative in their interpretation of the authority granted

the Commission by the Act. Some believed it gave the Commission broad authority to override the Commerce Clause. Others viewed the Commission's authority as limited to basing decisions upon the system of existing milestones specified within the Act.

Complicating matters were two recent Supreme Court decisions related to hazardous and solid waste: *Chemical Waste Management, Inc. v. Hunt*, No. 91-471 and *Fort Gratiot Sanitary Landfill, Inc. v. Michigan Department of Natural Resources*, No. 91-636. These cases complicated the Commission's development of an import policy because of their rulings against the levying of differential fees, which conflicted directly with the differential system of penalties and surcharges authorized by the LLRWPA.

It was clear in the beginning that the Southeast Compact's Import Policy would be guided by several considerations. First, any decision to import waste into the region requires the approval of two-thirds of the Commission, including the affirmative vote of both commissioners from the host state, in this case South Carolina. The South Carolina legislature had also tagged a minimum price of \$160 per cubic foot on out-of-region waste. In addition, Speaker of the House Bob Sheheen, an adamant opponent of the Barnwell facility, had indicated in no uncertain terms that he would mount an additional effort in the 1993 legislative session to close the facility if it should fall short of achieving projected revenues, which were slated at \$80 Million annually.

There were other factors, which strongly influenced the development of the Commission's import policy. One was a strong desire on the part of several commissioners to continue to encourage development of the regional compact system. These commissioners felt this was necessary in order to follow through on the Commission's obligation to getting South Carolina out of the LLRW disposal business, and to ensure that the North Carolina facility would not be the only facility available nationally when it became operational. Other factors guiding the Commission's development of the Import Policy were a desire to be fair and reasonable, and commitment to protect public health and safety, and to support the interests of the Southeast Compact.

PROVISIONS OF THE IMPORT POLICY

Progress in Site Development

On September 28, 1992 the Commission passed a Policy for Import to the Barnwell Facility for the Period January 1, 1993 - June 30, 1992. In deciding which states and compacts to allow to dispose at Barnwell, the Commission continued in the tradition of the sited states. Those states and compacts which had access to Barnwell by December 31, 1992, by virtue of their compliance with the milestones of the LLWPA were determined to be eligible to contract for access to Barnwell during the eighteen month period.

A United States District Court ruling on September 1, 1992 confirmed the authority of the sited states to continually monitor compliance with milestones and deny access to their disposal facilities for non-complying states.³ This decision strengthens the Commission's use of progress

³ *The Rocky Mountain Low-Level Radioactive Waste Board v. U.S. Ecology, the State of Michigan, the State of Nevada*, United States District Court, District of Nevada, September 1, 1992.

in site development as a basis for determining whether to allow continued access to the Regional Facility.

Deciding that it was important to send a clear message about the importance of continued progress, the Commission included an "overt action" provision in its policy. This provision specifies that the Commission "may terminate access to the Regional Facility if it determines that an overt action has been taken by a compact region, designated host state within a compact region, or unaffiliated state which the Commission determines substantially impedes the state or region's progress in fulfilling its responsibilities for providing, either by itself or in cooperation with other states, for the disposal of its low-level radio-active waste."

The Import Policy also requires compacts and unaffiliated states to provide periodic reports on their progress in site development. These reports are to be evaluated by the Import Policy Committee of the Commission, which will make recommendations to the Commission as to whether access should be continued or denied.

Compensation

It was clear from South Carolina's passage of legislation extending Barnwell operations that out-of-region access to Barnwell during the import period wouldn't be cheap. South Carolina's requirement that it receive at least \$160 per cubic foot served to push the price of access way above the going rate of \$40 to \$120 most generators were paying in surcharges.⁴ After considering its own revenue needs, the Southeast Compact Commission determined that another \$60 per cubic foot was required, thus bringing the total access fee rate to \$220 per cubic foot.

The Commission felt that the \$220 access fee rate was reasonable, particularly when compared with Nuclear Regulatory Commission estimates for disposal costs at the next generation of sites⁵, which are expected to range from \$300-\$500. In keeping the access fee rate in line with costs at the new sites, the Commission hopes to provide an incentive to states and compacts for continued development of new sites. It was thought that if prices at Barnwell were maintained below those of the new sites, then states and compacts might avoid developing the costly new sites.

The Commission also believes the \$220 rate to be in keeping with the spirit of the LLWPA. The penalties and surcharges specified in the Act have doubled and tripled periodically between 1986 and 1992. If the existing surcharge of \$40 were to double in 1993 to \$80 as it has historically, then a triple penalty surcharge of \$240 could be extrapolated to apply to states and compacts not in compliance with the LLRWPA. As there are no states or compacts which will have new

⁴ Low-Level Radioactive Waste Policy Amendments Act of 1985, Public Law 99-240 Section 5(d)(1)(c) and (d)(2)(G)(2)(D), January 15, 1986.

⁵James Kennedy, USNRC, in comments presented to SEG User's Conference, Knoxville, Tennessee, September 16-17, 1992.

operating regional disposal facilities by 1993, and thus which will be in compliance with the LLWPA as of 1993, a fee of \$240 could be argued to be reasonable.

The Import Policy also establishes a rather elaborate mechanism for upfront payment of access fees. Recognizing that a steady flow of revenues from the site was essential for satisfying the South Carolina legislative initiative, the Commission designed a mechanism to stabilize cash flow from Barnwell. For several reasons the revenue flow from Barnwell has historically been greatest in the last half of the calendar

year. This is because, generally, there is less waste disposed in the beginning of the calendar year, and there is a time lag associated with invoicing and payment. The access fee collection mechanism adopted by the Commission is designed to alleviate problems with unstable cash flow by generating \$20 million in revenue at the beginning of each calendar quarter. This arrangement requires generators to pay a total access fee, based on the volume of waste they project to dispose at Barnwell over the 18-month period. Payment of the entire access fee is required for the right to access Barnwell at any time during the import period. As a concession to generators, the Commission allowed payment of the fee to be spaced in six quarterly payments.

INDUSTRY RESPONSE TO THE IMPORT POLICY

The aspects of the Import Policy which have caused the most marked industry response have been the access fee rate, the mechanism for its collection, and the provisions relating to continued progress in site development.

The volumes projected by generators to be disposed at Barnwell over the eighteen month period are significantly less than expected. Generators indicate that they will dispose approximately 50% less than what was projected by the site operator prior to the establishment of the \$220 access fee rate. Some generators have indicated that the magnitude of the access fee is sufficient for them to initiate storage, since it will eventually be required when the eighteen month import period ends. Some aspects of the mechanics of the access fee may also be encouraging generators to store, such as the upfront collection. In addition, the fear that their state or compact may be denied access during the eighteen month period due to lack of progress may be causing some generators to plan for storage.

The access fee provisions of the Import Policy may have conflicting affects on the use of waste minimization or volume reduction technologies. On the one hand, the access fee rate may be of sufficient magnitude to make the increased use of available reduction technologies cost effective and feasible. On the other hand, the structure of the fee itself may serve as a disincentive for industry to pursue such technologies. Since generators must commit to paying a total access fee for a projected waste volume specified at the beginning of the eighteen month period, there is little incentive for pursuing waste reduction below the specified volume. However, many generators appear to have low-balled their volume projections, perhaps planning to increase their use of reduction technologies.

THE NEW GENERATION OF REGIONAL SITES

The unexpected period of access to Barnwell after 1992 is a welcome but temporary reprieve to out-of-region generators. It is only for a maximum period of eighteen months. It is not the long-term solution to our national problems, nor is it a pardon to states and compacts lacking their own disposal facilities.

We must not allow our attention to become diverted from the real task at hand, building a long-term solution in the form of a New Generation of Sites for the nation. We have come a long way from the days when only three states took any responsibility for the disposal of low-level radioactive waste. We've come too far to change direction now. It is time to redouble our efforts to support siting efforts in our states and compacts, to enable our politicians to have the courage and leadership to support the national site development process.