Twenty years after enactment of the federal Low-Level Radioactive Waste Policy Act, only 14 states have assured access to LLRW disposal facilities. Have you ever wondered why?

The Politics of **Low-Level Radioactive** Waste Disposal

By Alan Pasternak

hen I presented the Monday luncheon address at the recent 2001 Waste Management Symposium [from which this article is adapted], I remarked that I had been asked, as keynoter, to "energize" the audience. But, I said, I'm from California, and we have no energy to spare.

Not surprisingly, there are many parallels between California's electricity crisis and the lack of safe, assured disposal of LLRW. One such parallel deals with a question that applies to both energy and radioactive waste disposal: Will controversial infrastructure be built in advance of a foreseeable crisis?

In the case of electricity, California failed to develop the necessary infrastructure. Policies put in place 25 years ago left California unprepared for a restructured deregulated electricity market. California does not have enough electric generating capacity to create a competitive market and relies on other states for 25 percent of [have assured access to LLRW disposal

California's leading historian and state librarian, Kevin Starr, recently noted that in the 1970s and 1980s California politics "demonized" nuclear energy.

As a result of its antinuclear politics, California's policy for years has been to rely on other states for both electricity and radioactive waste disposal. In 1976, the California legislature passed, and Gov. Jerry Brown signed into law, a moratorium on the construction of new nuclear power plants within the state. Just a few years later, however, another law was passed that facilitated investment in Arizona's Palo Verde Nuclear Generating Station by California's municipal utilities. The Los Angeles Times supported both the California moratorium and, a few years later, investment in Palo Verde. The Times argued that reliance on the Arizona nuclear project would improve air quality in the Los Angeles basin. What hypocrisy!

LLRW Disposal: The Current Situation

Twenty years after enactment of the federal Low-Level Radioactive Waste Policy Act (LLRWPA), only 14 states its kilowatt-hours (electric energy). facilities. Only the 11 states of the

Northwest and Rocky Mountain Compacts (which use the Richland, Wash., disposal facility operated by US Ecology) and the three states of the Atlantic Compact (which use the Barnwell, S.C., disposal facility) enjoy assured long-term access to LLRW disposal facilities. The other 36 states rely on Barnwell, which is phasing out as a national facility, and the Envirocare of Utah facility, which is licensed to dispose of some Class A LLRW. Envirocare has applied for a license to dispose of Classes B and C waste. Given the reality of the Barnwell phaseout pursuant to South Carolina law, under the best-case circumstance (i.e., Envirocare gets its B and C license), 36 states will be dependent on just one state, Utah, for disposal of LLRW. This is a politically unstable situation worse than that of 1979 when all 50 states depended on only three states-the situation that originally led to passage of the federal LLRWPA.

Science under Siege

Safe disposal of radioactive waste is not unique in experiencing opposition based on fear and politics from groups professing to support environmental protection, animal rights,

and environmental justice goals. Other examples are opposition to nuclear energy, opposition to the use of radioactive materials in all their applications, opposition to safe disposal of high-level nuclear waste and spent reactor fuel, and opposition to medical and agricultural applications of biotechnology. I recall a recent ad in the *New York Times* with a banner lead, "Biotech Equals Hunger."

Opposition Themes

During the effort to establish a safe, reliable LLRW disposal facility in California, the California Radioactive Materials Management Forum (Cal Rad) has observed several themes repeatedly used by opponents.

♦ Separation of waste by institutional pedigree rather than by hazard as required by regulations of the U.S. Nuclear Regulatory Commission. It's a divide-and-conquer approach in which opponents try to play off one group of radioactive materials users against another. Note that the U.S. Department of Energy's data that show as much long-lived radioactive carbon-14 is sent to the Barnwell disposal facility by industries (primarily biotech) as by electric utilities with nuclear power plants.

One of California's leading biotech associations, BIOCOM of San Diego, opposes, on economic grounds, this classification and separation of wastes by source. "Once developed, the California Ward Valley site must be economically practicable to dispose of the LLRW generated by the emerging biotechnology industry. To this end the site must also be licensed to receive LLRW from other sources, such as the utility industry. Without their waste volume to offset the cost of the Ward Valley site, the site will not be economically feasible to construct and operate."

♦ Interim storage forever: The proposal for "assured isolation" is a technical "solution" that is inferior to advanced nearUnder the best-case circumstance (i.e., Envirocare gets its B and C license), 36 states will be dependent on just one, Utah, for disposal of LLRW. This is a politically unstable situation worse than that of 1979 when all 50 states depended on only three states.

surface disposal as provided in NRC regulations. The DOE's inspector general, in a formal audit, criticized the Idaho National Engineering and Environmental Laboratory study of assured isolation because it is really storage and not disposal as required by the LLRWPA. The so-called precautionary principle: Don't do anything unless you are 100 percent certain that it is 100 percent safe. But remember the words of James Watson, 1962 Nobel Prize winner in medicine: "Never put off doing something useful for fear of evil that may never arrive."

✤ Inferior designs: Opponents criticize the design of the Ward Valley facility because, pursuant to NRC requirements, it does not incorporate trench liners. (Opponents never mention the requirement that wastes be containerized.) Interestingly enough, in 1990 the NRC specifically cautioned California regulators against the use of liners because they degrade the safety of disposal units.

Litigation as a Solution

Litigation may resolve the current im-

passe and restore the viability of the LLRWPA. Lawsuits are pending in three compact regions. The Southeast Compact Commission has sued the state of North Carolina for failure to perform its duties as the compact's host state. Similarly, the Central States Compact Commission and utilities are suing the state of Nebraska. In a preliminary opinion, a federal district court judge has already said that there is evidence that Nebraska has acted in bad faith in denying a permit for an LLRW disposal facility. And in California, the state's licensee, US Ecology, is suing the state for failure to pursue acquisition of the federally owned Ward Valley site. US Ecology is seeking recovery of its costs to develop the proposed Ward Valley facility and an order from the court directing the governor and the California Department of Health Services to pursue purchase of federal lands in Ward Valley from the U.S. Bureau of Land Management. Underlying these suits is the legal concept that compacts are contracts and host states cannot simply walk away from their statutory and contractual obligations.

Politics and Ward Valley

California's proposed Ward Valley LLRW disposal facility is supported by a huge administrative record, a joint federal-state Environmental Impact Statement/Report (EIS/EIR), a favorable federal Supplemental Environmental Impact Statement requested by then Interior Secretary Bruce Babbitt, a license issued by the California Department of Health Services, a favorable review conducted by a panel appointed by the National Academy of Sciences (NAS) at the request of Secretary Babbitt, and rulings by California courts upholding decisions to issue the license and certify the EIR. Nevertheless, the Ward Valley project, the only compact disposal project to receive a license since enactment of the LLRWPA, has not been completed. Beginning when it took office in January 1993, the Clinton administration stalled the transfer of federal lands in Ward Valley to the state of California.

There is a strong hint of the influence of campaign contributions in politicizing the Ward Valley issue. Opposition has been led by a group formed in 1991 specifically to oppose Ward Valley and composed of heavy political contributors, among them celebrities in the entertainment industry.

There is convincing documentation that political calculation, not safety concerns, motivated the Clinton White House to block the Southwestern Compact's proposed regional disposal facility, even when Interior was prepared to approve it. In 1997, while Pete Wilson was governor of California, the state and US Ecology sued the Interior Department, requesting the federal courts to direct a sale of the requested lands in the remote, arid Ward Valley. Discovery in this litigation produced some interesting docuSeparation of waste by institutional pedigree rather than by hazard is a divide-and-conquer approach in which opponents try to play off one group of radioactive materials users against another.

the Interior Department, requesting interesting interesting interesting interesting interesting documents in the remote and interesting documents interest

Interior Department officials, relying on the NAS analysis and recommendations, believe that the [Ward Valley] site can be operated and used with complete safety. Interior would like very much to move ahead with transfer and put the Ward Valley conflict behind the administration. That said, they believe that, as a political matter, the administration simply cannot of its own volition agree to hand the site over in exchange for a check and an unpopular governor's promise to do the right thing. [Emphasis added.]

This occurred despite Secretary Babbitt's statement following release of the NAS report: "I've never felt that being an environmentalist means saying 'no' to necessity. The National Academy of Sciences says it's safe, so I'm prepared to go ahead with it."

(As reported in *The San Francisco Chronicle*, May 5, 1995.)

Another interesting document was obtained and made public by Sen. Frank Murkowski (R-Alaska), chairman of the Senate Energy and Natural Resources Committee. In a memo to Secretary Babbitt dated February 21, 1996, Deputy Interior Secretary John Garamendi wrote: "Attached are the Ward Valley clips. We have taken the high ground. Wilson is the venal toady of special interests (radiation business). I do not think Green Peace [sic] will bother you any longer. I will maintain a heavy PR campaign until the issue is firmly won."

Deputy Secretary Garamendi did maintain his heavy PR campaign against Ward Valley and was severely criticized by NRC Chair Shirley Jackson in a letter to Secretary Babbitt dated July 22, 1997. Jackson noted that There is convincing documentation that political calculation, not safety concerns, motivated the Clinton White House to block the Southwestern Compact's proposed regional disposal facility, even when Interior was prepared to approve it.

Garamendi had criticized the definition of LLRW, which is a matter of statute. She also accused him of incorrectly ascribing to the NRC and DOE

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statistics on LLRW that were actually generated by an antinuclear group.

The NRC letter followed by one week a General Accounting Office report that criticized the federal government's handling of the Ward Valley land transfer. ("Radioactive Waste: Interior's Continuing Review of the Proposed Transfer of the Ward Valley Waste Site," RCED-97-184, July 15, 1997.)

Study and Stall

Study and stall is a tactic employed by states as well as the federal government. An example is the work of the California State Advisory Group on Low-Level Waste Disposal convened by Gov. Davis in 1999 to study alternatives for disposal of the state's LLRW consistent with federal law. Over the six-and-a-half-month study, the group took all important issues "off the table"—(a) Ward Valley, (b) California's responsibility to the Southwestern Compact (Arizona, California, North Dakota, South Dakota), (c) all alternative sites to Ward Valley, and, finally, (d) disposal of wastes—in favor of indefinite storage of wastes. Removal of at least two of these items from the study—consideration of California's compact obligations and the Ward Valley site—were clearly the result of political interference in this supposedly independent study.

Ongoing Politicization

Ongoing politicization is evident in a bill introduced in the California legislature this past February. It incorporates the opponents' desire to classify

wastes by institutional pedigree rather than by hazard and to ban disposal according to the current federal and state regulatory framework. The Southwestern Compact Commission is on record as being in opposition.

Will We Ever See Full Implementation of the LLRWPA?

Three recent developments offer hope that the federal LLRWPA and the compact laws may yet be faithfully implemented.

1. Ongoing litigation: The courts may hold reluctant state governments to their statutory and contractual obligations pursuant to the compacts their legislatures have ratified.

2. The new administration: The Bush

administration does not share the antinuclear technology biases of its predecessor. It is therefore more likely to follow science and law and cooperate with state and compact efforts to develop new LLRW disposal capacity.

3. The lesson of California's electricity crisis: The consequences of failure to take responsibility for timely development of new infrastructure may teach a salutary lesson.

Our future with safe, assured disposal of LLRW depends on political will at all levels of government.

Alan Pasternak is technical director of the California Radioactive Materials Management Forum. This article is derived from a luncheon address given at the 2001 Waste Management Symposium, held February 25–March 1 in Tucson, Ariz.

