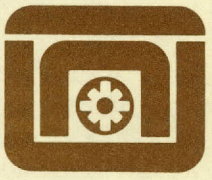


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Low-Level
Radioactive Waste
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PROPOSAL TO AMEND TEXAS RADIOACTIVE WASTE DISPOSAL RULES

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At its November meeting, the Authority's Board of Directors authorized an interagency contract with the University of Texas at Austin, Bureau of Economic Geology to provide a preliminary data base on the geology of three potential sites located on state-owned land in Hudspeth and Culberson counties. These studies will provide area characteristics upon which a site characterization plan may be based when the final site is selected.

Briefly, the scope of work will include the analysis of all existing data relative to the three sites, as well as additional studies to be conducted during the contract period. Aerial photographs will be taken and a photo geologic map prepared. This map will be field checked and used for the evaluation of the stratigraphic, structural, and geomorphic features of each site.

A small-scale drilling program will be completed to assess the uniformity of the subsurface geology. At least one boring at each site will be extended to a depth sufficient to encounter groundwater so that an observation well may be constructed.

Preliminary hydrogeologic studies will be undertaken to assess the probability of groundwater transport.

The final report of these investigations is expected in August 1986. The total cost of this work is estimated at \$330,000.

The Authority is coordinating an effort by Texas low-level radioactive waste generators to petition for amendment of the Texas Regulations for Control of Radiation to allow the disposal of limited concentrations of short-lived radionuclides in sanitary landfills. The petition will be supported by a technical report which will establish concentration limits, total curie limits, physical form, and radiological dose limits for the radionuclides.

The technical report is underway and is scheduled for completion by December 31, 1985. There are approximately 80 radionuclides with half-lives of less than 100 days. The report will address the eight most commonly used of these radionuclides in detail, and the remainder by common characteristics. The report's dose calculations will consider potential exposure pathways, parameters of Type I municipal solid waste sites in Texas, the Texas source term, and the source term a site could tolerate versus the actual source term. The dose calculations will be done using a rational as-low-as-reasonably-achievable (ALARA) approach.

JUST A REMINDER:

The Authority has moved its offices to 7703 North Lamar Boulevard, Suite 300 in Austin, Texas, zip 78752. Our new phone number is 512/451-5292.

BARNWELL TOURS

Over the past several months, the Authority has sponsored two trips to the low-level radioactive waste disposal facility operated by Chem-Nuclear Systems at Barnwell, South Carolina. Several residents of Hudspeth and Culberson counties attended the tours. Each day-long tour involves a security and safety briefing, a visit to Class A, B, and C trenches during waste handling operations at one or more of the trenches, a tour of the environmental monitoring laboratory, and a luncheon with members of the local community.

There has been some confusion regarding the funding of the tours and the role of Chem-Nuclear Systems in Texas. All travel and accommodation expenses incurred during the two tours were paid for by the Authority through a contract with Chem-Nuclear. That firm makes their site available to over 2,000 visitors from around the country and the world each year. This provides an excellent opportunity for interested parties to see first-hand the operation of a disposal facility and to talk to both workers and local townspeople about the facility.

The Authority will continue to conduct additional tours in the future.

ALTERNATIVE DISPOSAL METHODS

The Authority is continuing its investigation of engineered systems for the disposal of low-level radioactive waste. The systems selected for study are aboveground bunkers, earth mounded concrete bunkers, and enhanced below ground modules. Safety considerations include protection of the selected systems from natural phenomena such as tornadoes, earthquakes, fire, and flooding. Also being considered is the relationship between technical requirements and the existing safety and seismic criteria promulgated by the U.S. Nuclear Regulatory Commission. Economic considerations relating to the actual cost of designing, licensing, constructing, and operating each system will also be included.

The Authority has received 11 responses, representing 21 firms, to its request for qualifications and experience statements from firms interested in conducting this study. The staff will meet with the top five or six firms to discuss their work plans. Final selection will take place in late January 1986. The contract is expected to run until August 1986.

TEXAS CONTINGENCY PLAN

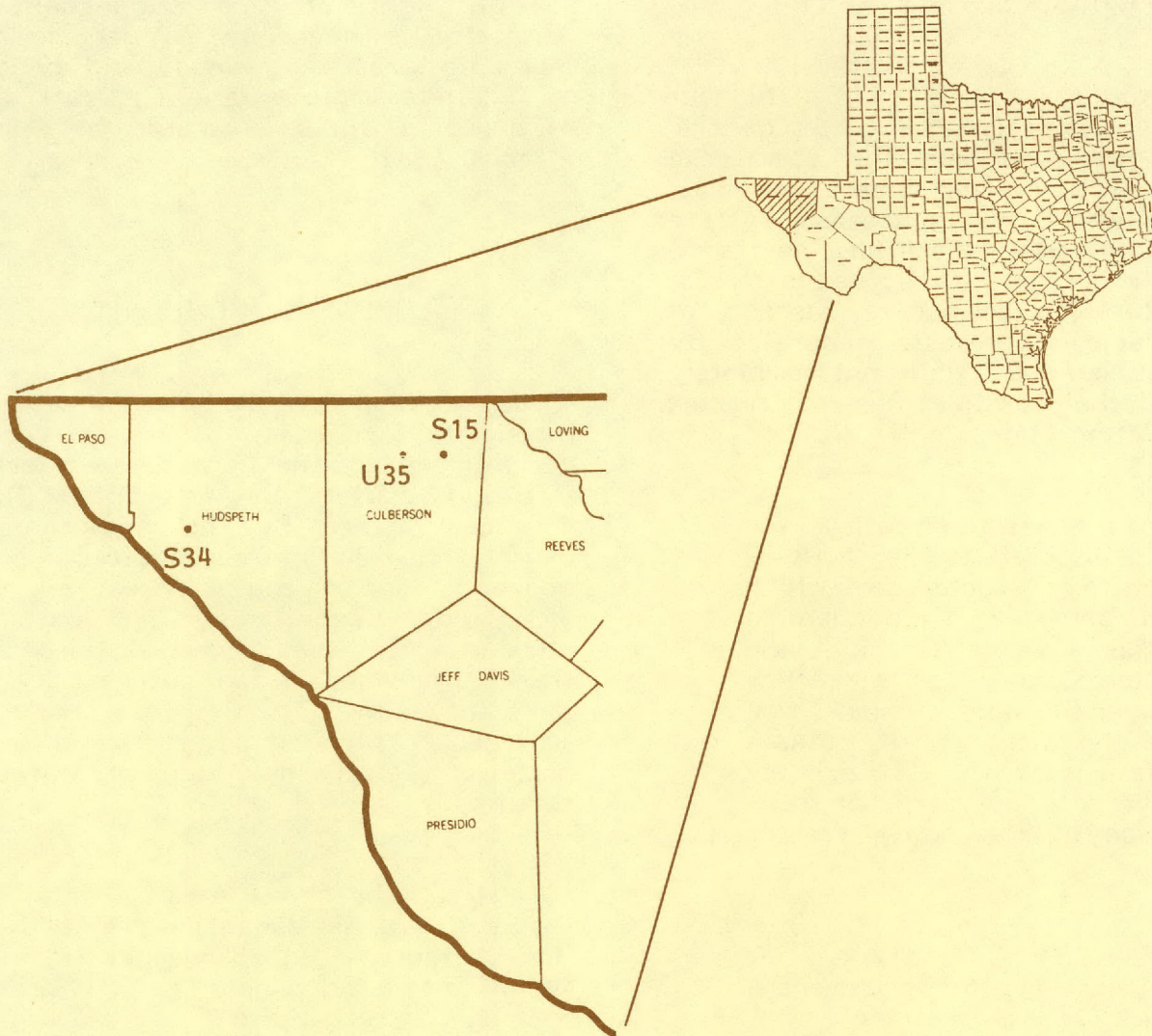
A plan for the management of low-level radioactive waste after December 31, 1985 has been developed by the Authority and the Texas Department of Health, Bureau of Radiation Control. The plan describes methods for storing and reducing the volume of radioactive waste in Texas after December 31, 1985 in the event waste generators in Texas are restricted from disposing of waste at out-of-state disposal facilities.

The plan lists three preferred options for low-level radioactive waste storage if an emergency situation exists as of January 1, 1986: (1) authorize additional storage volumes at commercial waste processing facilities; (2) authorize on-site storage for the low-level waste generators with storage capabilities; and (3) establish a waste storage facility to be operated by the Bureau of Radiation Control.

The plan outlines waste volume reduction methods such as compaction, segregation and decay of short-lived radionuclide waste, utilization of the current de minimis rule, revision of current Texas waste disposal rules, and incineration.

Other options set forth in the plan include development of individual contingency plans by large volume waste generators; negotiation for continued access to out-of-state disposal facilities through the Governor's Office; and restriction of the use of radioactive materials in Texas.

The draft plan has been distributed to major Texas radioactive waste generators for comment.



SITING UPDATE

At its November 14 quarterly meeting, the Authority's Board of Directors designated three sites on state-owned lands as potential low-level radioactive waste disposal sites and instructed the staff to further evaluate them. This designation followed a staff recommendation of the three sites for further consideration.

Two sites, designated as NTP-S15 and NTP-U35, are located in Culberson County. The third site, designated as NTP-S34, is located in Hudspeth County. The legal descriptions of the potential sites are as follows.

Site NTP-S34

TP74T6 Survey
 Sections 2, 3, 10, & 11
 Approx. 10 miles NE of
 Ft. Hancock

Site NTP-S15

Public School Land Survey
 Block 114
 Sections 16 & 21
 Block 110
 N $\frac{1}{2}$ of sections 4 & 5
 Approx. 20 miles WSW of
 Orla

Site NTP-U35

University Lands Survey
 Block 46
 Sections 22, 23, 26, & 27
 Approx. 26 miles SE of
 Pine Springs

NRC ISSUES STATEMENT

On August 1, the U.S. Nuclear Regulatory Commission issued a generic letter (85-14) regarding the commercial storage at power reactor sites of low-level radioactive waste not generated by the utility. In the past, there has been some discussion concerning the possible use of reactor sites for temporary storage of low-level radioactive waste generated by non-reactor sources. While not completely ruling out the possible use of reactor sites, the letter states:

. . . As a matter of policy, the NRC is opposed to any activity at a nuclear reactor site which is not generally supportive of activities authorized by the operating license or construction permit and which may divert the attention of licensee management from its primary task of safe operation or construction of the power reactor
.....

In order for NRC to consider any proposal for commercial storage at a reactor site, including commercial storage in existing low-level waste storage facilities, the NRC must be convinced that no significant environmental impact will result and that the commercial storage activities will be consistent with and not compromise safe operation of the licensee's activities
.....

RANGE/WILDLIFE MANAGEMENT PLAN

It has been suggested by one of the state land management agencies that the Authority's operation of a low-level radioactive waste disposal facility on state-owned land might provide funds to support a rangeland improvement and wildlife management effort that would provide perpetual benefits for all citizens of Texas. The benefits could accrue both fiscally and aesthetically.

In light of this suggestion, the Authority is developing a generic plan, including practices, costs, and benefits, to facilitate implementation. Draft copies of the plan will be available for comment in early 1986.

EMPLOYEE HIGHLIGHTS

Ms. Christine Pollard, staff health physicist for the Authority, recently became one of the few female Certified Health Physicists in the United States. The certification by the American Academy of Health Physics requires a college degree in one of the sciences, six years of practical experience, and passing a strenuous two-part exam. Only about three applicants in ten successfully complete the exam. There are currently over 300 health physicists practicing in the State of Texas, only ten of whom are certified.

Mr. Robert V. Avant, Jr., P.E., Deputy General Manager, resigned from the Authority on November 15, 1985. Mr. Avant left to join a private engineering consultant firm.

AUTHORITY WINS SMALL AGENCY RECOGNITION

On August 29, Commissioner Jim Hightower, Texas Department of Agriculture, presented the Authority with a Certificate of Appreciation for the highest percentage, 83 percent, of personnel participating in "Project Tejas". Project Tejas was a money-raising effort to provide grain and dried milk to drought-stricken Ethiopia. The Agriculture Department coordinated the state-wide effort to provide relief through Save the Children.

State employees contributed \$120,000 of the more than \$600,000 raised in the state.