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Rad Waste Review

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Lawsuit Against Authority Goes to Trial

The trial on the lawsuit filed against the Authority by El Paso County, et al. finally got underway on September 6, 1990. The trial, postponed several times by El Paso County, was conducted in the 34th District Court in El Paso. Judge Bill Moody heard the case.

The lawsuit revolved around two major allegations. The first was that the Authority had not engaged in a fair and impartial site selection process in accordance with requirements of the law. The second allegation was that the Authority had not selected a technically good site. Both of these allegations, and related matters, were addressed in detail during the 14-day trial, which concluded on September 22.

There are several things that must happen now that the trial has been concluded. By the time this newsletter goes to press, Judge Moody will have made a tour of the proposed Fort Hancock site to learn more about the site issues raised at the trial. In addition, attorneys for both sides must submit trial issues to the judge for his review by October 17. These issues will form the basis of the judge's opinion on the case.

Both parties must submit their final briefs and arguments on the case to the judge by no later than November 19. Judge Moody is expected to render his decision by the end of December 1990.

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Three International Environmental Firms Review Authority's Work

Three internationally respected environmental consulting and engineering firms with substantial low-level radioactive waste experience in site selection, facility design, and facility operation have evaluated the Authority's site selection process and the Fort Hancock site. Last fall, prior to the Authority's Board of Directors action proposing the Fort Hancock site, the Board directed Authority staff to obtain an evaluation by independent experts who had not been involved in the Fort Hancock site evaluation. Dames and Moore. an international geotechnical engineering firm with substantial experience in siting many low-level radioactive waste disposal facilities, and Weston, an environmental consulting firm with experience in siting and licensing low-level radioactive waste disposal facilities, were asked to perform the evaluations.

Dames and Moore determined that the Authority used a "rational, phased siting methodology" and, in spite of the allegations raised by El Paso County, "no fatal flaw exists to prevent the Authority from recommending the Fort Hancock site for further evaluation and licensing." Weston determined that "the Fort Hancock site appears to be a licensable site." Both Dames and Moore and Weston noted that the allegations raised by El Paso County will need to be rebutted during the licensing process.

Dames and Moore has recently been hired by the Authority to provide technical support to the Authority in its lawsuit with El Paso, and to assist the Authority in preparing a license application for submittal to the Texas Department of Health's Bureau of Radiation Control.

Independently, Hudspeth County obtained the services of EG&G to follow the Authority's process and evaluate its work. EG&G is also a respected engineering and environmental consulting firm which has sited, designed, licensed, and operated lowlevel radioactive waste disposal facilities. EG&G submitted a report to the Hudspeth County Commissioners Court in early January which stated that "the characterization effort by the TLLRWDA has been thorough, objective, and conservative." They went on to say that differences in the Authority's findings and El Paso's allegations should be resolved by allowing the licensing process to proceed.

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What Is Below Regulatory Concern (BRC) Waste?

Wastes with radiation levels so low that they carry extremely small health risks are called "Below Regulatory Concern" wastes (BRC). The Nuclear Regulatory Commission (NRC) regulates all radioactive wastes and is attempting to reduce regulatory efforts on BRC wastes in order to concentrate on those wastes that have a greater risk to the public and the environment.

In view of this, NRC has published a new policy which outlines which radiation levels are so low that they do not wish to regulate them. This BRC policy is needed to allow the NRC to use their resources to regulate nuclear materials which carry much higher risks to the public. NRC believes that this new policy will fully protect the public health and safety and the environment. They do not expect any negative impact on the public health and safety as a result of the new policy.

What levels of radiation and risk place products and activities in the category considered below regulatory concern? The major reason some products are exempted from regulatory control is because they do not create a measurable risk to the public health and safety and the environment. Therefore, the NRC believes that radiation dose criteria for both individuals and the exposed population should be basic features of its policy.

The main question then is: How low is low enough when it comes to risk and dose? At what point is it clearly unnecessary to further reduce the risk or dose? The NRC believes that the risk from a product or activity which may be exempted from regulation should be no higher than other risks tolerated by people due to normal lifestyle factors. For

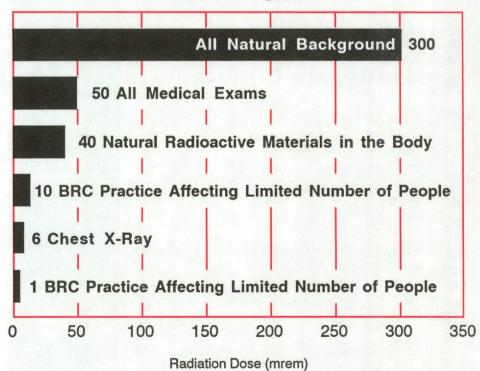
example, people who live in Denver, versus those who live in Washington, D.C., receive about 70 millirem more per year in natural background radiation. People also are not concerned about the 5 millirem dose from a round-trip coast-to-coast air flight, or the dose difference of living in a brick as opposed to a frame house.

The NRC decided that, for purposes of their BRC policy, an individual dose limit of 10 millirem per year would be used. However, until more experience is gained with the potential for individuals to be exposed from multiple sources, the NRC decided that

an interim individual dose limit of 1 millirem per year would be used as the basis for their BRC policy.

NRC believes that implementation of this policy will adequately protect public health and safety and the environment. Also, it will allow the NRC, states, and licensees to devote more of their limited time to nuclear-related matters that are associated with potentially higher public health risks. It will also allow other organizations, in such fields as health care and scientific research, to devote more of their resources to activities that contribute to greater health and safety protection, in addition to better serving the public.

Comparison of below regulatory concern doses to doses from natural background and medical exposures



This chart compares levels of radiation exposure established by the Commission as below regulatory concern (BRC) to levels of radiation exposure in natural background and to medical exposures. All doses shown except the chest x-ray are in average millirem per year per individual. The 6-millirem chest x-ray dose is for one single x-ray for an individual.

States Urged to Adopt Waste Storage Policy

The U.S. Nuclear Regulatory Commission (NRC) has urged all state radiation program directors to notify their licensees that extended storage of radioactive waste will not be allowed. This move was made by the NRC in anticipation that most states will miss the deadlines imposed by the Low-Level Radioactive Waste Policy Act. The next milestone requires states to have a low-level radioactive waste disposal site in operation by January 1, 1993. Texas will not be able to meet the next milestone due to the lengthy litigation process initiated by El Paso County.

The NRC policy statement recommends that storage should not be used as a substitute for disposal and that waste should not be stored any longer than necessary. The policy statement also urges the agreement state directors to adopt a policy of requiring license amendment requests to include final disposal plans.

Under the NRC policy, storage would not be allowed for more than five years. The stated purpose of this policy is to discourage long-term storage after January 1, 1996.

Lawsuit Goes to Trial

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While the judge is preparing his decision, the Authority will proceed with its site selection process. The Authority hopes to have a site selection report available to the public in mid-December. This report is required by the Authority's statute, which states that "The authority shall prepare a report that includes: (1) detailed information regarding all aspects of the disposal site selection process; (2) criteria for disposal site selection as established by the appropriate licensing authority; and (3) summaries of the studies required...". The statute also states that the report will be made available to the public. This report will be sent to every boxholder in Hudspeth County.

Following the release of the site selection process report, the Authority plans to conduct a public hearing in February of 1991 at the Hudspeth County seat in Sierra Blanca. The public hearing is the final step required before the Authority's board can officially select the Fort Hancock site as the disposal site.

Hudspeth County Residents Visit Disposal Sites

The Authority invited several Hudspeth County residents on a tour of the low-level radioactive waste disposal sites operating in Nevada. The tour included a visit to the Beatty, Nevada low-level radioactive waste site, operated by U.S. Ecology, and the U.S. Department of Energy's (DOE) Nevada Test Site. These tours are provided for the county as part of the Authority's public information program.

After the group arrived in Las Vegas, they were taken by chartered bus to the U.S. Ecology waste site. The site is one of only three commercially operating low-level radioactive waste disposal sites in the country. The Beatty site is very similar geologically to the proposed site in Hudspeth County. Beatty currently operates only one large trench for the disposal of about 100,000 to 200,000 cubic feet of waste per year. The actual site is located 12 miles from the town of Beatty, a small community of about 1,000.

The tour continued the second day with a visit to the DOE's Nevada Test Site. At the test site, we visited the low-level radioactive waste disposal site for U.S. Department of Defense waste and we also visited areas where weap-

ons testing was done in the 1950's and 1960's.

Both of the low-level radioactive waste disposal sites visited use standard trenches for waste disposal. Waste is placed in the trenches and covered over with natural soils. Texas waste will be disposed of in a different manner. All wastes received at the Texas site will be encased in concrete canisters and disposed of in specially designed trenches.

We wish to express our appreciation to the citizens of Hudsepth County who participated in the tour.

Definitions

- 1. Below Regulatory Concern Wastes Wastes with radiation levels with such a small health risk that further efforts to regulate the wastes are unwarranted.
- 2. Natural Radiation Radiation received by individuals from the environment every day. The average individual receives approximately 300 millirem annually from natural background radiation. Some examples of natural radiation exposure are:
- a. From the Sky About 30 millirem per year from cosmic radiation.
- b. From the Air We Breathe About 200 millirem per year.
- c. From Food and Drink About 40 millirem per year from natural radioactive materials such as potassium-40.
- d. From Soils and Building Materials About 30 millirem per year from natural radionuclides such as uranium.

Authority's Work

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The Authority's General Manager, Rick Jacobi, stated, "although we expect a long fight, the Fort Hancock site can be licensed. We are heartened that these experts, who know what they are doing and are among the most respected experts in the world, have complimented our efforts and encouraged us to proceed."



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