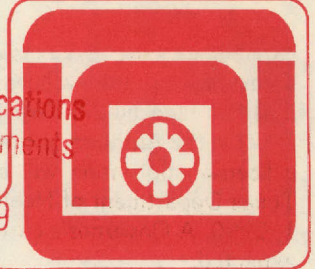


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Rad Waste Review

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Julio Maldonado (l) and Joe Castro (r) record pan evaporation rates at the weather station located 10 miles northeast of Fort Hancock.

saved and backup batteries were added as a safeguard.

The Authority is leasing 1,710 acres of public land from the General Land Office in Austin. They require that the Authority maintain and watch over the land. Julio and Joe are familiar with every part of the site and will be happy to take individuals on tours. Just contact Jackie, Joe, Julio, or Lindsey Alvarez at the Fort Hancock office at (915) 769-3725 and they will gladly give you a tour.

Federal Milestone Deadline Approaching

Federal law requires states that are building low-level radioactive waste disposal facilities to meet a series of milestones. These milestones are deadline dates that help the states gauge their progress in building these facilities. Having met the 1986 and 1988 milestones, the Authority expects to meet the 1990 milestone.

By January 1, 1990, the Authority will apply to the Texas Department of Health for a license to operate a low-level radioactive waste disposal facility. If they don't meet that date, Governor Clements must certify to the U.S. Nuclear Regulatory Commission that Texas will be capable of managing any low-level radioactive waste generated in the state. The certification must describe the actions that Texans will take to ensure that such

Engineering Technicians Make Site Effort Work

Two Authority employees, Julio Maldonado and Joe Castro, make the environmental data collection effort work on a day to day basis. The Authority has over \$50,000 of sophisticated environmental monitoring equipment at the office in Fort Hancock and at the site, located about ten miles north of Fort Hancock. Air samplers, meteorological stations, stream gauges, water quality stations, and radiation detectors all have to be monitored, maintained, and most importantly, the data has to be recorded daily and sent to the scientists for analysis.

Jackie Hillin, the Fort Hancock site supervisor, said, "Julio and Joe are good technicians who understand scientific instruments and data collection, but they also are good 'jacks of all trades' because they have to perform all kinds of maintenance on the equipment including mechanical, electrical, and carpentry work." Because the equipment runs 24

hours a day, seven days a week, the responsibilities of the engineering technicians involve much more than just an 8 to 5 job.

Ruben Alvarado, Chief Engineer for the Authority, said, "If there is a problem with a piece of equipment on a weekend, someone has to get it up and running quickly so we don't lose important data. Often this requires communication between the field, the Austin office, and a researcher. That means that there has to be a commitment up and down the line to make the system work. Julio and Joe are our front line."

Because there is no electricity at the site, all of the equipment is powered by portable generators or solar cells. In February, there were a number of cloudy days which caused the solar charged batteries for the meteorology station to run down. Because Julio and Joe recognized the problem early, valuable data was

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capabilities exist. If Texas decides to file a certification, then a license application must be filed by January 1, 1992.

On the Authority's current schedule, a license application will be sent to the Texas Department of Health by January 1, 1990. A Governor's certification is not expected.

The incentives for meeting the federal milestones are substantial, and the penalties for missing the milestones are severe. If the milestones are missed, the existing low-level waste sites in the states of Washington, South Carolina, and Nevada may deny Texas waste generators access to their disposal sites until Texas meets the required milestone. If Texas meets the milestones, continued access to out-of-state sites is guaranteed.

Authority Hires Deputy General Manager

Mr. Robert V. Avant, Jr. has returned to the Texas Low-Level Radioactive Waste Disposal Authority as Deputy General Manager. He was previously employed by the Authority as Deputy General Manager from 1982 to 1985.

Mr. Avant, who is a graduate of Texas A&M University with bachelor and masters degrees in agricultural engineering, will be responsible for long range planning, licensing coordination, and site construction. He is a Registered Professional Engineer in the state of Texas.

The Authority is glad to have Bob back on board.

Purchasing Bids Requested

Anyone interested in bidding on services or materials for the Authority should contact Ms. Rita Hodde in Austin at (512) 451-5292, or Jackie Hillin in Fort Hancock at (915) 769-3725. Rita maintains a permanent bidder's list for individuals interested in doing business with the Authority. She will forward copies of all bid requests to those individuals who are on the list.

Individuals interested in being placed on the agency's permanent bidder's list must complete a Bid List Sign-Up Form. These forms are available through either Rita or Jackie. We encourage you to drop by our Fort Hancock office and complete a form, or contact Rita or Jackie and a form will be mailed to you.

Hudspeth Officials Hire Technical Experts

Hudspeth County officials recently hired several engineers and scientists to monitor and review work being done by the Authority at the Fort Hancock site. Through a grant by the U.S. Department of Energy, Hudspeth County citizens can now have an independent review of all of the work the Authority is doing.

Through the efforts of Commissioner Larry Karr, experts from the engineering firm of EG&G, Idaho, Inc. will assist the county in its review of all on-site evaluations. EG&G is a contractor for the Department of Energy responsible for

low-level radioactive waste issues throughout the United States.

"The advantages of having a firm like EG&G represent the technical interests of Hudspeth County are many," said Commissioner Karr. "They report directly to the Court, are well qualified and respected in the field of low-level radioactive waste disposal, and do not have a stake in this issue. We feel that they will provide us with an unbiased review of the work the Authority is doing."



Daniel Ortuño, an Assistant Store Supervisor with the University of Texas, measures a core taken at the Fort Hancock site.

Site Evaluation Activities Progressing

Scientists and engineers from the state's major universities are continuing testing and evaluations at the Authority's proposed low-level radioactive waste disposal facility. The tests are being conducted on 1,710 acres of land, located approximately 10 miles northeast of Fort Hancock, in an effort to fully understand and evaluate the environmental conditions in the area.

The \$1.8 million program began last July with the start-up of a weather station. The station is operated by Authority employees Julio Maldonado and Joe Castro. Data collected by them is sent to scientists at Texas A&M University for evaluation. The weather station will continue to operate as long as the Authority is operating in the area. Local weather conditions collected by the station can be obtained daily by calling the Authority's Fort Hancock office.

The familiar white pick-ups and blazers that can be seen criss-crossing the site almost daily belong to the geologists, hydrologists, and soil scientists from the University of Texas at Austin. They have

been evaluating the geology, water, and soil conditions at the site. Over 50 test holes have been drilled, core samples have been taken to a depth of 875 feet, a water well has been drilled, and every water well within ten kilometers of the site has been sampled and studied. We would like to thank all of the well owners for their cooperation in the water well study program.

The University's investigations also include mapping and monitoring the surface water runoff surrounding the site, measuring the rate of soil erosion taking place, measuring and monitoring the moisture content of the soil, and studying the time it takes water to move underground. Their work will continue into 1990.

Biologists and wildlife scientists from Texas Tech University have started a program to identify all of the plants, animals, and insects in the area. They are also identifying and mapping the different soils on site. So far, they have identified four soil series, 80 plant species, nine vegetation types, and are still working

on the animal and insect studies. Their work should be finished by the early summer. Check the Authority's bulletin board on Spur 146 in Fort Hancock for examples of the plants found at the site. Lindsey Alvarez posts new examples weekly.

The University of Texas at El Paso has been busy in their investigation of the archaeological sites in the area. They have conducted several archaeological digs at locations in the area, but have not found anything of any significance. Engineers and scientists from the Departments of Geology and Civil Engineering are studying the potential for earthquakes in the area and how those earthquakes may effect the site design. Their work will be finished later this year.

Tours of the study area are open to anyone interested in the work being done by the Authority and the universities. Those interested in a tour should contact the Fort Hancock office.

Facility Preliminary Design Complete

The Authority has completed its preliminary design of a low-level radioactive waste disposal facility for Texas. Design work started several years ago with a series of meetings with technical experts, federal, state, and county officials, and members of the general public to determine the most appropriate design for a Texas low-level radioactive waste disposal facility. Two engineering firms assisted the Authority in providing the required engineering talent to bring the design concepts into reality. The prime contractor was Rogers and Associates Engineering Corporation of Salt Lake City, Utah and Sargent and Lundy Engineers of Chicago, Illinois. Both firms are well respected in the field of low-level radioactive waste disposal facility design.

The design selected for Texas includes two different types of disposal units to be used at the site. They are Modular Concrete Canisters and Below Ground Vaults.

As low-level radioactive waste arrives at the site for disposal, it will be closely monitored and inspected to determine which method of disposal will be most appropriate. Waste materials that pose little hazard to the workers and the environment will be placed in reinforced

modular concrete canisters and buried in specially designed disposal trenches. These canisters are steel reinforced concrete containers that are approximately seven feet tall and seven feet in diameter. The walls of the canisters are four inches thick.

Waste containers are placed inside of the canisters. After the canisters are filled with the waste containers, they are filled with sand to make sure that there are no open spaces inside of the canister. A concrete lid is then put on the top of the canister and the canister is placed in a burial trench for disposal.

Waste materials that require greater isolation will be placed in below ground steel reinforced concrete vaults. The floor, walls, and top of the vaults will be constructed of steel reinforced concrete, approximately three and a half feet thick. The vaults will be located below grade with approximately 15 feet of soil and clay on top of them.

All low-level radioactive wastes that are disposed of on site will be solid materials. No liquids will be allowed. All materials will be packaged in clean containers that will be encased in either concrete canisters or placed in massive underground concrete vaults.

The next step will be to prepare final design plans and specifications which will be used for licensing and construction. Final design plans and specifications will be prepared after a site is selected.

If you would like more information on the design of the Authority's facility, please call Bob Avant or Ruben Alvarado at (512) 451-5292.



Please inform us!



Texas Low-Level Radioactive Waste Disposal Authority

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