

Grounds

for improvement

BY ALEXEI SMIRNOV

K-25's uranium enrichment site makes the transition from half-life to new life

Highly skilled, security-clearance-wielding scientists like Bill Bostick or Doug Hoffman had nowhere to go in the mid-1990s. The U.S. Department of Energy had cut off their funding as it was shutting down hundreds of facilities across the country due to a sweep of budget cuts across the federal government. Not trained to wait tables, they were equally unprepared for early retirement, so the scientists banded together to form Materials and Chemistry Lab, a private entity of 12 people who can do everything from industrial forensics (figuring out which materials work in which conditions) to environmental consulting. They negotiated a lease of a building and equipment at DoE's old K-25 site—a 1,500-acre bastion of buildings that were used to enrich uranium for the Manhattan Project—and went to work as a private contractor.

K-25 was no Disneyland. Dotted with more than a hundred mostly vacant buildings—some of which were highly contaminated with the remnants of the gaseous diffusion voodoo of the 1940s—the land could not be left unattended. But the cash-strapped department, which was short on research funding, could not justify spending billions of dollars on cleaning up land just to turn it into pasture. As the neighboring communities in Anderson and Roane counties that depended on the federally funded jobs looked for new ways of making money, the DoE itself was searching for the big idea, which it eventually found in “reindustrialization.” A bit of a mouthful, the plan was to spawn new businesses as part of the cleanup effort, lease the available space to them, and eventually clean up the land and turn it over to a local not-for-profit organization that would then look for ways to redevelop it. Coined in 1996 by Jim Hall—the DoE's point man in Oak Ridge at the time—and his aide Robert Brown, the term and the concept were initially met with resistance from the Environmental Protection Agency and the Tennessee Department of Environmental Protection—chiefly because Hall and Brown lacked practical proof that a transfer of government property into private hands could be done on such a scale.

Seven years later, the EPA came to Oak Ridge to present its Phoenix Award to the freshly minted East Tennessee Technology Park's Heritage Center, recognizing the successful cleanup of the first batch of the old K-25 property.

“The progress has been very good,” says Gerald Boyd, who replaced Jim Hall as DoE's top federal official overseeing the Oak Ridge facilities. “For the Department of Energy, which owns a very large complex in some 20 states, this is the largest single reindustrialization effort.”

To date, six buildings and 33 acres of land have been transferred from the government books to the Community Reuse Organization of East Tennessee (CROET), which is charged with divvying up and marketing the K-25 property that passes all safety and environmental tests. The buildings and eight acres of land are now in private hands, which saved DoE some \$11 million in demolition costs and allowed the money to be used for further environmental cleanup at the site. (The department has spent \$2 billion on the cleanup effort at ETTP since 1994—clear evidence



of a much improved budget climate at DoE.) By 2011, the department and its chief cleanup contractor, Bechtel Jacobs, plan to transfer 250 acres to CROET.

The industrial park is now home to a dozen companies, most of which are involved in some aspect of environmental cleanup. Impact Services, for instance, was started at the park to process, package and ship radioactive waste for further disposal for both federal and commercial clients across the country. Initially housed in an old K-25 facility, the company eventually built its own plant to accommodate nuclear waste from commercial nuclear power plants, cleanup sites and nuclear generators. The 15-employee firm has processed one million cubic feet of low-level nuclear waste in the last two years. Another company, Infrared Technologies, makes furnaces that are used in developing new metal, ceramic or plastic products. There's also Pall Corp., made up of former government-issue scientists who have adapted classified technology to make high-end inorganic membranes used in petroleum refining, chemical feedstock manufacturing and plastics production.

Bill Biloski, who has been managing the cleanup project for Bechtel Jacobs since 1996, says the old K-25 site was just visited by the Savannah River Community Reuse organization, which is intent on replicating the reindustrialization effort in their region. There is also interest from Canada and England, where similar efforts are underway.

Meanwhile, for those worried about the radiation emanating from the former gaseous diffusion headquarters, DoE's Boyd offers this reassurance: "We would not allow anyone to come in if we could not assure their safety—that's our primary objective. Once we finish the cleanup it will be a relatively clean site, what we refer to as a brownfield park. It'll be in a completely safe condition for people who are going to be there in the future."

Take it from the guys who know how to handle a radiation detector: There is life after uranium enrichment. **tn**

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