



2011 Annual Review



UCOR
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Oak Ridge LLC

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Message from the President

In just a few months, we have made real progress in achieving the Department of Energy's (DOE's) goal of transforming East Tennessee Technology Park (ETTP) into a private sector industrial park. We continue to make progress on demolishing the K-25 Building's east wing, leading us closer to successfully concluding the largest demolition project on the Oak Ridge Reservation. We are gearing up to begin demolishing the K-27 Building as well as other facilities in the Poplar Creek area. Meanwhile, our Reindustrialization Program continues its process of transferring ETTP property to private interests.

Our work is not limited to ETTP. We are removing a contaminated tank, called Tank W-1A, at the Oak Ridge National Laboratory (ORNL). Fieldwork for that project should be completed by this summer. The tank has been the source of migrating contamination, and its removal will create a safer work environment at ORNL and eliminate a known source of contamination to the environment.

We are also managing DOE's on-site waste disposal complex, called the Environmental Management Waste Management Facility. Now that its expansion is complete, we have a great deal of disposal capacity to handle the debris generated from our cleanup projects, as well as projects being performed by other contractors across the Reservation.

On a personal level, I have to say that I've been extremely impressed with the professionalism and dedication of the work force that came to us from the previous cleanup contractor. Along with the skilled staff we brought to the project, we have created an impressive team suited to handle the challenges this project poses. Cleaning up a Superfund site is not an easy task, but we are confident in the ability of our management staff and work force to bring a dignified close to these facilities as ETTP turns the page to a new chapter in its history.

Above all, we are working and will continue working safely. We want to make sure every employee goes home the way he or she arrived, and we will not put our employees in unsafe circumstances. Safety is our Number One consideration when approaching any task.

I look forward to more years of progress as we watch the continuous changes at ETTP and work with DOE to make Oak Ridge a safe, prosperous area in this beautiful region.



A handwritten signature in black ink that reads "Leo H. Sain". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Leo H. Sain
President and Project Manager

Focus on Safety

UCOR completed 2011 (Aug. 1 to Dec. 31) with no recordable injuries. This record of no recordable or lost workday injuries is consistent with the company's Number One objective: to work safely with zero injuries.



One Million Safe Hours and Counting

UCOR and subcontractor employees reached a milestone of 1 million safe hours worked in November 2011, a significant achievement for an incoming contractor on such a complex project.

"Considering the vast scope of our work and the inherent challenges it entails, working for four months without an injury is a truly noteworthy achievement," said Cheryl Cabbil, ESH&QA Manager. "This achievement was made possible by the dedication and continuous focus of our employees and management team to create a safety-conscious work environment."

UCOR has an unyielding philosophy about working safely. If it can't be done safely, it won't be done. If it needs to be done, we'll find a way to do it safely.

"We work in the field, in our offices, and throughout the site to plan and ensure work is performed safely and compliantly," Cabbil said. "We're insistent on not taking shortcuts, and we adhere to all procedures and guidance that dictate how we do work."

UCOR has launched a new employee newsletter, called "The Safety Advocate," to further focus attention on the need to work safely.

"We are committed to ensuring that people go home at the end of the day in the same condition that they arrived," Cabbil said.

K-25 Demolition



East wing before demolition



East wing during demolition

Demolition of the K-25 Building's east wing steadily progressed in 2011. With the exception of a few units that are contaminated with technetium-99, the east wing demolition is expected to be completed in 2012.

The former uranium enrichment facility was once the world's largest building under one roof, covering more than 44 acres. This demolition project is one of DOE's highest Environmental Management priorities and an integral part of completing cleanup of ETP.

UCOR is making great progress on the demolition while performing work safely and cost-efficiently. UCOR has generated almost \$5 million of cost savings since taking over the project in August 2011.



Tank W-1A Removal

UCOR began excavation at ORNL's Tank W-1A in September 2011 and should complete the project, including all field work, by the summer of 2012. The project completed operational readiness reviews prior to excavation of the contaminated area.

The 4,000-gallon stainless steel tank collected and stored liquid wastes from radiochemical separations and high-radiation analytical facilities at ORNL. It was removed from service and emptied in 1986 when significant levels of soil and groundwater contamination were traced to the area surrounding the tank.

Since late 1994, DOE has been implementing various coordinated actions to minimize the release of contaminants to the environment from Tank W-1A and the pipeline feeding it.

The remediation process includes excavating, packaging, and transporting contaminated soil for disposal, as well as removing, size-reducing, containerizing, and transporting to the Nevada National Security Site (NNSS) the concrete pad and tank supports and tank shell. Additional soil sampling and characterization, completed in 2010, was performed along a Tank W-1A feed pipeline to delineate the extent, type, and concentration of contamination north of the Tank W-1A site. Based on the analytical data from the soil sampling, additional soil along the pipelines will require removal.



Workers practice tank removal in a specially built structure erected over the excavation site

Contaminated soil excavated from the Tank W-1A site is being packaged and shipped to the Nevada National Security Site.



Cleanup Activities



Chromium Water Treatment System

CNF Sludge Shipped

Installation and testing of the Chromium Water Treatment System at the Central Neutralization Facility (CNF) has been completed, eliminating the requirement to treat the chromium-contaminated water at CNF. With only limited water left to treat at CNF, workers began processing the sludge contained in process tanks for off-site disposal. UCOR has shipped 300 barrels of sludge to Clive, Utah, for disposal. UCOR also conducted additional surveys, sampling, and cleanup activities at the TSCA Incinerator, which has been shut down, to eliminate this last source of contaminated water requiring treatment at CNF.

Cleanup Continues at K-1070-B

All non-mercury-contaminated debris in the K-1070-B Burial Ground has been shipped for disposal. The mercury-contaminated debris has been packaged and is awaiting sample analysis results to determine where the material will be shipped.

This site is being cleaned up to eliminate future sources of contamination to surface water and groundwater. A security cap will be placed over the area once all cleanup activities are completed. UCOR will complete the remaining work scope in 2012.

Effort Under Way to Remove Debris

UCOR has taken steps to identify and dispose of hundreds of containers and waste piles at ETPP, the Y-12 National Security Complex, and ORNL.

"Since we have to keep track of this material anyway, it makes more sense to properly dispose of it," said UCOR Operations and Surveillance & Maintenance Manager Bob Smith. "Either way, there are costs involved, but we think it is better to pay the cost of disposal up front, rather than pay for surveillance and maintenance on a continuing basis."



Poplar Creek Facilities Being Transitioned to "Cold and Dark" Status

UCOR is providing support under subcontract to the Oak Ridge Institute for Science and Education (ORISE) for characterization of ETPP's Poplar Creek facilities. This support involves preparing the facilities for intrusive sampling by ensuring that they are "cold and dark." Making a facility cold and dark means removing all hazardous energy sources. Utilities are isolated, mains are cut, and a thorough investigation is conducted to account for every conduit or pipe going into or out of the facility.

UCOR developed a new ETPP site-wide procedure to establish a formal process for ensuring that facilities are cold and dark prior to intrusive sampling and other field work. This process is based on the successful work controls implemented by URS and CH2M HILL at numerous sites, including Rocky Flats, Hanford, and Savannah River Site. Six facilities have been certified cold and dark.

Waste Disposition

Much of the waste generated from demolition and cleanup activities, such as the K-25 Building demolition project, is disposed in one of two on-site facilities: the Environmental Management Waste Management Facility (EMWMF) and the Oak Ridge Reservation Landfills.

Waste that doesn't meet the criteria to be disposed at these facilities, such as the contaminated soil being excavated at Tank W-1A, is shipped off-site for disposal.

From Aug. 1, 2011, when UCOR took over the cleanup contract, until Dec. 31, 2011, UCOR shipped approximately 47,000 tons of waste for disposal, with workers driving almost 230,000 safe miles.

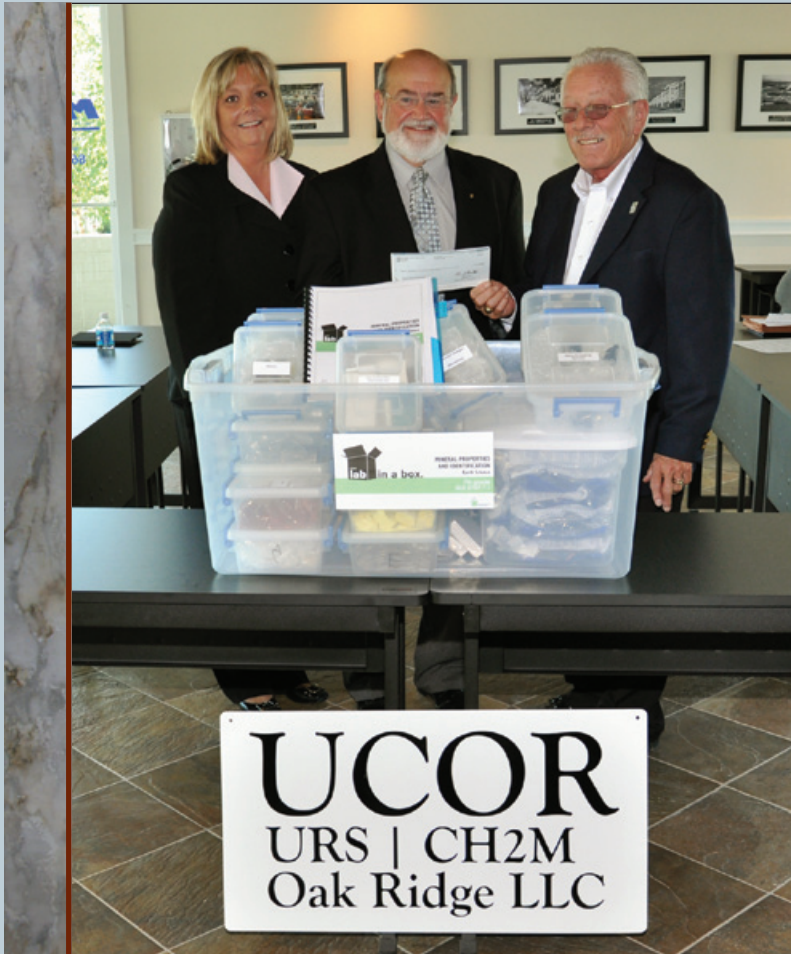
UCOR Waste Shipments

Aug. 1 - Dec. 31, 2011

Shipments to EMWMF:	3,654
Tons of waste disposed:	29,811
Shipments to ORR Landfills:	93
Tons of waste disposed:	716
Shipments to other on-site facilities:	848
Tons of waste disposed:	15,860
Shipments to Nevada National Security Site:	64
Tons of waste disposed:	464
Shipments to EnergySolutions, Utah:	12
Tons of waste disposed:	121



Helping the Community



UCOR provides support to various community organizations, including Roane State Community College, which received \$7,500 for its "Lab in a Box" program.

Corporate Donations

Since Aug. 1, 2011, UCOR has funneled more than \$187,000 into the local community through donations to educational, civic, and philanthropic organizations.

"UCOR is committed to being a strong supporter of the community," said Veronica O'Hearn, Community Relations. "Our work force extends into several counties, and we work hard to provide assistance to the agencies supporting those counties."

UCOR Angel Tree

Christmas for 225 local children was much brighter thanks to UCOR employees who provided gifts as part of the Angel Tree Program. UCOR also sponsored the program with a \$2,500 donation.



Employees loading Angel Tree gifts for delivery



United Way Campaign

UCOR raised almost \$110,000 for the United Way, surpassing its \$100,000 goal.

A variety of employee-sponsored events, such as bake sales and an on-line auction, helped push the amount over the top. Pictured left are volunteers cooking hot dogs for the campaign's kickoff luncheon.

Preparing ETTP for the Future

DOE's goal for ETTP is to convert the site into a private sector industrial park. UCOR's cleanup operations are helping advance that goal.

UCOR also supports DOE's Reindustrialization Program, which has been working to transfer and lease property at ETTP to private interests.

One of those major leases took place in August 2011. UCOR assisted DOE in transferring 282 acres in the ETTP Powerhouse area to the Community Reuse Organization of East Tennessee (CROET), which is planning to sublease the property to a local biofuel business.

UCOR has also been working with CROET and AT&T to bring commercial telecommunications service to ETTP for the private businesses at the site.



How Reindustrialization Works

As UCOR demolishes various structures across the ETTP site, a parallel effort is under way to transfer and lease buildings that have been deemed as potentially usable by the private sector. Two speculative buildings have also been built at ETTP to bring industry to the site, and parcels of land are being transferred for industrial development.

UCOR Signs Reindustrialization Partnering Agreement

Officials from the DOE Oak Ridge Office, UCOR, and the CROET signed a new partnering agreement on Nov. 3, 2011, that establishes goals to enhance reindustrialization and development efforts at ETTP. These efforts will continue ETTP's transition from a Cold War uranium enrichment site into a private sector industrial and business park.

The agreement establishes goals for the partnership and presents a collaborative framework to promote commercial opportunities through development and asset revitalization. It also helps DOE's Reindustrialization Program further utilize existing infrastructure at ETTP, generating revenue for the regional economy. To aid this process, UCOR and CROET will review progress and conduct organizational adjustments to increase time and resources dedicated to the initiative.

The signed agreement advocates measurable performance criteria to gauge success based on the number of leased and transferred DOE buildings, creation of non-federal jobs, private sector investments, and reduced demolition costs through innovative reuse strategies.



CROET President Lawrence Young, DOE Acting Manager John Eschenberg, and Leo Sain

Working Efficiently

UCOR has implemented numerous innovative approaches that have helped identify approximately \$32 million in savings. These savings began at contract transition as UCOR applied the Earned Value Management System (EVMS) to transition completion, bringing in experts from other successful EVMS-certified projects. EVMS is a project management system for measuring project performance and progress by combining measurements of scope, schedule, and cost in a single integrated system.

As UCOR began performing work, several areas were identified where the company could increase efficiency, improve performance, and save money. These areas include the following:

- **Characterization consolidation:** consolidated characterization efforts under one over-arching organization, which reduced staffing requirements; consolidated subcontracts; reduced redundant resources
- **Surveillance and Maintenance:** streamlined work control processes and the electrical safety program by using a URS process that was successfully demonstrated at Hanford River Corridor; relied more on UCOR personnel to perform work rather than purchasing services from UT-Battelle at ORNL
- **Waste Management, Transportation, and Disposition:** began a process of shipping waste from the point of generation to eliminate the need for double handling and storage; improved methods of shipping (e.g., shipping K-25 converters on cradles rather than packaging them in containers, which is more time-consuming and expensive); renegotiated and rebid contracts with treatment disposal facilities to establish more cost-effective options
- **Business Management:** combined the supervisory role of Computer Maintenance and the Help Desk, reducing systems and maintenance support requirements; consolidated functional oversight requirements of the Office of Administrative Services, allowing for a reduction in upper level management



Disposing of waste at the point of generation reduces handling and storage costs

About Our Company

UCOR became DOE's cleanup contractor for the Oak Ridge Reservation on Aug. 1, 2011. We are a partnership between URS, a worldwide leader in environmental work, and CH2M HILL, the United States' largest environmental company. Along with our team subcontractor, RSI, one of Oak Ridge's most successful woman-owned businesses, we are committed to the long-term success of cleanup operations at the Department of Energy's Oak Ridge Reservation.



CH2MHILL



Restoration Services, Inc.