

Heritage Center Cleanup, Closure, and Revitalization — 17426

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ABSTRACT

For the past 20 years, Heritage Center, located at the East Tennessee Technology Park (ETTP), has been undergoing reindustrialization (RI) at the same time that legacy contamination from the Manhattan Project has been cleaned up. The DOE Oak Ridge Office of Environmental Management (OREM), cleanup contractor URS | CH2M Oak Ridge LLC (UCOR), and the Community Reuse Organization of East Tennessee (CROET) have developed a roadmap to achieve the desired end state for the site. The plan builds on ETTP cleanup, which will complete remediation to regulatory requirements, followed by closure activities that have identified all of the activities necessary to fully transition the site from closure to Heritage Center Revitalization. The ultimate goal is to eliminate or minimize DOE's long-term financial responsibility by transferring ownership of all of the property within the former ETTP site.

DOE OREM is in the unique position of nearing the completion of cleanup scope at ETTP, planned for fiscal year (FY) 2020, and finalizing closure of the site (minimizing DOE's long-term liability and responsibility). In tandem, CROET is revitalizing and transforming the site into a unique end state, including a private industrial park and a National Historical Park with conservation activities integrated around and through the site. The closure and revitalization planning efforts were initiated during FY 2016 and will be finalized in FY 2017.

The Closure Plan identifies all of the potential gaps between environmental cleanup of the site per the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the ultimate preferred end state. CROET, involved throughout the development of the closure strategy, is building upon the Closure Plan by completing the Revitalization Plan. The Revitalization Plan takes advantage of the Heritage Center's diverse amenities and uniqueness while maximizing its economic development potential, including a private-sector industrial park, conservation area, National Historical Park, and proposed regional airport.

INTRODUCTION

The cleanup, closure, and revitalization of the 890.3-hectare (2,200-acre) Heritage Center at ETTP is a common goal shared by DOE OREM, CROET, the City of Oak Ridge, Anderson and Roane counties, the regulators, and many other area stakeholders. Heritage Center has been known through the years by many names, including the Oak Ridge Gaseous Diffusion Plant, the Oak Ridge K-25 Site, the East

Tennessee Technology Park, and now and into the future, the Heritage Center. The rich history of the Heritage Center dates back to World War II's Manhattan Project. With completion of the cleanup work at ETTP on the horizon, the need for a comprehensive evaluation of the end state and a road map to reach that end state spawned formal closure and revitalization planning efforts (Fig. 1).

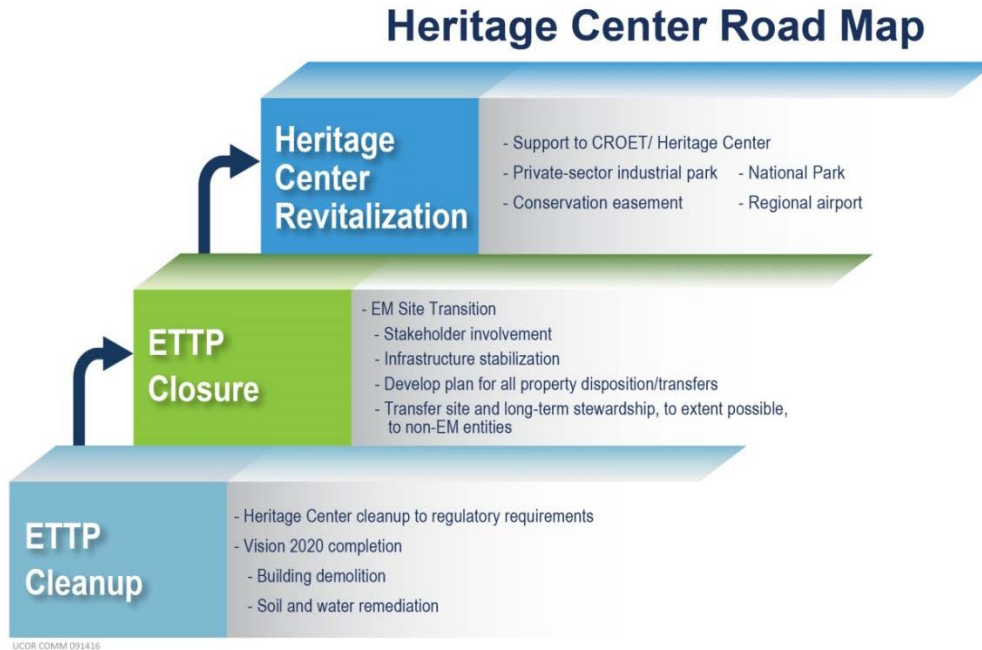


Fig. 1. Cleanup, closure, and revitalization of the Heritage Center.

DESCRIPTION

Cleanup

DOE began the cleanup of Heritage Center in the late 1980s and has been guided by the publicly supported Records of Decision (RODs) issued in 2002 [1] and 2005 [2] under CERCLA. A final sitewide ROD is under development and will identify the final cleanup and environmental monitoring activities that are required for the site.

Much has been accomplished at ETTP, including being the first site in the world to complete demolition of all five onsite gaseous diffusion buildings; however, much work remains. ETTP has a legacy of radiological and chemically contaminated buildings, soil, sediment, and groundwater that require remedial actions to reduce risk to human health and the environment. Cleanup activities include the demolition of contaminated facilities and structures, including five gaseous diffusion buildings; remediation of contaminated soils; disposal of associated waste; and treatment of contaminated groundwater.

In August 2016, DOE realized its *Vision 2016*: demolition of all five gaseous diffusion buildings at ETTP. This milestone marked the first time anywhere that an entire uranium enrichment complex had been demolished. The landmark cleanup

included deactivation and demolition of 418,063.7 m² (4.5 million ft²) of radiological and chemically contaminated facilities, and disposal of more than 55,000 truckloads of debris.

Closure

As the cleanup continues, certain “closure activities” must take place to allow the site to be safely reused. During FY 2016, UCOR, working closely with OREM and CROET, initiated the planning effort associated with closing the site and meeting its intended end state. The Closure Plan is intended to be a strategic roadmap for completing the remaining cleanup and closure activities at ETTP and identifies a number of critical decisions and resulting activities to be completed. Closure activities will facilitate the transition of the site to a privately owned and operated industrial park. The goal of closure activities is to minimize future long-term DOE stewardship responsibilities and costs associated with the Heritage Center site (Fig. 2). The Closure Plan identifies all of the potential gaps between the Cleanup Plan and Revitalization, the ultimate preferred end state.

Significant progress has been made in the deactivation and demolition (D&D) of buildings, remediation of environmental media, and transfer of real property to the community for reuse. At the same time, DOE is working through its contractors to maximize reuse of ETTP by getting the site into a transferable position, which will minimize its long-term stewardship responsibilities and free up workforce and resources to continue cleanup work at other Oak Ridge Reservation (ORR) sites, such as Y-12 National Security Site and Oak Ridge National Laboratory.

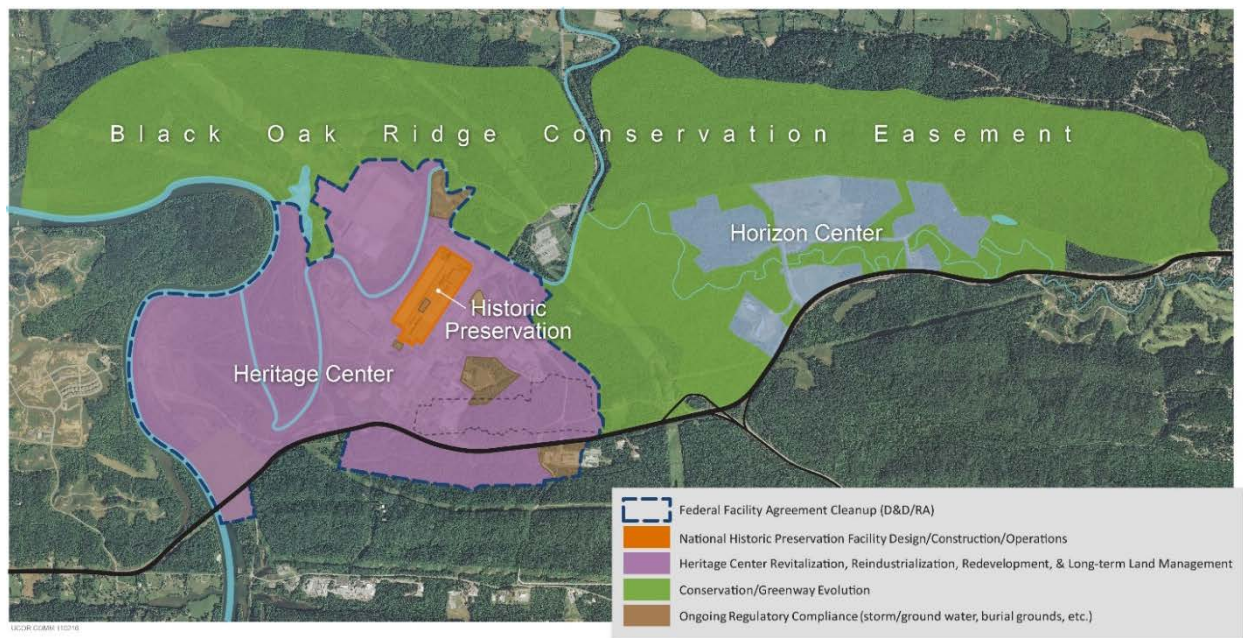


Fig. 2. Heritage Center, Horizon Center and conservation easement map.

Revitalization

DOE began a Reindustrialization Program in 1996 in an effort to reduce DOE costs and also to enhance the economy of the area. The program originally started as leasing of facilities; but in 2001, DOE moved from leasing to deed transfer of buildings, as well as land parcels. CROET has been the primary recipient of land transfers. The City of Oak Ridge has been the recipient of utility infrastructure, the water plant, and the fire station.

At the proposed end state, all property and infrastructure at the ETPP Heritage Center will have achieved CERCLA No Further Action and DOE Order requirements. Any impediments to reuse will have been eliminated, resulting in the transfer of all available property to a non-DOE entity that divests OREM of any maintenance or other responsibilities to the maximum extent possible.

During the summer of 2016, as closure activities were being identified, and in close communication with CROET as the “park manager,” the need for a new Revitalization Plan was determined—building on the end state identified in the Closure Plan. The Revitalization Plan will use the Heritage Center’s diverse amenities and uniqueness while maximizing its economic development potential, including a private sector industrial park, conservation area, National Historical Park, and proposed regional airport (Fig. 3).

To date, 291 hectares (720 acres)—of which 93 hectares (230 acres) are in the Heritage Center and 198 hectares (490 acres) are in the adjacent greenfield site, Horizon Center—as well as 11 buildings and 17.8 kilometers (11 miles) of railroad have been transferred. Additionally, over 1,000 acres of Heritage Center are in various stages of the regulatory approval process for additional transfers. CROET is nearing completion of the draft Revitalization Plan that further integrates the multiuse industrial park and provides a blueprint for the Heritage Center beyond the cleanup.



Fig. 3. Reindustrialization accomplishments.

CONCLUSION

In December 2016, Oak Ridge celebrated the 20th anniversary of the site’s reindustrialization and the founding of CROET. More than 20 private companies have chosen Heritage Center as their home, providing over 200 jobs onsite unrelated to OREM’s mission. Through partnerships and collaboration with key stakeholders, Heritage Center will continue to be transformed into a private-sector

industrial park, promoting economic growth while protecting the natural ecosystem and its historic legacy (Fig. 4).



Fig. 4. Conceptual rendering of Heritage Center transformation.

REFERENCES

1. *Record of Decision for Interim Remedial Actions for Selected Contaminated Areas Within Zone 1, East Tennessee Technology Park, Oak Ridge, Tennessee, DOE/OR/01-1997&D2, Bechtel Jacobs Company LLC, Oak Ridge, TN (2002).*
2. *Record of Decision for Soil, Buried Waste, and Subsurface Structure Actions in Zone 2, East Tennessee Technology Park, Oak Ridge, Tennessee, DOE/OR/01-2161&D2, Bechtel Jacobs Company LLC, Oak Ridge, TN (2005).*