

Revitalizing Contaminated Property to Support a Local Urban Garden and “Work to Earn” Program

The KDHE Brownfields Program and its contractor GSI Engineering, LLC (GSI) along with assistance from the Kansas State University (KSU) Technical Assistance to Brownfields (TAB) program developed a cleanup plan for revitalizing a contaminated property in northeast Kansas City, Kansas, into an urban garden for the Oak Grove Neighborhood Association. The 5th Street and Haskell Ave Urban Garden Brownfields site occupies approximately one acre of previously developed residential property on the northeast corner of the intersection of Haskell Avenue and North 5th Street in Kansas City. The site was a lead-contaminated property with overgrown brush and surface fills, demolition voids, and foundation remnants associated with historical use.

Previous investigations conducted by the Environmental Protection Agency (EPA) in 2010 and 2011 identified lead contamination in the surface and near surface soils at varying concentrations ranging from less than 400 milligrams per kilogram (mg/kg) to approximately 2,000 mg/kg. The purpose and primary objective of the Brownfields Cleanup was to remove the most concentrated areas of lead-impacted soil combined with surface neutralization to bring lead concentrations in soil below the KDHE RSK residential soil Tier 2 Level of 400 mg/kg. Following cleanup, the Oak Grove Neighborhood Association planned to use this property as an urban garden utilizing numerous raised beds.



Youths participating in the Work to Earn program planting vegetables in raised garden beds. The Brownfields Program has helped restore this property to productive use, providing work opportunities and fresh food to neighborhood children.

KDHE conducted field activities from June 20 through June 25, 2012. Five areas consisting of approximately 2,700 square feet (ft²) and 132 tons consisting of contaminated soil was hauled off-site for disposal at a permitted landfill. Clean, organic

soil was brought in to fill excavated areas. Residual lead impacts in areas within and surrounding the excavation areas were blended with organic topsoil blends to neutralize elevated lead concentrations left in place. This approach was implemented based on consultation with the KSU, TAB Program. Surface blending areas comprised approximately 7,500 ft² throughout the site. Approximately three to four inches of topsoil were blended at the surface in most areas. KDHE conducted confirmation sampling of the excavated and blended areas, and results showed less than 400 mg/kg of lead in soil.

In addition to the above mentioned soil removal and surface blending activities, materials to construct some raised garden beds were delivered to the Site on June 25, 2012. The Oak Grove Neighborhood Association sponsors an area youth gardening “Work to Earn” program. As a result of this Brownfields Cleanup, the children participating in this program were able to construct their own raised garden beds, plant their own crops, and will continue to maintain a portion of the urban garden for their own use throughout the summer. This project demonstrates another approach taken by KDHE’s Brownfields Program to reuse, revitalize and redevelop underutilized property across the state.



The site before, during, and after excavation.

