# Kansas Department of Health and Environment

## Bureau of Environmental Remediation, Remedial Section

## Voluntary Cleanup and Property Redevelopment Program

### *Landie Aluminum Smelter/Rose Lile Property Site*

**Background:**
The Landie Aluminum Smelter/Rose Lile Property site is located three miles east of Greely, Anderson County. The operation of a secondary aluminum smelter between 1997 and 2002 resulted in piles of waste aluminum dross and two areas of metals contamination in soil above Risk-based Standards for Kansas (RSK).

*Blending excavated material with agricultural lime stabilized the contamination and reduced disposal costs.*

KDHE investigated the site in 2002 in response to a citizen complaint. Mr. Landie agreed in 2007 to dispose of 100 cubic yards of smelter waste under the oversight of the Bureau of Waste Management (BWM), but some contaminated soil remained. The site entered the Voluntary Cleanup and Property Redevelopment Program (VCPRP) in 2008. Subsequent efforts to address site conditions stalled due to the applicant's financial limitations.

**Solution:**
BWM and BER have developed an innovative approach to addressing a limited number of qualifying sites with past waste issues and documented financial limitations. The use of Supplemental Environmental Projects (SEPs) can be used when a third-party respondent is found to be in violation of Kansas waste statutes and regulations The third party may opt to conduct a SEP by providing funding to clean up environmental contamination at another site, in lieu of paying a penalty to KDHE. The Landie/Lile property cleanup was the first project in the VCPRP to use SEP funding.

Cleanup activities began in December 2012. A KDHE-approved contractor used an X-ray Florescence (XRF) to delineate the area of metals contaminated soil. In the north excavation area, the contractor mixed soil and agricultural lime to raise the pH, chemically stabilize the lead contamination, and prevent the lead from leaching. The material was disposed of as special waste at a BWM approved landfill.

The contractor continued to excavate until XRF and laboratory analytical results confirmed all the soil contaminated above RSK had been removed. The contractor then backfilled the excavations with clean topsoil, graded the soil to match local conditions, and planted grass seed.

This project demonstrated that SEP funding can be successfully applied to cleaning up contaminated sites that lack other viable funding sources. This innovative approach provided KDHE funding to clean up environmental contamination of the site in a time-efficient manner, thus reducing risk to public health and the environment.

**Benefits:**

- **Successful use of a SEP funding source.**
- **133 tons of stabilized and excavated material disposed of in an approved landfill.**
- **The site was restored to a natural condition.**
- **The site has received a No Further Action Determination.**

*Backfilling and grading restored the site's natural condition..*

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