

# Kansas Department of Health and Environment

## Bureau of Environmental Remediation, Remedial Section

### Voluntary Cleanup and Property Redevelopment Program



## Krause Corporation



*Looking northwest toward the waste pile. Note established vegetative cover and fencing enclosing the waste pile.*

### **Background:**

In early 1989 KDHE conducted a Screening Site Investigation (SSI) that identified a waste pile located on City of Hutchinson property adjacent to the Krause facility at 305 South Monroe, Hutchinson, Kansas. The waste pile was in use from approximately 1945 to 1980 and contained foundry waste and waste paint from the manufacturing of farm equipment and industrial waste receptacles conducted at the Krause facility. After 1980 use of the waste pile was discontinued in compliance with new hazardous waste management regulations. The SSI identified chromium and lead in soil above KDHE Residential Risk-Based Standards for Kansas (RSKs). At the request of KDHE, Krause initiated semi-annual ground and surface water sampling at the site in 1991. Since 1994, no contamination has been identified in ground or surface water above RSKs.

Krause made application to the Voluntary Cleanup and Property Redevelopment Program (VCPRP) and was accepted in February 2002.

### **Investigation:**

In order to fully characterize the waste pile, Krause conducted investigation activities. In August 2002 Krause's consultant advanced eight borings into the subsurface to characterize the nature and extent of metals and chlorinated hydrocarbons contamination in soil and ground water. Arsenic, chromium, and lead were detected in soil samples from five locations at levels above RSKs; also, chlorinated solvents were detected in

soil above RSKs in one location. Analysis of ground water samples did not identify chlorinated solvents or dissolved metals above RSKs.

### **Solution:**

Cleanup actions were necessary to prevent exposure to metals and chlorinated solvents identified during the investigation. Krause prepared a Voluntary Cleanup Plan that called for capping contaminated soil, fencing off the waste pile with warning signs placed at entry points, and implementing Environmental Use Controls (EUCs) along with routine ground water monitoring. The cap consisted of at least 1-foot of topsoil and vegetated cover. The EUC restricted the property to non-residential use and stipulates KDHE be notified prior to undertaking any changes to the property. The terms of the EUC Agreement require future inspections to monitor cap integrity.

In June 2004 the City of Hutchinson donated the land on which the waste pile was located to Krause; subsequently, the KDHE-approved Voluntary Cleanup Plan was implemented in the spring of 2005. In July 2008 all requirements of the VCPRP had been met and KDHE issued a "No Further Action" determination to Krause.

### **Benefits:**

- **1.8 acres of contaminated land capped to prevent exposure to metals and chlorinated solvents.**



*Routine ground water sampling conducted at the Krause property.*