



Mark Parkinson, Governor
John W. Mitchell, Acting Secretary

DEPARTMENT OF HEALTH
AND ENVIRONMENT

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FINAL AGENCY DECISION STATEMENT

DER SCANNED
JAN 13 2011

TITLE: Final Agency Decision Statement

DATE: December 15, 2010

PROJECT NAME: Roberts Complaint Site, C3-019-71818

LOCATION: 108 W. 25th Street, Pittsburg, Crawford County, Kansas
SE ¼ of Section 18, Township 30 South, Range 25 East
(See Figure 1)

**MEDIA
IMPACTED:** Soil impacted with lead and foundry waste (See Figure 2)

**LAND USE/
SETTING:** Commercial, mixed residential/commercial setting,
bounded on the south and west by residential properties.

SITE BACKGROUND:

The Site is located in a vacant lot owned by Creative Car Audio, a retail automobile stereo dealer located on the adjacent property to the east. In November 2002, KDHE received a citizen's petition by Mr. Roberts alleging past disposal of wastes from the McNally Foundry on property near his own residential property located at 105 W. 25th Street. The McNally Foundry began operation in the early 1900's as a boiler-making plant and operated in Pittsburg until the 1980's. The waste is alleged to have been placed on the lot in the 1950's and 1960's. Prior to foundry operations, a lead and zinc smelter was present in the late 1800's. The Granby Mining and Smelting lead and zinc smelter can be seen in Sanborn fire insurance maps for Pittsburg between 1885 and 1897.

Affidavits from three former employees of McNally Foundry document that McNally Foundry transported and dumped waste from the Pittsburg facility to the Site. The McNally Foundry began operations in the 1900's and eventually became the McNally Manufacturing Corporation, specializing in fabrication of coal mining equipment. Review of property ownership records as well as historic Polk City Directories for this area of Pittsburg does not indicate the lot being historically owned or operated by McNally Foundry. All property ownership transactions

reviewed for the lot were between individuals, with no apparent corporate ownership prior to Creative Car Audio from Kenneth Hagman in 1996. McNally Foundry has operated under a variety of corporate names and is now reportedly a division of Metso Minerals Industries, Inc. Metso Minerals Industries, Inc. entered into a letter agreement with KDHE to characterize the soil impact at the Site on August 31, 2007.

The following environmental investigations have been conducted at the Site:

- a. On December 12, 2002, KDHE conducted a Preliminary Site Evaluation at the Site. Foundry wastes, including cinders, casting sand, and fire brick fragments, were observed at the Site at a typical depth of less than one foot below ground surface (bgs). Topsoil was removed and soil samples were collected in the waste layer at five locations. The samples were field screened for arsenic, chromium, and zinc using both X-ray Fluorescence (XRF) with EPA Method 6200. Samples were sent to the KDHE laboratory for analysis using EPA Method 6010. Lead was detected above the Risk-Based Standards for Kansas (RSK) screening value of 400 mg/L for residential scenarios in one sample at 475.76 mg/kg (laboratory analysis). The highest Toxicity Characteristic Leaching Procedure (TCLP) result for lead using EPA Method 1311/6010 was 0.80 mg/L, below the threshold of 5 mg/L. Lead was detected below the residential RSK value in the Robarts' residential yard, south of the Site, at 112.55 mg/kg (laboratory analysis). Chromium was also detected at the Site ranging from 32.63 to 593.35 mg/kg (laboratory analysis) with all but one sample above the residential RSK value of 33.6 mg/kg. Findings are recorded in the Preliminary Site Evaluation Report dated August 2003.
- b. On September 21-25, 2005, KDHE conducted a Supplemental Sampling Assessment at the Site. XRF analysis was supplemented with laboratory analysis using EPA Methods 6200 and 6010, respectively. Lead was detected in four of 26 surficial soil samples above the residential RSK value, ranging from 620 mg/kg to 1900 mg/kg (laboratory analysis). Chromium was detected above the residential RSK value in six of seven samples ranging from 26 mg/kg to 93 mg/kg. Subsurface results between two to five feet bgs were below the residential RSK value for lead (laboratory analysis) but above the residential RSK value for chromium, ranging from 42 mg/kg to 120 mg/kg. Foundry and smelter waste were observed as deep as five feet bgs while conducting ten exploratory borings at total depths between four to ten feet bgs to find the vertical extent of foundry waste. Findings are recorded in the Supplemental Sampling Assessment Report dated April 2006.
- c. On June 2, 2008, August Mack Environmental, Inc., conducted a Site Investigation on behalf of Metso Minerals Industries, Inc., for the purpose of delineating the lateral extent of lead-contaminated soil and exposed foundry waste. Three surficial samples were collected and analyzed using EPA Method 6010, confirming the area of lead-contaminated soil in the eastern portion of the Site. Chromium was not analyzed since concentrations were below the residential RSK value in effect at that time in all but one of the samples previously collected. A legal survey was conducted for the boundaries of the area of observed foundry waste, occupying an area of

approximately 150 feet by 220 feet. Findings are recorded in the Site Investigation Report dated July 2008.

REMEDIAL ALTERNATIVES:

August Mack Environmental, Inc., on behalf of Metso Minerals Industries, Inc., submitted a letter dated March 16, 2010, evaluating the following remedial options:

- a. Remedial Alternative 1 (Off-site Disposal) - Excavation and off-site disposal of foundry waste and lead-impacted soil at a permitted disposal facility – Estimated Cost \$245,000.
- b. Remedial Alternative 2 (Beneficial Re-Use) - Excavation of foundry waste and lead impacted soil with off-site disposal of the lead-impacted soil and beneficial re-use of the foundry waste - Estimated Cost \$155,000.
- c. Remedial Option 3 (Soil Cap) - Excavation and off-site disposal of lead-impacted soil with a soil cap over the foundry waste – Estimated Cost \$56,000 plus Environmental Use Control (EUC) Fees.
- d. Remedial Option 4 (No Action) – Foundry waste and lead impacted soil will remain in place – Estimated Cost \$0.

PREFERRED REMEDIAL ALTERNATIVE & RECOMMENDATION:

Remedial Alternative 1 is the preferred alternative. This remedial option will include the excavation of foundry waste and lead-impacted soil at the Site. The excavated material will be transported to a permitted disposal facility. The cost estimate is based on a combined total of 3,700 tons of foundry sand and lead-impacted soil to be removed. Following the removal of the foundry sand and lead-impacted soil, the excavation area will be backfilled with clean fill that matches the permeability of the existing soil column to prevent creation of an infiltration conduit into the subsurface and, conversely, to prevent pooling and compaction that might impede vegetative growth. A layer of topsoil will be spread over the site to a depth of approximately six inches and seeded with native grasses to KDHE protocols. As the lead-impacted soil and exposed foundry waste will be removed and disposed off-site, this alternative is considered to be protective of human health and the environment.

The following additional activities will be conducted:

- Best Management Practices that control erosion and sediment discharges and reduce the potential for contamination of storm water runoff associated with construction activities will be implemented as applicable. Erosion and surface water run-off controls will be installed around excavation areas to minimize the potential of transport of soils and sediment during construction and to capture and contain any storm water that comes into contact with excavated soils that exceed RSK values. Dust control measures will be used to minimize dust generation during excavation and construction.
- BER Policy# RS-047 *Consideration and Selection of Borrow Sites* will be followed for selecting clean backfill.

COMMUNITY INVOLVEMENT:

KDHE encouraged public input and comment on the preferred remedy presented in the Draft Agency Decision Statement. Public notice of the availability of the Draft Agency Decision Statement was published in the *Pittsburg Morning Sun* on August 4, 2010. If requested, KDHE was prepared to hold a public availability meeting during the public comment period (August 4 to September 3, 2010) to present information regarding the preferred remedy and solicit public participation.

Written comments were required to be postmarked by September 3, 2010, and mailed to the name and address specified below:

Kansas Department of Health and Environment
Bureau of Environmental Remediation
CONTACT: Pamela Green, Project Manager
1000 SW Jackson St., Suite 410
Topeka, Kansas 66612-1367


Comments on the Draft Agency Decision Statement could also be submitted to KDHE by electronic mail at pgreen@kdheks.gov. Comments sent by electronic mail were to be received by KDHE by 5:00 p.m. on September 3, 2010.

All comments that were received by KDHE prior to the end of the public comment period are addressed by KDHE in the Response to Comments Summary Section of this Final Agency Decision Statement.

RESPONSE TO COMMENTS SUMMARY:

One written comment letter was received by KDHE during the public comment period. Comments pertained to minor language and grammatical changes that have been addressed in the Final Agency Decision Statement.

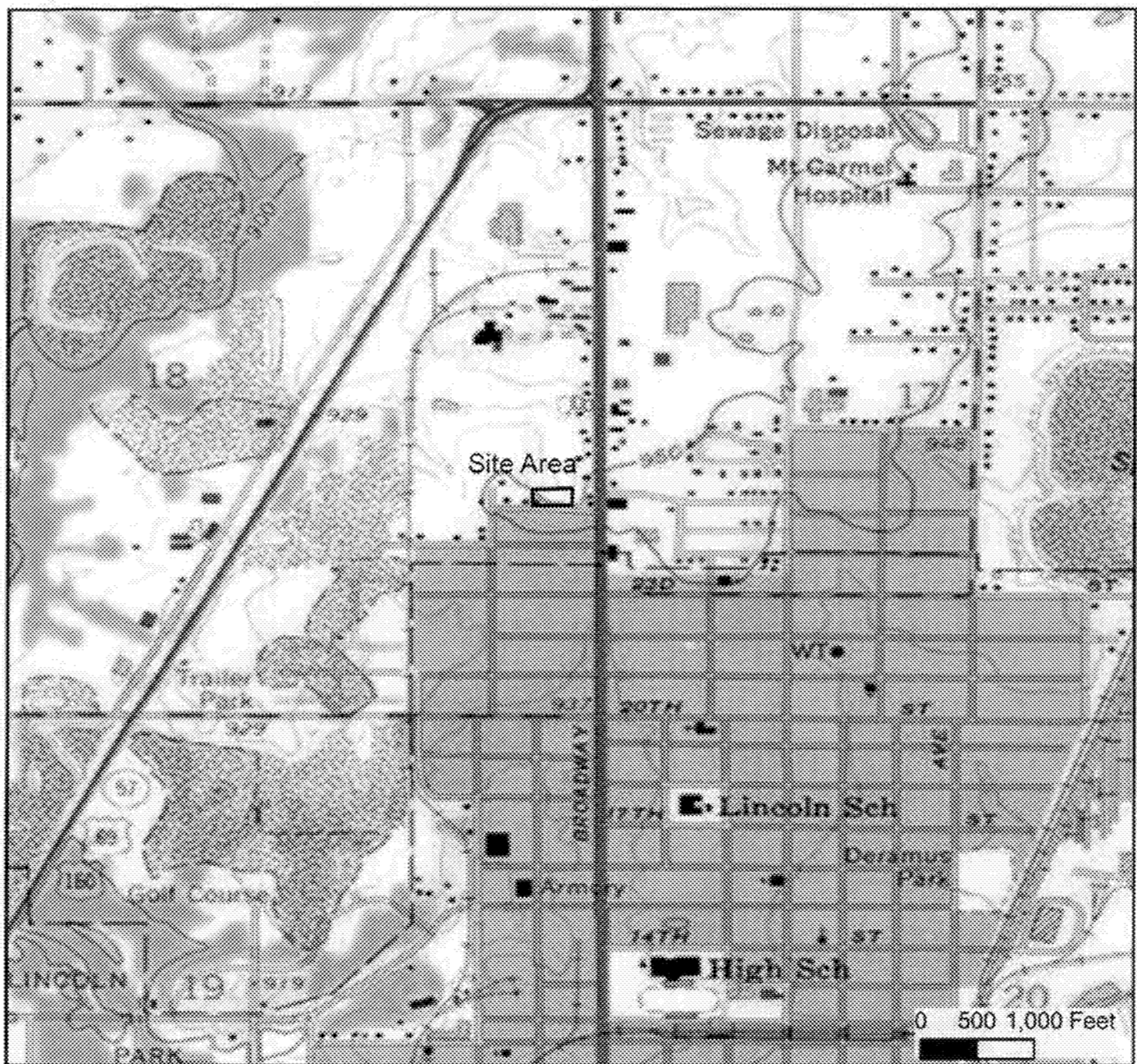
Revisions to the Agency Decision Statement include the new RSK screening values from the RSK Manual 5th version, which was issued October 2010. The RSK screening value for chromium in residential scenarios, originally 390 mg/kg, was changed to 33.6 mg/kg. In the 2002 and 2005 investigations, chromium had been detected ranging from 26.0 to 593.35 mg/kg (laboratory analysis) with all but two locations above the residential RSK value of 33.6 mg/kg. Two additional samples were collected by KDHE on December 1, 2010, one at the location of the highest chromium detection on the Site and the other at the north easement of the Robart's residential yard. Hexavalent chromium was not detected in either sample. KDHE believes that the preferred remedial alternative is effective and no changes are necessary for the following reasons: 1) the highest chromium concentrations are co-located with lead; 2) no hexavalent chromium was detected; and 3) in areas where chromium was above the residential RSK value but not co-located with lead, the risks to the receptors are within the CERCLA protective levels of 10⁻⁴ and 10⁻⁶.



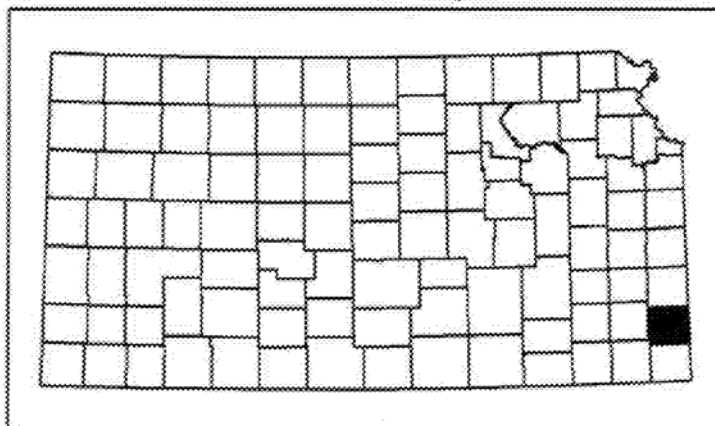
Gary Blackburn
KDHE-BER Bureau Director

1/12/11

Date



Crawford County



Attachment 1

Site Location Map
 Roberts Complaint Site
 Pittsburg, Kansas
 May 2010



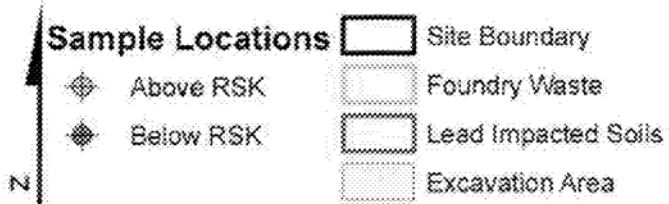


Figure 2
 Soil-Impacted Areas
 Roberts Complaint Site
 Pittsburg, KS
 April 2010