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# **DRAFT – Phase I Environmental Site Assessment Report – Kuhlman Diecasting Site**

**Stanley, Kansas**



**Prepared for:**

**United States Environmental Protection Agency**

Contract Number EP-W-07-096, Task Order Number 0011

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**November 28, 2011**

**Submitted By:**



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## EXECUTIVE SUMMARY

Environment International Government Ltd. (EIGov) was tasked by the U.S. Environmental Protection Agency (EPA) Region 7 under Contract Number (No.) EP-W-07-096, Task Order No. 0011, to conduct a Phase I Environmental Site Assessment (ESA) of the Kuhlman Diecasting site (site) located at 16400 Mission Road in Stanley, Johnson County, Kansas. The property is currently owned by the Kuhlman Diecasting Company; however, it is not currently used for any beneficial purpose. The Johnson County Government applied for a Brownfields grant from EPA Region 7 for assessment of the site. EIGov and team subcontractor, Seagull Environmental Technologies Inc., conducted this Phase I ESA in accordance with the Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, American Society for Testing and Materials (ASTM) designation E 1527-05, and otherwise in compliance with EPA's "All Appropriate Inquiries" Rule ("AAI Rule"; 40 Code of Federal Regulations [CFR] Part 312). The purpose of the Phase I ESA is to identify recognized environmental conditions (RECs) in association with the site and to identify the nature of contamination and the risks posed by the contamination, if present.

The Kuhlman Diecasting site is a defunct electroplating facility that covers 35.15 acres and is bounded to the west and south by the Blue River. The site address is 16400 Mission Road, which is near 164th Street and Mission Road in Stanley, Kansas. On the site is a single-story, concrete block building that is 73,730 square feet (ft<sup>2</sup>) in size. In addition, the site contains two process water storage basins; two wastewater evaporation sanitary lagoons; three capped lagoons (surface impoundments); and a pond. See **Figure 2 in Appendix A** for more details on the layout of the site. The site is surrounded by a levee. The dike was constructed to provide flood control. Additionally, a railroad line bisects the site in a north-south direction.

The following significant findings were identified from records review, interviews, or site reconnaissance:

- Review of historical documents shows the subject property has been operated as a bulk oil storage facility. That former business could be a potential source of contamination. The likelihood of release and migration of hazardous materials or wastes from oil storage facilities pose a REC to the subject property.
- The subject property has a well-documented history of environmental investigation and cleanups associated with its past operation as an electroplating facility. The Kuhlman Diecasting Company conducted electroplating at the subject property from the early 1960s to 1990. Operations at the site ceased in 1990 when the facility declared bankruptcy. Numerous environmental investigations have been conducted at the site and have identified elevated levels of site-related contaminants, metals in particular. An EPA-funded removal action was completed at the site in 1991 and 1992 and addressed contaminated liquid wastes abandoned at the site. Follow-up investigations have identified elevated concentrations of metals in soil, surface water, sediment, and groundwater at the site. Historical site operations as an

electroplating facility which resulted in releases of hazardous substances to environmental media at the site pose a REC to the subject property.

- Records review and interviews conducted during the Phase I ESA determined that three Resource Conservation and Recovery Act (RCRA) post-closure units remain at the site. The three units are former surface impoundments that historically received waste from electroplating operations on the Site. The units are currently capped. Kansas Department of Health and Environment (KDHE) maintains post-closure authority over those units, while EPA Region 7 maintains regulatory authority over the entire site. The presence of the three RCRA post-closure units poses a REC to the subject property.
- During site reconnaissance activities, asbestos and lead-based paint (LBP) were determined likely to be present at the site. Building materials thought to contain asbestos and LBP were identified inside the building. The presence of ACM and LBP is of environmental concern. The scope of the Phase I ESA also included asbestos and LBP surveys of any on-site structures. The asbestos and LBP inspections were completed separately by the project team and are summarized in a separate report.

Based on the identification of those RECs, the project team provides the following recommendations:

- The project team recommends a Phase II ESA of the subject property. The Phase II ESA should include the collection of surface and subsurface soil, groundwater, surface water, and sediment. Samples should be analyzed for contaminants commonly associated with bulk oil storage facilities and electroplating facilities. Phase II sampling should be conducted to confirm historical investigation findings and address data gaps. Additionally, Phase II sampling should be conducted in consultation with EPA Region 7 and KDHE. After discussing the site with EPA and KDHE, specific areas of concern that should be addressed during Phase II sampling are listed below.
  - Past investigations have had limited involvement on the east portion of the site (east of the railroad track). Historical records indicate that bulk oil storage tanks were located in that area. Future sampling should include the collection of soil and groundwater from this area to determine if historical site activities have resulted in a release of hazardous substances.
  - Groundwater samples should be collected from permanent monitoring wells currently located at the site to characterize groundwater quality. Additionally, specific emphasis should be placed on the monitoring wells downgradient of and surrounding the three RCRA post-closure units (surface impoundments).
  - Both surface and subsurface soil samples should be collected from select locations across the site to determine current contaminant concentrations, metals in particular. Past sampling results indicate that elevated concentrations of metals (chromium, copper, nickel, and zinc) have been detected in surface soil near the two wastewater

evaporation sanitary lagoons in the southern portion of the site. Additionally, surface soils to the south and west of the building have been determined to contain elevated concentrations of site-related metals. Sampling should be conducted to delineate the lateral and vertical extent of contamination.

- Surface water and sediment samples should be collected from the two process water basins in the northern portion of the site, two wastewater evaporation sanitary lagoons in the southern portion of the site and from several locations on the Blue River.

## 1.0 INTRODUCTION

Environment International Government Ltd. (ElGov) was tasked by the U.S. Environmental Protection Agency (EPA) Region 7 under Contract No. EP-W-07-096, Task Order No. 0011, to conduct a Phase I Environmental Site Assessment of the Kuhlman Diecasting site located at 16400 Mission Road in Stanley, Johnson County, Kansas. The property is currently owned by the Kuhlman Diecasting Company; however, it is not currently used for any beneficial purpose. The identified property will hereafter be designated as the “subject property” or “site”. The Johnson County Government applied for a Brownfields grant from EPA Region 7 for assessment of the site. Specifically, Johnson County is interested in acquiring the property to demolish the site building which has been identified by the county as a “dangerous building”. The Phase I ESA was requested based on the known environmental history of the site.

ElGov and team subcontractor Seagull Environmental Technologies Inc. (Seagull) conducted this Phase I ESA of the property in accordance with the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM designation E 1527-05, and otherwise in compliance with EPA’s “All Appropriate Inquiries” Rule (40 CFR Part 312). For the purpose of this Phase I ESA, the *users* are defined as the EPA and the Johnson County Government (Section 3.2.93, ASTM 2005). EPA tasked ElGov to conduct a Phase I ESA on the site to identify recognized environmental conditions associated with the property and identify the nature of contamination and the risks posed by the contamination, if present.

### 1.1 Purpose

The goal of this Phase I ESA is to identify RECs at the site. RECs are the presence or likely presence of any hazardous substances or petroleum products on a site under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the site or into the ground, groundwater, or surface water of the site. The term includes hazardous substances or petroleum products, even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies (Section 1.1.1 E 1527-05, ASTM 2005). Historical Recognized Environmental Conditions (HRECs) are environmental conditions that in the past would have been considered RECs, but that may or may not be considered RECs currently (Section 3.2.39 E 1527-05, ASTM 2005).

This Phase I ESA is intended to satisfy one of the requirements for the innocent landowner defense, the contiguous property exemption, and the bona fide prospective purchaser exemption to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability: that is, the practices that constitute “all appropriate inquiry into the previous ownership and uses of the site consistent with good customary practice,” as defined in 42 U.S. Code Section 9601 (35)(B).

## **1.2 Scope of Work**

EPA developed a Statement of Work for Phase I ESA activities to be performed at the site. The scope of work (SOW), based on ASTM designation E 1527-05, was to identify RECs at the site. Phase I Environmental Site Assessments (referred to as a Phase I ESA in this report) typically are conducted in a four-phase process, including: (1) records review; (2) site reconnaissance; (3) interviews with current and previous owners and occupants of the site, adjacent property owners and occupants, and local government agencies; and (4) preparation of a report. Section 10.0 of this report lists sources referenced during this investigation.

Any items listed in the ASTM standard that the report does not specifically identify as present can be assumed not present within the site or within such distance to the site as to be of potential concern to the site. Any item mentioned but not specifically identified as a REC can be assumed to not be a REC.

## **1.3 Significant Assumptions**

The following are beyond the scope of this evaluation: sampling and analysis for radon, and lead in water, soil, and groundwater; evaluations of air quality, regulatory compliance, industrial hygiene, and noise impacts; identification of wetlands; and identification of geological or geotechnical hazards.

## **1.4 Deviations**

No deviations were noted from ASTM E 1527-05 or the EPA SOW for this Phase I ESA. Section 7.1 in this report provides a data gap analysis for this Phase I ESA.

## **1.5 Limitations and Exceptions**

This report was based partially on information supplied to the project team from outside sources and on other information available in the public domain. The conclusions and opinions reported herein are based on information obtained in compiling the report. The project team makes no warranty as to the accuracy of statements made by others which may be contained in the report, nor are any other warranties or guarantees, expressed or implied, included or intended by the report except that it has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professional consultants or firms performing the same or similar services. Because the facts forming the basis for the report are subject to professional interpretation, differing conclusions could be reached. The project team does not assume responsibility for the discovery and elimination of hazards that could possibly cause accidents, injuries, or damage. Compliance with submitted recommendations or suggestions does not assure elimination of hazards or the fulfillment of the client's obligations under local, state, or federal laws or any modifications or changes to such laws. None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of findings of fact from records examined.

## **1.6 Special Terms and Conditions**

There were no special terms or conditions for the Phase I ESA.



### **1.7 Statement of User Reliance**

The project team is not required to verify independently the information provided to it by the user or gathered throughout the course of this Phase I ESA. For this Phase I ESA, the project team may rely on information provided unless actual knowledge is possessed that certain information is incorrect based on information obtained during the Phase I ESA or otherwise actually known by the person preparing this report.

## 2.0 SITE DESCRIPTION

This section provides a brief description of the site and the physical setting based on information obtained from EPA Region 7, Johnson County Government, and a records review conducted prior to the site reconnaissance. Observations made during the site reconnaissance regarding current land use of the site and adjoining facilities are described in Section 5.

### 2.1 Site Location

This site is a defunct electroplating facility that covers approximately 35.15 acres and is bounded to the west and south by the Blue River. The site address is 16400 Mission Road, which is near 164<sup>th</sup> Street and Mission Road in Stanley, Kansas. The site is accessed off Mission Road by a gravel road that connects to West 163<sup>rd</sup> Street. The site is included on the Stilwell, Kansas, U.S. Geological Survey (USGS) 7.5-minute topographic series map (USGS 1991; see **Appendix A, Figure 1**). The site is located in Section 16, Township 14 South, Range 25 West. The coordinates for the approximate center of the site are 38.830741 degrees north latitude and 94.633464 degrees west longitude.

**Appendix B** contains property information that includes a brief legal description for the site. The parcel identification number for the subject property is 046-165-16-0-40-01-006.00-0 (Johnson County 2011).

#### 2.1.1 Physical Setting

The site is located in a mixed rural residential and agricultural area. The site is surrounded by a levee. A railroad line bisects the site in a north-south direction (**Appendix A, Figure 2**).

##### 2.1.1.1 Physiographic Conditions

Based on a recent topographic map, the site is approximately 893 feet above mean sea level (amsl). The site is relatively flat, as it is located within a meander of the Blue River.

##### 2.1.1.2 Geology, Hydrogeology, and Hydrology

The site is located in eastern Johnson County in northeastern Kansas. Johnson County lies partly in the Osage Cuestas, a portion of the Osage Plains physiographic province. Most of Johnson County consists of gently rolling uplands with a greater relief along streams (Ecology and Environment, Inc. [E & E] 1995).

Sedimentary rocks in northeast Kansas range in type from Late Pennsylvania to Late Cambrian age. In the vicinity of the site, they have an aggregate thickness of approximately 1,700 feet. Structurally, the site lies within the Forest City basin. Shale and carbonate are the predominant lithologies of Paleozoic rocks in the Forest City basin, although sandstone composes the bulk of Late Cambrian and Early Ordovician-age formations. Middle Ordovician through Mississippian-age formations are typically thick-bedded limestone and dolomite interbedded with thick shale. The overlying Middle Pennsylvania-age rocks are predominantly shale and channel sands with minor amounts of carbonate. The Upper Pennsylvania-age rocks that underlie the site are cyclothermic shale and limestone formations varying in thickness from several inches to several tens of feet.

Eastern Johnson County is underlain by the Upper Pennsylvanian-age Kansas City group. Within the Kansas City group, thick limestone and thin shale of the Bronson subgroup underlie the thick shale and thin limestone of the Linn Subgroup.

Unconsolidated sediments in the Blue River Valley are Wisconsinan to recent in type. The thickness of the alluvium varies from approximately 30 feet in the northern and central portions of the site to approximately 20 feet in the southern portion of the site.

Previous investigations have determined that groundwater is located approximately 10 feet below ground surface. Additionally, groundwater flow at the site is to the south-southwest.

Topsoil at the site belongs to the Kennebec and Chase series. Kennebec silt loam covers the southern portion of the site. Typical Kennebec soil is very dark grayish-brown becoming very dark gray with depth, slightly hard, friable, with weak to moderate fine granular structure. Kennebec soils are deep, moderately well drained, moderately permeable and level. (E&E 1995)

## **2.2 Current Use of the Subject Property**

The site is a defunct electroplating facility. According to the Johnson County Assessor website, the site is 35.15 acres in size and contains a 73,730 square feet (ft<sup>2</sup>) building (Johnson County 2011). The site is not currently used for any beneficial purpose.

## **2.3 Description of Property Improvements**

The site contains a single-story, concrete block building that is 73,730 ft<sup>2</sup> in size. In addition, the site contains two process water storage basins; two wastewater evaporation sanitary lagoons; three capped lagoons (surface impoundments); and a pond (**Appendix A, Figure 2**). The site is surrounded by a levee. The dike was constructed to provide flood control. Additionally, a railroad line bisects the site in a north-south direction.

## **2.4 Current Uses of the Adjoining Properties**

The site is located in a mixed rural residential and agricultural area. A small residential area of approximately six residences is located approximately 200 feet northeast of the site. Farmland and woodlands surround the site to the north, west, and south. Residential areas are located in all directions from the site, beyond the undeveloped areas (**Appendix A, Figure 2**).

## **2.5 Site History and Operations**

Operations on the subject property have included bulk oil storage/transfer, grain storage, and electroplating. Property information from the Johnson County Assessor website indicates the site building was constructed in 1904 (Johnson County 2011). Historical photographs show seven large aboveground storage tanks (AST) located at the site dating back to 1941. Historical photographs are included in **Appendix C**. Kuhlman began electroplating operations at the site in 1962. Kuhlman manufactured zinc diecastings for a variety of commercial and industrial customers. Kuhlman

operations consisted of an electroplating process that used chromium, nickel, and copper plating on zinc diecastings. On November 30, 1990, Kuhlman ceased all operations and filed for bankruptcy.

### 3.0 USER-PROVIDED INFORMATION

In order to qualify for one of the Landowner Liability Protections (LLP) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the “Brownfields Amendments”), the user must provide the following information (if available) to the Environmental Professional. Failure to provide this information could result in a determination that “All Appropriate Inquiry” is not complete. The following information was provided by Mr. Robert Ford, Johnson County Government, with regard to the property. The completed User Questionnaire is provided in Appendix D.

- No title records for the site were provided by the User.
- The User was aware of environmental cleanup liens associated with a removal action previously conducted by EPA. However, the User was not aware of any Activity and Use Limitations (AUL) for the property.
- The User reported no specialized knowledge or experience related to the subject property or nearby properties.
- The User reported that the purchase price would be affected by the well documented environmental history of the site.

The User provided the following additional information to assist the Environmental Professional:

- The Phase I ESA is being performed for the Johnson County Government for general reference in managing risk associated with acquiring the subject property.
- The physical address for the subject property was identified as 16400 Mission Road, as listed on the Johnson County Assessor website.
- No special terms or conditions were agreed upon by the Environmental Professional.

## **4.0 ENVIRONMENTAL RECORDS SOURCES**

The purpose of the records review is to obtain and review records that will help identify RECs in connection with the site. The following sources of environmental records were accessed and reviewed as part of this assessment.

### **4.1 Historical Review**

Historical data regarding the site and surrounding area were gathered to determine past uses and evaluate visible environmental issues that may pose RECs. The following sections describe aerial photographs, topographic maps, city directories, and Sanborn® maps that were available for the site. Historical use documentation referenced in the following sections is included as Appendix C.

#### **4.1.1 Historical Aerial Photographs**

Historic aerial photographs of the site for the years 1941, 1948, 1955, 1959, 1966, 1970, 1976, 1979, 1982, 1986, 1991, 1996, 2002, 2006, and 2010 were obtained from Historical Information Gatherers (HIG; HIG 2011a). The review of these aerial photographs is summarized in the table below.

YEAR	COMMENTS
1941 1948	<p><b>Site:</b> The subject property contains a building, two process water storage basins to the north, and seven ASTs.</p> <p><b>Surrounding Area:</b> The Blue River bounds the site to the south and west. The land surrounding the site is primarily agricultural or undeveloped; however, a small residential area is located just northeast of the site.</p>
1955 1959 1966 1970	<p><b>Site:</b> The subject property appears similar to the earlier photographs. Additions to the building have been completed, making it larger. In addition, one AST located on the eastern portion of the site has been removed. The 1966 photograph shows a levee has been constructed around the site and two impoundments are located on the southwest portion of the site. In the 1970 photograph, a lagoon is now located on the southern portion of the site.</p> <p><b>Surrounding Area:</b> The Blue River bounds the site to the south and west. The land surrounding the site is primarily agricultural or undeveloped; however, a small residential area is located just northeast of the site.</p>
1976 1979 1982	<p><b>Site:</b> The site building looks similar to its current condition. Only two ASTs remain at the site. Two sanitary ponds (lagoons) are located in the southern portion of the site. A surface impoundment is located on the northwest portion of the site.</p> <p><b>Surrounding Area:</b> The Blue River bounds the site to the south and west. The land surrounding the site is primarily agricultural or undeveloped; however, a small residential area is located just northeast of the site.</p>
1986	<p><b>Site:</b> The site building looks similar to its current condition. A surface impoundment is located just south of the levee on the southern portion of the site.</p> <p><b>Surrounding Area:</b> The Blue River bounds the site to the south and west. The land surrounding the site is primarily agricultural or undeveloped; however, a small residential area is located just northeast of the site.</p>
1991 1996	<p><b>Site:</b> The site building looks similar to current condition. No ASTs remain at the site. A pond is now located on the eastern portion of the site. Southern surface impoundments are no longer visible and appear to have been covered.</p> <p><b>Surrounding Area:</b> The Blue River bounds the site to the south and west. The land surrounding the site is primarily agricultural or undeveloped; however, a small residential area is located just northeast of the site.</p>

YEAR	COMMENTS
2002	<b>Site:</b> The site property looks similar to its current condition. The site appears to contain more vegetation, particularly to the south in the 2006 and 2010 photographs.
2006	<b>Surrounding Area:</b> The Blue River bounds the site to the south and west. Residential development appears to the southeast and northwest. In addition, a small residential area is located just northeast of the site.
2010	

Review of the aerial photographs identified development at the site dating back to 1941. The photographs show the site building has been at its current location since at least 1941. In addition, photographs show ASTs and other process-related lagoons and ponds located at the site.

#### 4.1.2 Historical Topographic Maps

Historic topographic maps of the site for the years 1970, 1975, and 1991 were obtained from HIG (HIG 2011b). The review of these topographic maps is summarized below:

YEAR	COMMENTS
1970	<p><b>Site:</b> The topographic map shows a building, six ASTs, and two ponds located at the site.</p> <p><b>Surrounding Area:</b> The Blue River bounds the site to the south and west. The land surrounding the site is primarily agricultural or undeveloped.</p>
1975	<p><b>Site:</b> The topographic map shows a building, two ASTs, and two ponds located at the site.</p> <p><b>Surrounding Area:</b> The Blue River bounds the site to the south and west. The land surrounding the site is primarily agricultural or undeveloped.</p>
1991	<p><b>Site:</b> The topographic map shows no features at the site.</p> <p><b>Surrounding Area:</b> The Blue River bounds the site to the south and west. The area immediately surrounding the subject property appears to be undeveloped. Larger areas of development appear to the north-northwest.</p>

#### 4.1.3 City Directories

City directories can be used in conjunction with other historical records presented in this section to determine previous land use at the site and at surrounding properties. The city directory abstract was provided by Environmental Data Resources Inc. (EDR; EDR 2011a). The site address was not listed in the city directory from the time period between 1996 and 2011.



#### 4.1.4 Sanborn® Maps

A search of Sanborn® maps was conducted by EDR; however, no Sanborn® maps were available for the subject property (EDR 2010b).

## 4.2 Environmental Database Search

Federal, state, regional, and local records were reviewed to assess whether any unauthorized releases of hazardous substances or other events with potentially adverse environmental effects have occurred at the site or at any facility within the ASTM-required search distance of one mile. EDR performed a database search of the site in accordance with ASTM E 1527-05 (EDR 2011c). A copy of this report is included as Appendix E.

The databases searched have been developed and are updated by federal, state, and local agencies. While these databases are generally reliable and comprehensive, some out-of-date data no longer reflecting actual site conditions may be encountered. The Government Records Searched/Data Currency Tracking section of the EDR report in **Appendix E** identifies when each database was updated.

A review of the facilities listed within the EDR Radius Map with GeoCheck® report (EDR 2011c) is summarized as follows.

- The subject property was listed in seven databases searched by EDR. Those databases are: Comprehensive Environmental Response, Compensation, and Liability Act – No Further Remedial Action Planned (CERCLA-NFRAP), Federal Resource Conservation and Recovery Act (RCRA) Correct Active (CORRACTS), RCRA Treatment, Storage, and Disposal Facility (RCRA TSDF), Institutional Controls/Engineering Controls (US INST CONTROL), State Hazardous Waste Sites (SHWS), Underground Storage Tanks (UST), and RCRA – Non Generators (RCRA-NonGen). The database listings are primarily associated with historical electroplating activities conducted at the site. As previously mentioned, the subject property has a long regulatory history involving RCRA and CERCLA investigations and cleanup.
- Four surrounding sites were identified in the database search and are summarized in the table below. Unless otherwise noted, the listed surrounding sites do not pose RECs to the subject property based on distance, topography, estimated groundwater flow direction, and/or current regulatory status.

Regulatory Database	Search Distance (Miles)	Subject Property Listed	Total Number of Sites Listed
Federal Records			
Comprehensive Environmental Response, Compensation, and Liability Information System – No Further Remedial Action Planned (CERCLIS-NFRAP)	0.50	Yes	1

Regulatory Database	Search Distance (Miles)	Subject Property Listed	Total Number of Sites Listed
Resource Conservation and Recovery Act – Correct Action (CORRACTS)	1.0	Yes	1
Resource Conservation and Recovery Act – Treatment, Storage, and Disposal Facility (RCRA-TSDF)	0.50	Yes	1
Institutional Controls/Engineering Controls (US INST CONTROL)	0.50	Yes	1
State and Local Records			
State and Tribal Hazardous Waste Sites (SHWS)	1.0	Yes	5
Underground Storage Tank (UST)	0.25	Yes	1
Resource Conservation and Recovery Act – Non Generator (RCRA-NonGen)	0.25	Yes	1

#### **State and Tribal Hazardous Waste Sites**

The SHWS database contains Superfund sites listed by the Kansas Department of Health and Environment. Four SHWS sites were identified within the search radius. Those sites are the Engelmann Parcel (159<sup>th</sup> Street and Mission Road) and three sites under the name Williams – Kenneth Manifold/Station (3410 and 3419 West 159<sup>th</sup> Street). Those sites are petroleum cleanup sites enrolled in the State’s voluntary cleanup program. Based on regulatory status and distance, none of the four sites pose a REC to the subject property.

#### **Unmapped Sites**

The EDR report identified one “non-geocoded” or “orphan” facilities, that, because of poor or inadequate address information, could not be mapped by EDR. Based on site reconnaissance observations and information obtained from database research and on-line mapping resources, it is not likely the “orphan” site poses a REC to the subject property.

### **4.3 Additional Environmental Records**

As part of the environmental records search performed by EDR, federal databases for institutional and engineering controls were searched. The site is listed on the Institutional Controls/Engineering Controls (US INST CONTROL) database. That listing is associated with the RCRA and CERCLA activities/investigations involving the site.

As part of this Phase I ESA, site documents concerning historical RCRA and CERCLA investigations and cleanups conducted at the site were obtained from EPA. Numerous investigations have been conducted at the site and have involved the collection of multimedia samples to determine if past site operations have resulted in releases of hazardous substances. Involved in those investigations and cleanups were

the collection of soil (surface and subsurface), groundwater, surface water, and sediment samples. In addition, air, dust, and concrete samples were collected from within the building.

From 1991 to 1992, an EPA-funded removal action was conducted at the site. During the removal action, over 1 million gallons of liquid wastes contaminated with metals and cyanide were treated on site and properly discharged. Wastes that could not be treated on site were transported off site for proper disposal. In 1992, following the completion of the removal action, EPA conducted a removal assessment to determine whether further removal activity would be required. The removal assessment determined elevated concentrations of metals, specifically, chromium, copper, nickel, and zinc, were detected in soil (both surface and subsurface), groundwater, and sediment at the site. However, no further removal activity was conducted.

Based on discussions with the User (Johnson County Government) and the fact that the environmental history of the site is well-documented, a complete discussion of past investigations at the site was not requested or warranted. However, listed below are several site reports completed for EPA that summarize site history and results of environmental investigations and cleanups.

- Jacobs Engineering. 1998. RCRA Facility Assessment of Kuhlman Diecasting Site. Stanley, Kansas. EPA ID No. KSD006325013. July.
- Ecology and Environment, Inc. 1992. Removal Funded: Kuhlman Diecasting Co., Stanley, Kansas. Removal Assessment Phase II. TDD# T07-9107-035D. September 24.
- Ecology and Environment, Inc. 1993. Removal Funded: Kuhlman Diecasting Co., Stanley, Kansas. Removal Assessment Phase II. TDD# T07-9301-025. April 16.
- Ecology and Environment, Inc. 1995. Preliminary Assessment/Site Inspection for the Kuhlman Diecasting Site. Stanley, Kansas. TDD# T07-9412-506A. October 5.

## 5.0 SITE RECONNAISSANCE

A site reconnaissance was conducted on September 14, 2011, by project team member Jeff Pritchard. Also present during the site reconnaissance were personnel with EPA Region 7 Brownfields and RCRA, KDHE, and the Johnson County Government. Photographic documentation from the site reconnaissance is included in **Appendix F**.

### 5.1 Methodology and Limiting Conditions

The site reconnaissance consisted of a visual inspection of the site in accordance with requirements set forth in 40 CFR Part 312. Observations of the perimeter area were noted to assess the presence of environmental concerns. The scope of the Phase I ESA also included asbestos and LBP inspections of the on-site structures. The asbestos and LBP inspection were completed separately by the project team and are summarized in a separate report. The project team interviewed Mr. Robert Ford, Johnson County Government, regarding current and past uses of the site (see Section 6.1).

### 5.2 General Site Setting

The site is located at 16400 Mission Road, which is near 164<sup>th</sup> Street and Mission Road in Stanley, Kansas.

### 5.3 Site Reconnaissance Observations

Property conditions were evaluated for evidence of current or past RECs as described in the following table.

Potential Environmental Concern	Present or Suspected	Not Present
Hazardous Substances and Petroleum Products	✓	
Hazardous Waste	✓	
Landfills, Dumps, Burials, or Solid Waste Disposal	✓	
Storage Tanks	✓	
Polychlorinated Biphenyls-containing Equipment		✓
Heating, Ventilation, and Air Conditioning System and Fuel Source	✓	
Drains, Sumps, Pools of Liquids, Standing Water, Cisterns, and Cesspools	✓	
Pits, Ponds, and Lagoons	✓	
Stains or Corrosion and Stained Soil or Pavement		✓
Areas of Dead, Distressed, Discolored, or Stained Vegetation		✓
Possible Fill, Grading, or Solid Waste Disposal	✓	
Smells of Chemical Gases, Petroleum Products, or Noxious Odors		✓
Wastewater and Stormwater Systems and Discharges	✓	

Potential Environmental Concern	Present or Suspected	Not Present
Wells and Potable Water Supply	✓	
Utilities	✓	

The subject property contains a single-story, concrete block building that is 73,730 ft<sup>2</sup> in size. In addition, the site contains two process water storage basins; two wastewater evaporation sanitary lagoons; three capped lagoons (surface impoundments); and a pond. As previously discussed, the site has been operated as a bulk oil storage facility and an electroplating facility. The site building, water storage basins, and lagoons were utilized during those past operations. The site has been inactive since 1990, and the site building is in a dilapidated condition. The building has a basement that contained a large volume of water during the site reconnaissance inhibiting exploration of this area. The former wastewater treatment facility attached to the west side of the building is still in place, but in poor condition, and contains a large volume of water. The wastewater treatment plant discharged to the Blue River. Although the subject property has access to public utilities, none are currently active. Permanent monitoring wells were noted across the site. Historical records indicate that 22 monitoring wells have previously been installed at the site.

The site reconnaissance involved walking the entire site with personnel with EPA Region 7, KDHE, and Johnson County. In particular, the three capped surface impoundments were viewed by EPA Region 7 and KDHE personnel to determine their current condition. The three surface impoundments are currently regulated as post-closure units by KDHE, while EPA Region 7 maintains corrective action authority over the entire site. The surface impoundments are discussed further in Section 6.3.

## **6.0 INTERVIEWS**

The objective of conducting interviews is to obtain information concerning RECs in connection with the site. This information was obtained verbally, as indicated below. Interviewees were cooperative and forthcoming with information, unless otherwise specified.

### **6.1 Interview with Owner/Key Site Manager**

Seagull interviewed Mr. Robert Ford, Johnson County Government, at the site on September 14, 2011. Mr. Ford stated that Johnson County is interested in obtaining the property primarily to demolish the site building, which has been identified as a dangerous building by county officials. The county is also interested in the property for future recreational uses (bike trail). Mr. Ford stated that the property is still owned by Kuhlman Diecasting Company; however, there is no current involvement in the property by the owner, which is in bankruptcy. The owner was not contacted for this Phase I ESA. Mr. Ford stated that the courts have appointed Mr. Thad Jones as a Liquidating Agent for the Kuhlman property. Mr. Jones had no historical or operational knowledge concerning the site and was not interviewed. Mr. Ford stated that the Johnson County Government was well aware of the site's environmental history.

### **6.2 Interview with Current Occupants**

The subject property is vacant and not currently developed for occupancy.

### **6.3 Interview with Government Officials**

As previously discussed, the Kuhlman Diecasting site has a well-documented history related to environmental investigations and cleanups. During the completion of this Phase I ESA, both EPA Region 7 and KDHE personnel were consulted concerning the site. Additionally, historical documents and reports concerning the site were obtained from EPA for review. Discussions with EPA and KDHE were primarily associated with RCRA authority and issues associated with the site. Currently, there are three RCRA post-closure units located at the site that are regulated by KDHE (see **Appendix A, Figure 2**). Those three units are capped surface impoundments formerly used for waste disposal. EPA Region 7 maintains RCRA corrective action authority over the entire site.

If additional sampling activities are to be conducted at the site, consultation with EPA and KDHE concerning sample locations and analyses is advised.

## 7.0 FINDINGS AND OPINIONS

The following significant findings were identified from records review, interviews, or site reconnaissance:

- Review of historical documents show the subject property has been operated as a bulk oil storage facility. Historic oil storage operations could be a potential source of contamination. The likelihood of release and migration of hazardous materials or wastes from this type of facility poses a REC to the subject property.
- The subject property has a well-documented history of environmental investigation and cleanups associated with its past operation as an electroplating facility. The Kuhlman Diecasting Company conducted electroplating at the subject property from the early 1960s to 1990. Operations at the site ceased in 1990 when the facility declared bankruptcy. Numerous environmental investigations have been conducted at the site and have identified elevated levels of site-related contaminants, metals in particular. An EPA-funded removal action was completed at the site in 1991 and 1992 and addressed contaminated liquid wastes abandoned at the site. Follow-up investigations have identified elevated concentrations of metals in soil, surface water, sediment, and groundwater at the site. Historical site operation as an electroplating facility which resulted in releases of hazardous substances to environmental media at the site poses a REC to the subject property.
- Records review and interviews conducted during the Phase I ESA determined that three RCRA post-closure units remain at the site. The three units are surface impoundments that formerly received waste from electroplating operations. The units are currently capped. KDHE maintains post-closure authority over those units, while EPA Region 7 maintains regulatory authority over the entire site. The presence of the post-closure units poses a REC to the subject property.
- During site reconnaissance activities, asbestos and LBP were determined likely to be present at the site. Building materials thought to contain ACM and LBP were identified inside the building. The presence of ACM and LBP is of environmental concern. The scope of the Phase I ESA also included asbestos and LBP surveys of any on-site structures. The asbestos and LBP inspection were completed separately by the project team and are summarized in a separate report.

### 7.1 Data Gap Analysis

A data gap is a lack of or inability to obtain information by the Environmental Professional that could affect the ability of the Environmental Professional to identify conditions indicative of releases or threatened releases. The Environmental Professional has conducted an analysis of the data gaps associated with information gathered during this Phase I ESA and a summary of that assessment follows.

- Time gaps of more than 5 years were present in available historical information. Historical documents were reviewed back to 1941. Given the consistent observed use

of the subject property in the historic information reviewed, it is not necessary to review additional time periods, and the lack of information for all 5-year-or-less intervals is not considered data failure.

- An interview with the current property owner could not be completed as part of this Phase I ESA. The subject property is still owned by Kuhlman Diecasting Company; however, there is no current involvement in the property by the owner, which is in bankruptcy. The owner was not contacted for this Phase I ESA. Mr. Thad Jones currently serves as court-appointed Liquidating Agent for the Kuhlman property. However, Mr. Jones has no historical or operational knowledge concerning the site and was not interviewed. Based on the well-documented history of the site, it is the opinion of the Environmental Professional that the lack of the owner interview is not considered data failure.
- The building has a basement that contained a large volume of water during the site reconnaissance inhibiting exploration of this area. The basement is a below-grade crawl space that typically contains water; however, because it could not be explored during the Phase I ESA, it is considered a data gap.



## 8.0 CONCLUSIONS AND RECOMMENDATIONS

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-05 for the Kuhlman Diecasting site located in Stanley, Kansas. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. Based on available information, this assessment has revealed evidence of several RECs and environmental issues in connection with the site, as described in Section 7.0. Based on the identification of these RECs and other issues of concern, the project team provides the following recommendations.

- The project team recommends a Phase II ESA of the subject property. The Phase II ESA should include the collection of soil (both surface and subsurface), groundwater, surface water, and sediment. Samples should be analyzed for contaminants commonly associated with bulk oil storage facilities and electroplating facilities. Phase II sampling should be conducted to confirm historical investigation findings and address data gaps. Additionally, Phase II sampling should be conducted in consultation with EPA Region 7 and KDHE. After discussing the site with EPA and KDHE, specific areas of concern that should be addressed during Phase II sampling are listed below.
  - Past investigations have had limited involvement on the east portion of the site (east of the railroad track). Historical records indicate that bulk oil storage tanks were located in that area. Future sampling should include the collection of soil and groundwater from this area to determine if historical site activities have resulted in a release of hazardous substances.
  - Groundwater samples should be collected from permanent monitoring wells currently located at the site to characterize groundwater quality. Additionally, specific emphasis should be placed on the monitoring wells downgradient of and surrounding the three RCRA post-closure units (surface impoundments).
  - Soil samples (both surface and subsurface) should be collected from select locations across the site to determine current contaminant concentrations, metals in particular. Past sampling results indicate that elevated concentrations of metals (chromium, copper, nickel, and zinc) have been detected in surface soil near the two wastewater evaporation sanitary lagoons in the southern portion of the site. Additionally, surface soils to the south and west of the building have been determined to contain elevated concentrations of site-related metals. Sampling should be conducted to delineate the lateral and vertical extent of contamination.
  - Surface water and sediment samples should be collected from the two process water basins in the northern portion of the site, two wastewater evaporation sanitary lagoons in the southern portion of the site and from several locations on the Blue River.

## 9.0 CERTIFICATION STATEMENT

The resume of the Environmental Professional who conducted the site reconnaissance and prepared the report is provided in **Appendix G**. I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312.10. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property addressed in this report. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312, and attest to the completeness and accuracy of the information contained in this report.

If you have any questions concerning the findings and conclusions contained in this report, please call Environmental Professional Jeff Pritchard at (913) 220-5887.

Environmental Professional

A handwritten signature in black ink, appearing to read "Jeff Pritchard", with a stylized flourish at the end.

Jeff Pritchard, CHMM  
Senior Environmental Scientist

## 10.0 REFERENCES

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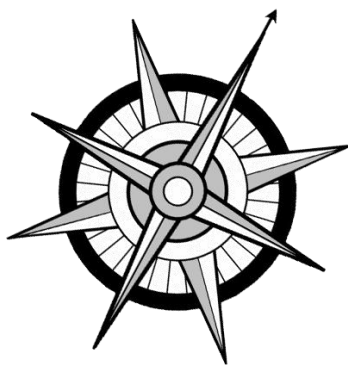
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