



On this day, May 05, 2015,

the U.S. Environmental Protection Agency Determines that

*26 Acres of the Central Plateau Area of the Eagle-Picher
Henryetta Superfund Site
Are Ready for Commercial and Industrial Use*

Carl Edlund
Director, Superfund Division
U.S. Environmental Protection Agency Region 6

Kelly Dixon
Director, Land Protection Division
Oklahoma Department of Environmental Quality

This Ready for Reuse (RfR) Determination is for the approximately 26-acre Central Plateau area of the Eagle-Picher Henryetta Superfund site located in Henryetta, Okmulgee County, Oklahoma. This RfR Determination provides that U.S. Environmental Protection Agency (U.S. EPA) has made a technical determination that the subject area is ready for commercial and industrial use and the remedy will remain protective of human health and the environment based on U.S. EPA documents for the Eagle-Picher Henryetta Superfund site, which include the 2000 Administrative Order on Consent (AOC), the 2000 Operations & Maintenance Plan included as an Appendix to the AOC, the 2001 Notice of Deed Restriction, the 1996 Eagle-Picher Site Streamlined Risk Evaluation and the 1999 Removal Reports for Eagle Picher-Henryetta, Henryetta, Okmulgee County, Oklahoma. This RfR Determination remains valid only as long as the requirements and use limitations specified in the aforementioned documents are met and no new information becomes available to suggest that conditions at the Site are no longer protective of human health and the environment. Limitations at the subject area include the following: The Property may only be used for commercial or industrial use and shall not be used for residential, child care or nursing care, due to continuing presence of certain authorized concentrations of hazardous substances in the soils and groundwater of the Property; the groundwater underlying the Property shall not be used for drinking or industrial uses. Installation of water wells on the Property is inappropriate, except for the purpose of conducting investigation, remediation, or other work authorized by the City, after notifying the Oklahoma Department of Environmental Quality; and preservation and protection of capped areas on the Property, under which hazardous substances will remain, is necessary. There shall be no disturbance, digging, excavation of the soils nor any drilling or invasive construction on the Property, without the prior approval of the City, after notifying the Oklahoma Department of Environmental Quality. The Administrative Order on Consent preserves U.S. EPA and the Oklahoma Department of Environmental Quality's right of access to the subject area and other areas impacted by the former smelter facility. The types of uses identified as protective in this RfR Determination remain subject to (i) applicable federal, state, and local regulations, including, but not limited to, zoning ordinances and building codes; and (ii) title documents, including, but not limited to, easements, restrictions, and institutional controls. This RfR Determination is an environmental status report and does not have any legally binding effect, nor does it expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. U.S. EPA assumes no responsibility for reuse activities and/or any potential harm that might result from reuse activities. U.S. EPA retains any and all rights and authorities it has, including, but not limited to, legal, equitable, or administrative rights. U.S. EPA specifically retains any and all rights and authorities it has to conduct, direct, oversee, and/or require environmental response actions in connection with the Site, including, but not limited to, instances when new or additional information has been discovered regarding the contamination or conditions at the Site that indicate that the response and/or the conditions at the Site are no longer protective of human health or the environment for the uses identified in the RfR Determination.

**EAGLE-PICHER HENRYETTA SUPERFUND SITE –
CENTRAL PLATEAU
READY FOR REUSE DETERMINATION**

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I. Executive Summary

This Ready for Reuse (RfR) Determination is for the approximately 26-acre Central Plateau area of the Eagle-Picher Henryetta Superfund site located in Henryetta, Okmulgee County, Oklahoma as defined in Figure 3 of this RfR Determination. The entire acreage of the former facility, which operated as a smelter, is approximately 70 acres. The former smelter facility is bordered by open fields to the north and east, by residential/commercial zoned properties and U.S. Highway 266 to the south, and U.S. Highway 75 to the west. The 70-acre former smelter facility is currently owned by the City of Henryetta. The Central Plateau area was re-graded during cleanup activities to make it suitable for future development. The City of Henryetta is using the Central Plateau area as an industrial park, which was renamed Shurden Leist Industrial Park.

The conditions summarized in this RfR Determination are based on U.S. Environmental Protection Agency (EPA) documents for the Eagle-Picher Henryetta Superfund site, which include the 2000 Administrative Order on Consent (AOC), the 2000 Operations & Maintenance Plan included as an Appendix to the AOC, the 2001 Notice of Deed Restriction, the 1996 Eagle-Picher Site Streamlined Risk Evaluation and the 1999 Removal Reports for Eagle Picher-Henryetta, Henryetta, Okmulgee County, Oklahoma. EPA has made a technical determination that the approximately 26-acre Central Plateau area of the Eagle-Picher Henryetta Superfund site as defined in Figure 3, located in Henryetta, Okmulgee County, Oklahoma, is ready for commercial and industrial land uses and that the remedy will remain protective of human health and the environment, subject to operation and maintenance of the remedy and the limitations identified in the 2002 Notice of Deed Restriction. Land use controls at the Eagle-Picher Superfund site limit the use of the property, prevent the use of groundwater, and protect the remedy put in place over the entire former smelter facility. These limitations are further discussed in Section V of this RfR Determination.

The Administrative Order on Consent preserves EPA and the Oklahoma Department of Environmental Quality's (ODEQ) right of access to the former smelter facility area and other areas impacted by the former smelter facility.

EPA has assessed the risk to human health and the environment resulting from contamination at the former smelter facility. A streamlined risk evaluation of the human and environmental risks associated with industrial and commercial uses at the former smelter facility was conducted. The streamlined risk evaluation looked at exposure, through soil ingestion and dermal absorption of soils and dust, to inorganic chemicals. Unacceptable risks identified for the former smelter facility included non-carcinogenic risk attributable primarily to antimony and arsenic, in addition to soil lead concentrations that exceeded the preliminary remediation goal for lead. Cancer risks were within an acceptable risk range. Groundwater was not assessed because it is not used at the former smelter facility or the surrounding areas. With the completion of the removal activities and implementation of the Notice of Deed Restriction, EPA has addressed possible exposures identified in the Streamlined Risk Evaluation.

Based on information available as of this date, EPA has determined that the unacceptable levels of risk to current and future users of the Central Plateau area of the Eagle-Picher Henryetta Superfund site have been abated for industrial and commercial users, which would include use as a health care clinic. The

Central Plateau area of the Eagle-Picher Henryetta Superfund site as depicted in Figure 3 is ready for industrial and commercial use, including health care facilities, and the remedy will remain protective of human health and the environment, subject to operation and maintenance of the remedy and limitations as specified in the Administrative Order on Consent, Operation and Maintenance Plan, and Notice of Deed Restriction.

EPA Region 6 issues this RfR Determination for the Central Plateau area of the Eagle-Picher Henryetta Superfund site, effective May 5, 2015.

By: 
Carl E. Edlund, Director
Superfund Division
U.S. Environmental Protection Agency Region 6


Kelly Dixon, Director
Land Protection Division
Oklahoma Department of Environmental Quality

Documents pertaining to the Site and the RfR Determination are part of the Administrative Record (AR) for the Site, which is available for review at the EPA Region 6 offices in Dallas, Texas, and ODEQ offices in Oklahoma City, OK. Additional information can be obtained from Casey Lockett Snyder, the Superfund Redevelopment Coordinator, who can be reached at lockett.casey@epa.gov. Additional information about the Site is available online at www2.epa.gov/aboutepa/epa-region-6-south-central.

This RfR Determination is a technical document and an environmental status report that does not have any legally binding effect, nor does it expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. EPA assumes no responsibility for reuse activities or for any possible or potential harm that might result from reuse activities. EPA retains any and all rights and authorities it has, including but not limited to legal, equitable, or administrative rights. EPA specifically retains any and all rights and authorities it has to conduct, direct, oversee, and/or require environmental response actions in connection with the Site, including instances when new or additional information has been discovered regarding the contamination or conditions at the Site that indicate that the remedy and/or the conditions at the Site are no longer protective of human health or the environment for the uses identified in the RfR Determination.

II. Site Location

The Eagle-Picher Henryetta Superfund site former smelter is situated approximately 1,000 feet north of the northeast corner of the junction of U.S. Highway 266 and U.S. Highway 75. Figure 1 shows the site location. The geographical coordinates of the former smelter facility are 35°27.648' North latitude, and 95°57.690' West longitude. The former smelter facility covers approximately 70 acres and is located just northeast of the downtown area of the City of Henryetta and west of the town of Dewar. The former smelter facility is bordered by open fields to the north and east, by residential/commercial zoned properties and U.S. Highway 266 to the south, and U.S. Highway 75 to the west. The Central Plateau is located on the former smelter area and covers approximately 26 acres of the 70-acre former smelter facility. The Central Plateau has flat topography and was remediated to support future development. Figure 2 shows the site topography and identifies features such as the Central Plateau area, drainage and piping, as well as basin and pond areas. Figure 3 outlines the Central Plateau area of the Eagle-Picher Henryetta Superfund site area covered by this RfR Determination. Figure 3 also shows the developable areas available as part of the Shurden Leist Industrial Park. Methodology for map development is available in Appendix A.

Figure 1: Site Location Map

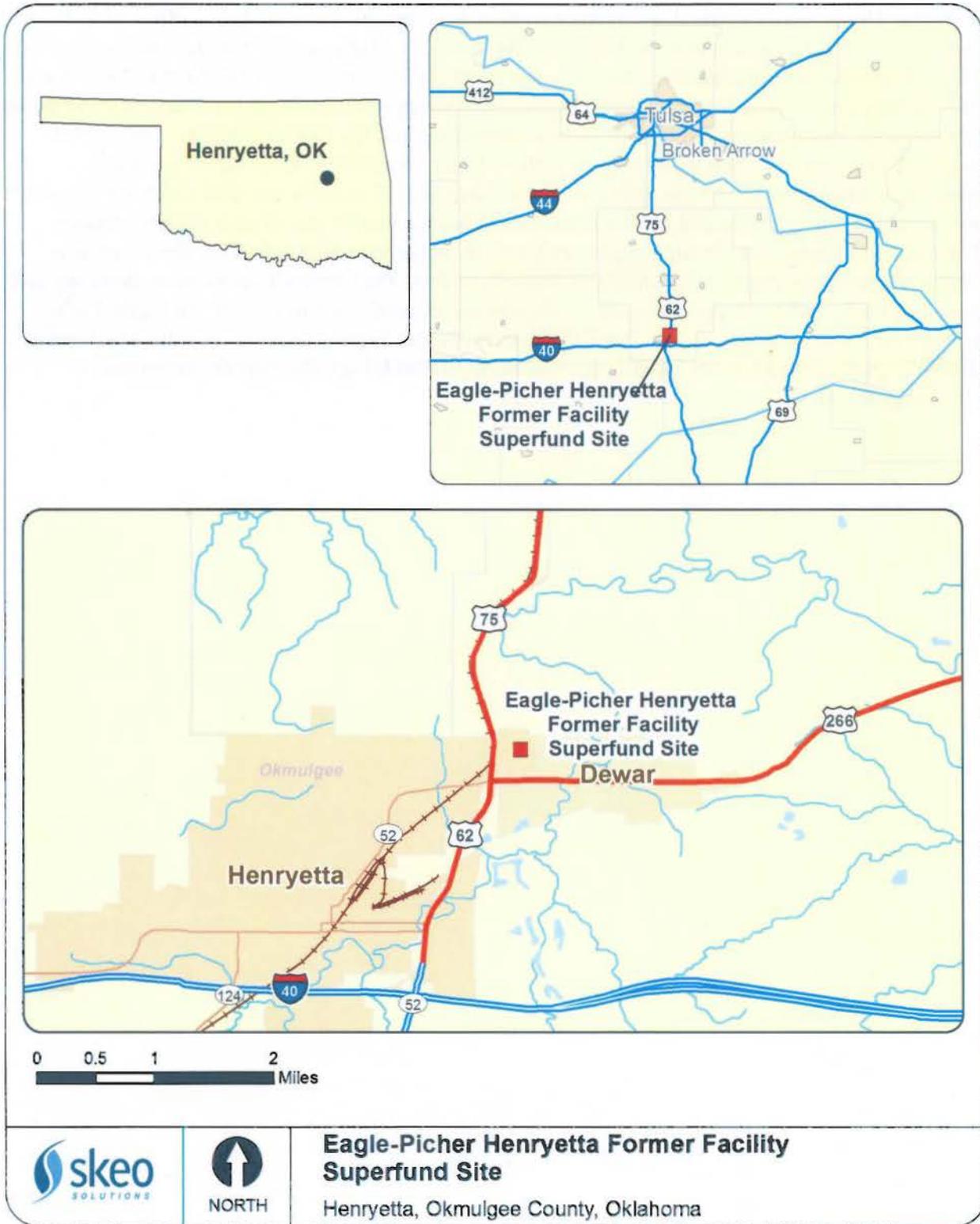


Figure 2: Site Detail Map Showing Central Plateau Area of the Eagle-Picher Henryetta Superfund Site

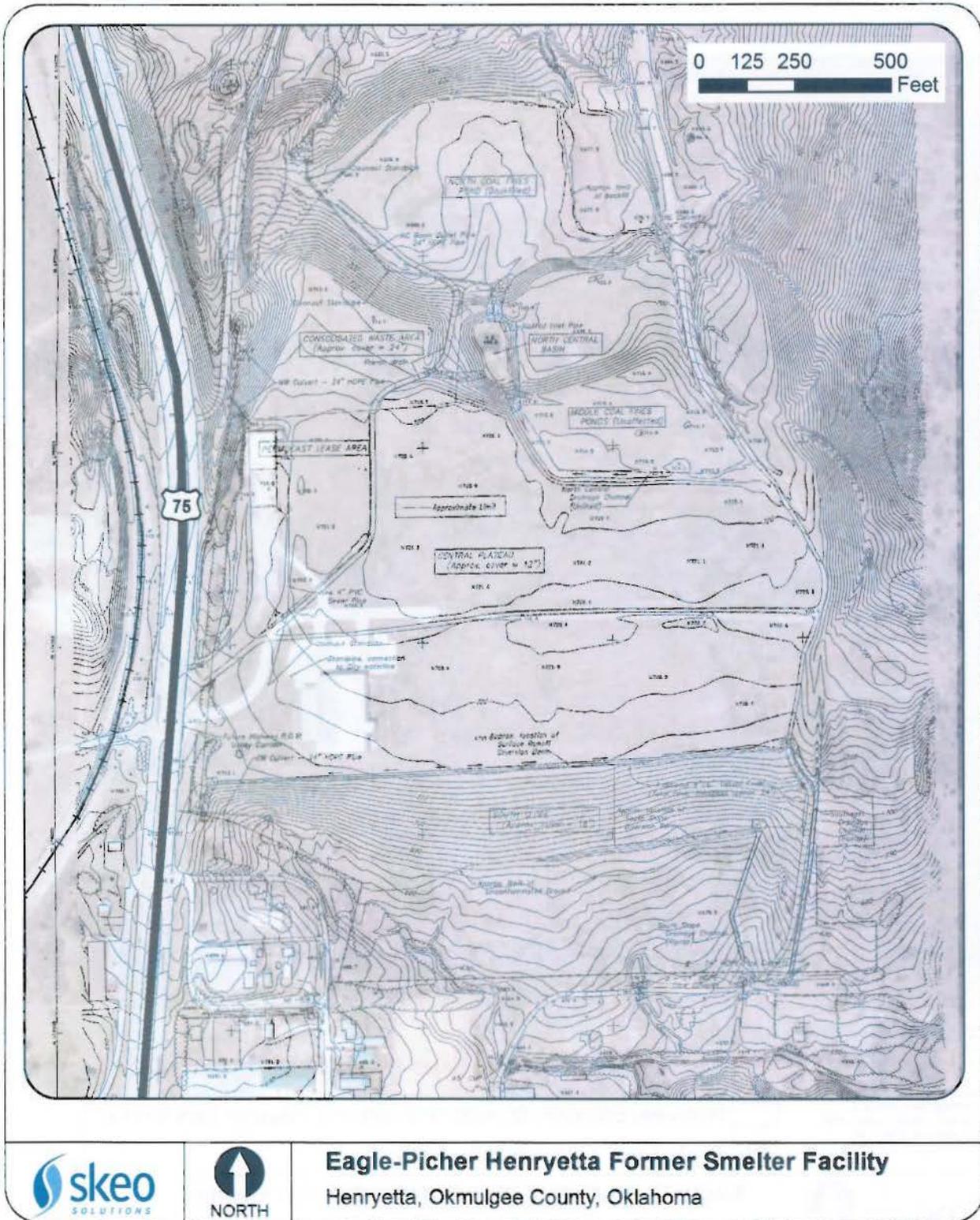
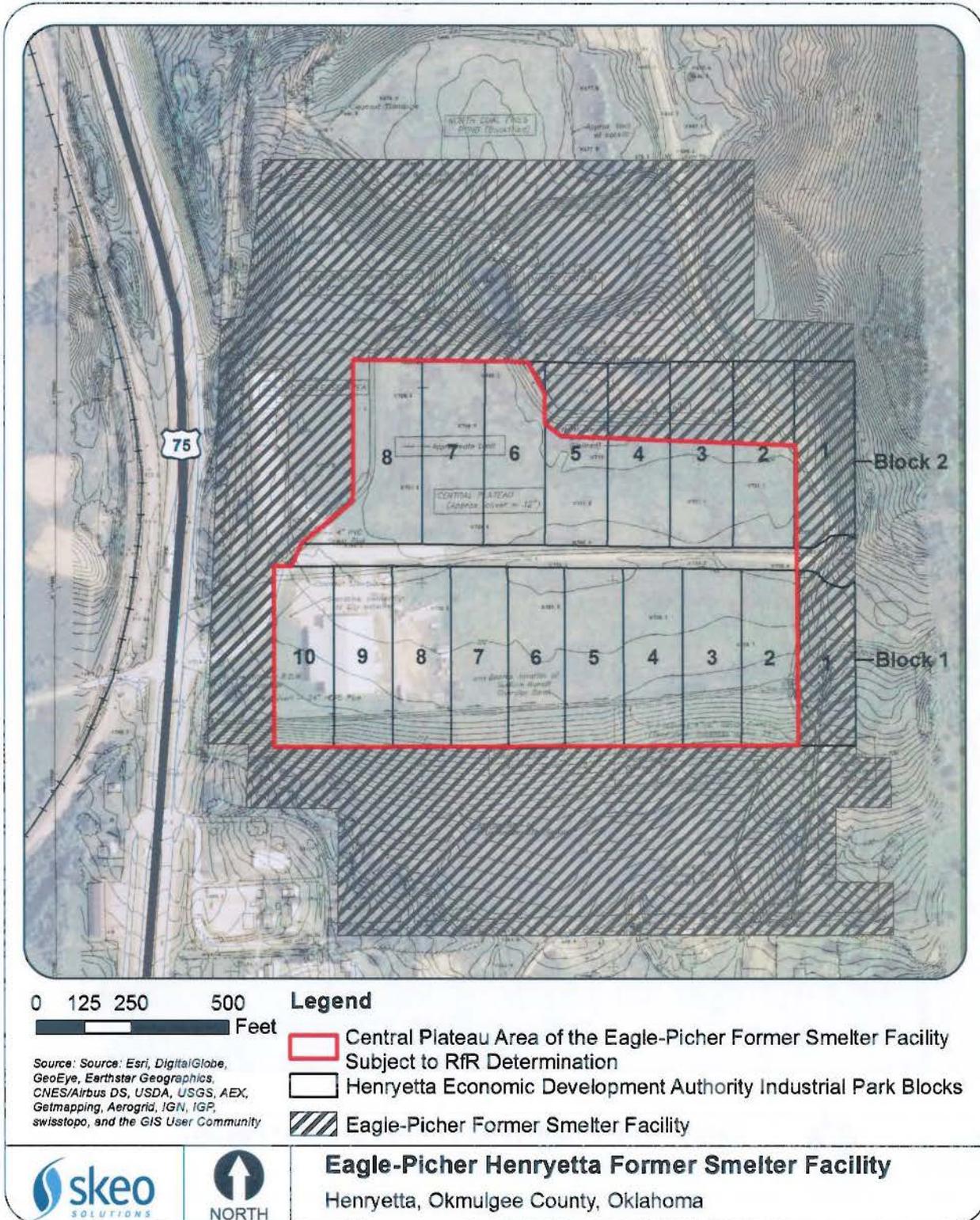


Figure 3: Central Plateau Area of the Eagle-Picher Henryetta Superfund Site Subject to RfR Determination



III. Site Summary

Site and Contaminant History

The Eagle-Picher Smelting Facility operated as a horizontal retort-smelter onsite for roasting, sintering, and the recovery of zinc, cadmium and germanium. The plant operated from 1916 until 1968, and received ore from many locations from the Tri-State Mining District of northeastern Oklahoma, southeastern Kansas, and southwestern Missouri.

The smelter was reportedly the world's second largest horizontal retort primary zinc smelter in the mid-1950s. The smelter had a furnace capacity of 8,000 retorts. In 1959, it consumed approximately 9 million cubic feet per day of natural gas. Its main product was slab zinc; however, it produced a germanium concentrate as a byproduct, which was sent off site for processing.

In 1974, Eagle-Picher Industries, Inc. donated the former smelter facility property to the City of Henryetta. Eagle-Picher Industries, Inc. demolished most of the production buildings, but the slag and cinder piles remained. The 70-acre site contained more than 170,000 cubic yards of bulk solid waste, which included contaminated (lead and arsenic) slag, retorts, soil and miscellaneous waste. The City later leased portions of the former smelter facility to a mining company for staging coal from mining operations and to a trucking company that hauled the coal. Both companies moved from the site prior to August of 1996. An aluminum casting company started operations in 1976 and is still in operation.

Downwind residential properties were impacted by air dispersion of heavy metals from the historical stack emissions and wind-blown dust from the smelter facility. Elevated levels of lead and arsenic were documented in smelter waste material which was used as fill material in residential and high access areas. EPA addressed the risks associated with the former smelting facility both on and off the property. This RfR Determination applies only to the approximately 26-acre Central Plateau-area of the Eagle-Picher Henryetta Superfund site as depicted in Figure 3.

Description of Risks

A Streamlined Risk Evaluation of the human and environmental risks associated with industrial and commercial uses at the former smelter facility was conducted in 1996. The streamlined risk evaluation looked at exposure pathways of soil ingestion and dermal absorption of soils and dust to inorganic chemicals in a "worker scenario." The worker scenario assumes an adult worker with a 70 year lifetime, a 70 kg body weight and an exposure frequency was assumed to be 250 days per year. Unacceptable risks identified for the former smelter facility included non-carcinogenic risk attributable primarily to antimony and arsenic, in addition to soil lead concentrations that exceeded the preliminary remediation goal for lead. Cancer risks were within an acceptable risk range. Groundwater was not assessed because it is not used at the former smelter facility or the surrounding areas.

Specific contaminants of concern identified in the risk evaluation at the Central Plateau are:

Antimony	Copper	Potassium
Arsenic (Inorganic)	Iron	Selenium
Barium	Lead	Silver
Cadmium	Manganese	Thallium
Chromium	Mercury	Zinc
Cobalt	Nickel	

With the completion of the removal activities and implementation of the 2001 Notice of Deed Restriction, EPA has addressed possible exposures.

Summary of Cleanup Activities

Table 1 summarizes relevant events and important dates in the former smelter's history.

Table 1: Chronology of Site Activities

Date	Activity
1916	Zinc, cadmium, lead, and germanium production operations began.
1968	Zinc, cadmium, lead, and germanium production operations ended.
1974	Eagle-Picher donated the property to the City of Henryetta.
1976	Permcocast, Inc., an aluminum casting company, initiated operations on the site.
July 31 - August 3, 1995	EPA began soil, sediment, waste pile and surface water sampling investigations.
December 1995	EPA sampled Wilson and Henryetta Townsite additions, driveways, parks, schools, and the Central Plateau area.
April 15, 1996	EPA completed Streamlined Risk Evaluation at the site.
August 10, 1996	EPA began removal actions at the Eagle-Picher Superfund site.
August 28, 1996	EPA placed a gravel pad parking area and office trailers on the Central Plateau.
October 18, 1996	Residential excavations began in Henryetta. Contaminated material from residential excavations was stockpiled at the Central Plateau.
February 14, 1997	Remediation of the former smelter facility, including the Central-Plateau area, began.
March 5, 1997	Drainage systems installed in the Central Plateau area to support future use.
July 12, 1997	Began sprigging Bermuda grass on the Central Plateau area of the site.
August 22, 1997	Remediation of the former smelter facility, including the Central-Plateau area, is completed. Former smelter facility cleanup included creating a consolidated waste area, re-contouring residential and onsite wastes, placing cover material, and re-vegetating the site.

Date	Activity
August 29, 2000	United States Department of Justice approved the Administrative Order on Consent between EPA, Oklahoma Department of Environmental Quality, and the City of Henryetta to preserve EPA and ODEQs right of access, provide notice of the cleanup to the public, and clarify rights and responsibilities moving forward.
January 17, 2001	City of Henryetta signed Notice of Deed Restriction.
May 2006	ProStreet Framework opened as the first business in the Shurden Leist Industrial Park.
May 5, 2008	Shurden Leist Industrial Park won the 2007 Phoenix Award for Region 6.

Removal Actions (August 1996-August 1997)

The topography and distribution of materials varied significantly across the Eagle-Picher Superfund site. Remediated areas on the former smelter facility included: the Central Plateau, the North (Coal Fines) Pond, the Consolidated Waste area, and the South Slope and Plateau. This RfR Determination summarizes removal actions at the Central Plateau-area of the Eagle-Picher Henryetta Superfund site. This RfR Determination applies only to the Central Plateau area of the Eagle-Picher Superfund site depicted in Figure 3.

The Central Plateau area was reshaped using balanced cut and fill excavation across the site to create a more natural topography with appropriate perimeter drainage controlling offsite migration of contaminants. The result of this re-grading effort created an area of approximately 26 acres suitable for potential future industrial and commercial development.

The former smelter facility impacted downwind residential properties with air dispersion of heavy metals from historical stack emissions and wind-blown dust from the former Eagle-Picher smelter facility. Elevated levels of lead and arsenic were documented in smelter waste material, which has been used as fill material in residential and high access areas. Waste material generated and hauled to the Central Plateau from residential and other high access areas, such as schools, was stockpiled and characterized as "visual" or "air dispersion/topsoil." Laboratory testing indicated that contaminant concentrations in the stockpiles were significantly lower than the levels of onsite waste material, and also provided a better vegetative growth base. The material from the "visual" stockpiles was generally placed in the upper 12 inches of subgrade on the Central Plateau as an additional buffer layer over onsite waste material. The Central Plateau area of the Eagle-Picher Superfund site was brought to final grade with a minimum 12-inch cover of material from the nearby Hamilton Strip Mine.

Old building foundations were excavated, but the final grade on the north side of the Central Plateau was adjusted to accommodate remnants of the substantial oven foundations that remained. A storm water collection system of surface drains and other erosion control measures were installed to prevent migration of contaminated sediments off the site. The Upper Pond and Coal Fines Area on the Central Plateau were backfilled, and a french drain was installed across those

areas to control subsurface water levels. The North Pond Area, located north of the Central Plateau in Figure 2, is not part of this RfR Determination.

East of the Central Plateau is a sediment basin (North Sediment Basin) and an area of approximately eight acres previously used as a stock piling and loan out area for a coal shipping business, known as the Middle Coal Fines Area. Shallow ponds in the area collected coal fines and other sediments when the business was active. During remediation, fine sediments with unconsolidated structure were observed to a depth of at least 15 feet. The sediments were not laboratory tested to identify possible contaminants. The ponds were backfilled, and the area is now level, but may not be suitable for redevelopment. This area is not part of this RfR Determination.

A small surface runoff sediment pond on the southwest side of the Central Plateau was backfilled and replaced with a collection drain, which connects to the gutter drain alongside the highway. A permanent surface runoff ditch was constructed along the northeast and north central side of the Central Plateau to direct surface runoff into the north central basin.

Groundwater was not assessed because it is not used at the former smelter facility or the surrounding areas.

Re-vegetation activities were performed by the Okmulgee County Soil Conservation District, and were funded by the Oklahoma Department of Environmental Quality.

Redevelopment/Reuse History

The City of Henryetta wanted to use the Eagle-Picher Superfund site as the location of a new industrial park. The proximity to US Highway 75 and Interstate 40 offered an ideal location for the Shurden Leist Industrial Park. The City of Henryetta received state and federal grants for the project, and completed construction of the park in 1996.

Lack of sufficient utility services and truck access roads at the site hindered Henryetta's efforts to attract tenants to the park. Due to land use restrictions, any disturbance of the protective cap was prohibited. The City worked with the ODEQ to install clean utility corridors. The clean utility corridors were limited to the area needed to construct a new access road into the Shurden Leist Industrial Park. The corridors were installed by removing waste from the utility pathways, replacing it with clean material, and reestablishing the cap. In May 2006, ProStreet Framework, a company that made after-market motorcycle bodies, opened a facility in the industrial park. In 2007, the Shurden Leist Industrial Park Project was awarded the Phoenix Award for Region 6. In 2015, the East Oklahoma Family Health Center expressed interest in constructing a rural health care clinic at the Shurden Leist Industrial Park. The ODEQ, in consultation with EPA, has determined this is an acceptable use.

IV. EPA's Basis for the Ready for Reuse (RfR) Determination

EPA has based the Eagle-Picher Henryetta Superfund Site RfR Determination for the Central Plateau area on the 2000 Administrative Order on Consent, the 2000 Operations & Maintenance Plan, the 2001 Notice of Deed Restriction, the 1996 Eagle-Picher Site Streamlined Risk Evaluation, and the 1999 Removal Reports for Eagle-Picher Henryetta, Henryetta, Okmulgee County, Oklahoma. These documents demonstrate that the Central Plateau area of the Eagle-Picher Superfund site as depicted in Figure 3 is ready for commercial and industrial use, which would include a health care clinic.

The Streamlined Risk Evaluation looked at the potential risks associated with the soils on the Central Plateau. The risk evaluation quantified the potential risks posed by contaminants of concern, after the 1996 to 1997 removal action, under a range of exposure scenarios during commercial and industrial land uses. At the Central Plateau area, non-carcinogenic health effects from exposure to inorganic chemicals were possible. The majority of non-carcinogenic risk was attributable to antimony and arsenic.

The Central Plateau was brought to final grade with a minimum 12-inch cover of clean material brought from the neighboring Hamilton Strip Mine. The Bureau of Reclamation's Technical Service Center Environmental Research Laboratory provided soil sample analysis to confirm the acceptability of the topsoil as borrow material. The cleanup addressed risks identified in the Streamlined Risk Evaluation.

V. Post-Removal Closure Activities

Institutional and Engineering Controls

When waste is left in place, EPA requires land use controls to keep users from coming in contact with waste or harming the remedy. Land use controls at the Eagle-Picher Henryetta Superfund site limit the use of the property, prevent the use of groundwater, and protect the remedy put in place over the entire former smelter facility. The 2001 Notice of Deed Restriction details the following limitations:

1. The Property may only be used for commercial or industrial use and shall not be used for residential, child care or nursing care, due to continuing presence of certain authorized concentrations of hazardous substances in the soils and groundwater of the Property.
2. The groundwater underlying the Property shall not be used for drinking or industrial uses. Installation of water wells on the Property is inappropriate, except for the purpose of conducting investigation, remediation, or other work authorized by the City, after notifying the Oklahoma Department of Environmental Quality.
3. Preservation and protection of capped areas on the Property, under which hazardous substances will remain, is necessary. There shall be no disturbance, digging, excavation of

the soils nor any drilling or invasive construction on the Property, without the prior approval of the City, after notifying the Oklahoma Department of Environmental Quality¹.

The City of Henryetta is responsible for enforcing these controls. Although the City may sell or lease this property, the City still maintains long term responsibility for enforcing these controls and implementing operations and maintenance requirements. A party may purchase or lease a portion of this site with knowledge of existing contamination, however to be protected from incurring liability for contamination they may want to pursue the Bona Fide Prospective Purchaser (BFPP) protection from CERCLA liability. The party interested in using the site will need to meet certain threshold criteria, such as performing all appropriate inquiries and not having an affiliation with the liable party at the site. Potential purchasers or lessees of Lots at the Shurden Leist Industrial Park should consult their own legal counsel, as well as EPA and ODEQ, to discuss the available BFPP liability protection as well as ongoing continuing obligations at the site.

As stated, the Administrative Order on Consent preserves EPA and the Oklahoma Department of Environmental Quality's right of access to the former smelter facility area and other areas impacted by the former smelter facility. A copy of the Administrative Order on Consent is available as Appendix B to this report.

Operations and Maintenance Requirements

Conditions of the Central Plateau and surrounding areas should be observed on a regular basis. Observations to note are visible erosion, condition of vegetation, stability, encroachments, seepage, animal burrows, and integrity of access roads. The City of Henryetta assumed responsibility for Operations & Maintenance, with the Oklahoma Department of Environmental Quality having oversight. Site maintenance conditions are outlined in detail in the Administrative Order on Consent in Appendix B.

VI. Provisos

This RfR Determination is a technical document and an environmental status report and does not have any legally binding effect and does not expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits of any party. EPA assumes no responsibility for reuse activities and/or for any potential harm that might result from reuse activities. EPA retains any and all rights and authorities it has, including, but not limited to, legal, equitable, or administrative rights. EPA specifically retains any and all rights and authorities it has to conduct, direct, oversee, and/or require environmental response actions in connection with the Site, including but not limited to, instances when new or additional information has been

¹ Capping involves placing a cover over contaminated material such as landfill waste or contaminated soil. Such covers are called "caps." Caps do not destroy or remove contaminants. Instead, they isolate them and keep them in place to avoid the spread of contamination. Caps prevent people and wildlife from coming in contact with contaminants. The Eagle-Picher Henryetta Superfund site has two different types of caps: soil covers and an engineered cap over the Consolidated Waste Area, or CWA, which is not part of this RfR Determination. These restrictions are applicable to both. A soil management plan must be approved by ODEQ before any construction activities on the cap can occur.

discovered regarding the contamination or conditions at the Site that indicate that the response and/or the conditions at the Site are no longer protective of human health or the environment for the types of uses identified in the RfR Determination.

The types of uses identified as protective in this RfR Determination remain subject to (i) applicable federal, state, and local regulation; and (ii) title documents, including, but not limited to, easements, restrictions, and institutional controls.

Appendix A: Shurden Leist Industrial Park Ready for Reuse Determination Map Development Methodology

Skeo Solutions, a contractor to EPA, developed maps depicting the approximate locations of site features and reuse areas for the Shurden Leist Industrial Park Ready for Reuse Determination using ESRI's ArcGIS mapping software in April 2015.

The maps were developed using the NAD 1983 NSRS 2007 State Plane Oklahoma North FIPS 3501 (US Feet) projection. Sources and methods include:

- **Base map sources**
 - **Aerial base map:** ESRI, DigitalGlobe GeoEye Earthstar Geographics, CNES/Airbus DS USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP swisstopo, and the GIS User Community
 - **Rail and highway features:** Hand drawn based on aerial basemap.
 - **Map overlay:** Skeo Solutions georeferenced the Bureau of Reclamation- Eagle Picher Henryetta Smelter Site Final As Built Surface Conditions map in Attachment B.1 of the December 1999 Removal Report for Eagle Picher-Henryetta by aligning map features with features in the aerial base map.
- **Figure 3 features**
 - **Eagle-Picher Former Smelter Facility feature:** Skeo Solutions georeferenced map titled Exhibit A - Shurden-Leist Industrial Park Henryetta Economic Development Authority by aligning map features with features in the aerial base map. Skeo created a new feature class by tracing the (unlabeled) dotted and dashed line depicted in that map.
 - **Henryetta Economic Development Authority Exhibit A Blocks features:** Skeo created a new feature class by tracing the numbered blocks depicted in the Exhibit A map.
 - **Central Plateau Area of the Eagle-Picher Former Smelter Facility Subject to RfR Determination features:** Skeo created a new feature class by outlining Blocks 1 and 2, excluding areas to the east and north, thereby approximating the Central Plateau Area boundaries.

To estimate the approximate acreage of the Central Plateau Area of the Eagle-Picher Former Smelter Facility subject to the RfR Determination, Skeo converted the *Area* field in the feature class attribute table automatically generated by ArcMap (measured in square feet) to acres. Skeo verified this measurement by calculating geometry for the shape in ArcMap in acres. This measurement was done in NAD 1983 NSRS 2007 State Plane Oklahoma North FIPS 3501 (US Feet) projection. The estimate of 26 acres is accurate to within 0.25 acres.

Appendix B: Administrative Order on Consent

20130

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

DALLAS, TEXAS

REGIONAL HEARING CLERK
EPA REGION VI

IN THE MATTER OF)

THE EAGLE PICHER MINING)

AND SMELTING SITE)

HENRYETTA, OKMULGEE COUNTY,)

OKLAHOMA)

Proceeding Under the Authority of)

Section 122(h)(1) of the)

Comprehensive Environmental)

Response, Compensation, and)

Liability Act of 1980, as Amended,)

42 U.S.C. § 9622(h)(1))

DOCKET NUMBER

CERCLA 6-05-2000

ADMINISTRATIVE ORDER

ON CONSENT

I. INTRODUCTION

1. This Administrative Order on Consent ("Consent Order") is entered into between the United States Environmental Protection Agency (EPA), the Oklahoma Department of Environmental Quality (ODEQ), and the City of Henryetta (referred to herein as the "City" or "Respondent"), regarding the Eagle-Picher Superfund removal site (the "Site"), in Henryetta, Oklahoma.

II. JURISDICTION AND AUTHORITY

2. This Consent Order is issued and entered into pursuant to the authority vested in the President of the United States by Section 122(h)(1) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 ("CERCLA"), Pub. L. No.

146546

99-499, 42 U.S.C. § 9622(h)(1), to reach settlements in actions under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a). The authority vested in the President has been delegated to the Administrator of EPA by Executive Order 12580, 52 FR 2923 (Jan. 24, 1987) and further delegated to the Regional Administrators of the EPA by EPA Delegation No. 14-14-D (May 11, 1994). This authority was further delegated to the Director, Superfund Division by EPA Delegation No. R6-14-14-D (August 4, 1995).

3. The Respondent agrees to undertake all actions required by the terms and conditions of this Consent Order. The Respondent consents to and will not contest the EPA's jurisdiction to issue this Consent Order and to implement or enforce its terms.

4. The purposes of this Consent Order are: (1) preserve the EPA's and ODEQ's right of access to portions of the Site consisting of the former Eagle-Picher Industries smelting facility located in the northeast intersection of Highway 75 and Highway 266 (the "smelter facility") in Henryetta, Oklahoma, as depicted in Appendix A attached hereto, requiring investigation, remediation and continued operation and maintenance; (2) provide notice to the public of the resolution of certain environmental matters relating to the Site; and (3) recite the rights and responsibilities of the Respondent and ODEQ and the EPA.

5. Unless otherwise expressly provided herein, terms used in this Consent Order which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned them in the statute or its implementing regulations.

III. FINDINGS OF FACT

6. Eagle-Picher Industries, Inc. ("Eagle-Picher") operated the smelter facility near Henryetta and Dewar, Oklahoma for the production of zinc, cadmium and germanium from 1916 until 1968. Eagle-Picher received ore from many locations including mines from the Tri-State Mining District of northeastern Oklahoma, southeastern Kansas, and southwestern Missouri. Eagle-Picher ceased operation in 1968 and donated the property to the City of Henryetta in 1974. The City is the current owner of the smelter facility. However, the City has never operated the smelter facility.

7. The Site encompasses the former Eagle-Picher zinc smelter facility and the surrounding residential and "High Access Areas" that were contaminated with lead and arsenic from the actual operations of the smelter, subsequent contaminant migration from the smelter facility via wind and water erosion, and the use of smelter facility wastes as fill material.

8. Initial EPA involvement was at the request of ODEQ. In

December 1995, the EPA conducted a removal assessment with extensive sampling in residential yards, at schools, day cares, parks, and playgrounds ("High Access Areas"), and on the smelter facility. The removal site assessment activities were concentrated at High Access Areas and residential properties since smelter wastes had been observed in many of these locations and since young children who are most susceptible to lead poisoning frequently use these areas.

9. The 70-acre smelter facility contained more than 170,000 cubic yards of bulk solid waste located at the north and south ends of the facility. These wastes included heavy metal contaminated slag, retorts, soil and miscellaneous wastes with lead and arsenic concentrations up to 30,166 ppm and 736 ppm, respectively.

10. Extensive sampling suggested that the downwind residential properties had been impacted by air dispersion of heavy metals from historical stack emissions and wind blown dust from the former Eagle-Picher smelter facility. Slag and bulk wastes had been used as fill material throughout Henryetta and Dewar. Site investigations identified three City parks, a school track and 162 residential properties with soil lead and arsenic concentrations ranging up to 14,192 ppm and 666 ppm,

respectively. Site wastes were also documented within tributaries to Coal Creek. Soil erosion and seeps with soluble metals were detected in sediment and water samples in off-Site tributaries to Coal Creek.

11. For years, wastes believed to have originated from the Eagle-Picher smelter facility had been used for a variety of purposes within the residential and High Access Areas and included such uses as roadway, driveway, alleyway, and parking lot aggregate; general fill material in residential areas; and impact-absorbing material in playgrounds. The existence and use of this material within the residential areas of the community posed a potential risk to human health, primarily to young children.

12. On August 9, 1996, Timothy Fields, Jr. executed an Action Memorandum on behalf of Elliott P. Laws, then Assistant Administrator for the EPA Office of Solid Waste and Emergency Response (OSWER), approving the initiation of a time-critical removal action (the "response action") at the Site, and an exemption from the 12-month and 2 million dollar statutory limits found in Section 104(c)(1) of CERCLA, 42 U.S.C. § 9604(c)(1)(A).

13. Response action Site mobilization was initiated on August 10, 1996. The EPA excavated contaminated material from

the school track, three city parks, 93 alleys, and 162 residential properties, and consolidated and capped contaminated material at the smelter facility. ODEQ paid for or performed activities for the re-vegetation of the smelter facility and a soil-borrow area.

14. In performing this response action, through September 1998, the EPA incurred past response costs at or in connection with the Site in the amount of \$6,308,629.33. ODEQ contributed \$400,000 to the EPA response action, and incurred past response costs of \$210,695.23, over and above amounts contributed to the EPA. The City contributed water and equipment to the response action, at an estimated value of \$10,000. By this Consent Order, the EPA and ODEQ acknowledge prior contributions by the City, and the City agrees to finance and assume operation and maintenance of the former Eagle-Picher smelter facility.

IV. DETERMINATIONS

Based upon the Findings of Fact set forth above and on the administrative record for this Site, EPA has determined that:

15. The Eagle Picher Superfund removal Site in Henryetta, Oklahoma is a "facility" as that term is defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

16. Respondent is a "person" as that term is defined in

Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

17. Respondent is a potentially responsible party within the meaning of Section 107(a) CERCLA, 42 U.S.C. § 9607(a).

18. The substances listed or stated in Paragraphs 9-10 are "hazardous substances" as that term is defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and further defined at 40 CFR § 302.4.

19. The past and potential future migration of hazardous substances from the Site constitutes an actual or threatened "release" as that term is defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

20. In response to the release or threatened release of hazardous substances at or from the Site, the EPA and ODEQ undertook response actions at the Site and have incurred response costs pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and Oklahoma law.

21. Respondent represents, and for the purposes of this Consent Order, the EPA affirms and finds, that (a) Respondent's involvement with the Site is limited to owning a portion of the Site; and (b) Respondent did not cause the release or threatened release of a hazardous substance at or from the Site by any act.

22. The prior contribution of water and equipment, together

with work to be performed and financed by Respondent in assuming operation and maintenance of the smelter facility, represents the Respondent's share of the EPA's and ODEQ's past response costs incurred at the Site.

23. The response actions conducted or authorized by EPA at or in connection with the Site are not inconsistent with CERCLA and the National Contingency Plan.

V. ORDER

Based upon the administrative record for this Site and the Findings of Fact and Determinations set forth above, and in consideration of the promises and covenants set forth herein, it is hereby AGREED TO AND ORDERED:

24. The Respondent hereby agrees that it shall finance and perform the work necessary to maintain the integrity of the response action (the "Work"), including necessary repair to the cap at the smelter facility, if any, as set forth in the Operation and Maintenance Plan, attached hereto as Appendix B. Respondent recognizes that the operation and maintenance may be modified by ODEQ, if necessary, based upon Site conditions. ODEQ will assume primary regulatory responsibility for oversight of operation and maintenance of the smelter facility. ODEQ may choose to set deadlines for repair or other activities required

to maintain the integrity of the remedy at the smelter facility.

VI. ACCESS AND NOTICE TO SUCCESSORS-IN-TITLE

25. The City hereby grants to the EPA and ODEQ, their employees, representatives, contractors, agents, and all other persons monitoring operation and maintenance of response actions under ODEQ's oversight, a right of access to the smelter facility for the purpose of monitoring the terms of this Consent Order and monitoring operation and maintenance of response actions at the smelter facility portion of the Site. Nothing herein shall limit EPA's and ODEQ's right of access under applicable law.

26. Within 60 days of the effective date of this Consent Order, the City shall file in the land records of Okmulgee County a Notice of Deed Restriction (the "Deed Restriction"), approved by the EPA and ODEQ, notifying subsequent purchasers of the smelter facility portion of the Site that hazardous substances were disposed and will continue to remain in the soils at the former smelter facility. This Deed Restriction and the language of any instrument conveying an interest in any portion of the former smelter facility shall prohibit the installation of water wells and the development of the former smelter facility for residential use, and shall require the preservation and protection of cap areas on the former smelter due to the

continuing presence of hazardous substances. The property use restrictions contained in the Deed Restriction shall be enforced by Respondent against subsequent owners of the smelter facility. Within 10 days of filing of such Deed Restriction, Respondent shall provide documentation to the EPA and ODEQ verifying that it has filed the Deed Restriction pursuant to this paragraph. A Deed Restriction in a form acceptable to the EPA and ODEQ is attached hereto as Appendix E.

27. Nothing in this Consent Order shall in any manner restrict or limit the nature or scope of response actions which may be taken by the EPA or ODEQ in fulfilling their responsibilities under federal or state law. Respondent recognizes that the operation and maintenance of response actions at the smelter facility may interfere with its use of the property. The EPA and ODEQ, their employees, representatives, contractors, agents, and all other persons performing operation and maintenance of response actions under ODEQ's oversight shall use their best efforts not to unreasonably interfere with the operations of the Respondent or its tenants by any such entry and actions, and will use their best efforts to give the Respondent reasonable notice prior to such entry. Respondent agrees to cooperate with the EPA and ODEQ in the implementation of

operation and maintenance of response actions at the Site and also agrees not to interfere with such operation and maintenance.

VII. DUE CARE

28. Respondent shall exercise due care with respect to hazardous substances at the smelter facility, and comply with all applicable laws and regulations. Such due care shall include but not be limited to: (a) preventing the installation of water wells on the smelter facility except for the purpose of conducting investigation, remediation, or other activities authorized by the EPA and ODEQ; and (b) preservation and protection of cap areas on the smelter facility and under which hazardous substances will remain. The EPA or ODEQ will provide notice of and an opportunity to cure any violation of subparagraph 28(b) provided that such violation is not caused by the Respondent. This opportunity to cure shall not exceed 10 days.

29. Respondent certifies that it has conducted a thorough, comprehensive, good-faith search for documents and to the best of its knowledge that it has fully and accurately disclosed to the EPA all information currently in its possession or in the possession of its employees, contractors or agents, which relates in any way to any arrangement for treatment or disposal or for transport for treatment or disposal of hazardous substances at or

in connection with the Site. This certification is attached as Appendix D to this Consent Order. Provision of false, fictitious, or fraudulent statements or representations to the United States may subject Respondent to criminal penalties under 18 U.S.C. § 1001.

VIII. COVENANT NOT TO SUE

30. Subject to the reservations of rights under this Consent Order, on the effective date of this Consent Order, the EPA and ODEQ covenant not to sue or to take any other civil or administrative action against such Respondent for any and all civil liability for reimbursement of past response costs pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), or Oklahoma law, with regard to the Site.

31. In consideration of EPA's and ODEQ's covenants not to sue in Paragraph 30 of this Consent Order, Respondent agrees not to assert any claims or causes of action against the United States, including the EPA, or the State of Oklahoma, including ODEQ, or their contractors or employees or the Hazardous Substance Superfund, and agrees not to seek any other costs, damages, or attorney's fees from the United States or the State of Oklahoma arising out of response actions at the Site. Nothing in this Consent Order shall be deemed to constitute

preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. 300.700(d).

IX. RESERVATION OF RIGHTS

32. Nothing in this Consent Order is intended to be, and this Consent Order shall not be construed as, a release or covenant not to sue for any claim or cause of action, administrative or judicial, civil or criminal, past or future, at law or in equity, which the United States, including the EPA, or the State of Oklahoma, including ODEQ, may have against the Respondent for:

- (a) any liability as a result of failure to provide access, notice or otherwise comply with this Consent Order;
- (b) any liability as a result of future disposal activities at the Site;
- (c) any liability for injury to or loss or destruction of natural resources;
- (d) any criminal liability;
- (e) any liability resulting from any failure to file the Deed Restriction, to enforce property use restrictions, or to exercise due care with respect to hazardous substances at the Site; or
- (f) any liability resulting from any future exacerbation by Respondent of the release or threat of release of hazardous substances at or from the Site.

33. Nothing in this Consent Order is intended as a release or covenant not to sue for any claim or cause of action,

administrative or judicial, civil or criminal, past or future, in law or in equity, which the United States, including the EPA, and the State of Oklahoma, including ODEQ, may have against any person, firm, corporation, or other entity not a signatory to this Consent Order.

34. The EPA, ODEQ, and the Respondent agree that the actions undertaken by the Respondent in accordance with this Consent Order do not constitute an admission of any liability by Respondent. However, the covenant not to sue referenced in paragraph 30 is null and void if information is discovered which indicates that Respondent's involvement with the Site is different than represented in paragraph 21 of this Consent Order.

X. CONTRIBUTION PROTECTION

35. Subject to the reservations of rights in Paragraph 32 of this Consent Order, with regard to claims for contribution against Respondent for matters addressed in this Order, which shall include all past response costs incurred at the Site, the EPA, ODEQ, and Respondent hereby agree that Respondent, on the effective date of this Consent Order, shall be entitled to such protection from contribution actions or claims as is provided in Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and under Oklahoma law.

XI. DISPUTE RESOLUTION

36. The Respondent, ODEQ, and the EPA shall use their best efforts to resolve all disputes or differences of opinion informally. If, however, the EPA, ODEQ, and Respondent are unable to resolve such matters informally, then the position advanced by the EPA shall be considered binding unless Respondent or ODEQ invokes the dispute resolution provisions of this Section.

37. If Respondent disagrees with EPA's or ODEQ's actions pursuant to this Consent Order, Respondent shall notify the EPA and ODEQ in writing of its objections and the basis therefore within 7 calendar days. Said notice shall set forth the specific points of the dispute and state the basis for the Respondent's position. Within 10 days of the EPA's or ODEQ's receipt of such written notice, the EPA shall provide to Respondent its decision on the pending dispute.

38. The EPA's decision pursuant to paragraph 37 shall be binding upon all parties to this Consent Order, unless Respondent or ODEQ, within 7 days, notifies the EPA in writing of its continued objections and requests the Superfund Division Director for EPA Region 6 to convene an informal conference for the purpose of discussing the objections and the reasons for the

EPA's determination. The EPA Superfund Division Director shall issue a written decision within 10 days from the date of the informal conference.

39. Except as set forth below, in any dispute, the Respondent or ODEQ shall have the burden of showing that the EPA's position, including without limitation any interpretation of the terms and conditions of this Consent Order and of applicable federal and state laws and regulations, is arbitrary and capricious or otherwise not in accordance with law.

40. The existence of a dispute as defined herein, and the EPA's consideration of such matters as placed into dispute shall not excuse, toll, or suspend any compliance obligation or deadline required pursuant to this Consent Order.

41. Notwithstanding any other provisions of the Consent Order, no action or decision by the EPA, including, without limitation, decisions of the Superfund Division Director of EPA Region 6 (or his designee), pursuant to this Consent Order shall constitute final agency action giving rise to any rights to judicial review prior to the EPA's initiation of judicial action to compel Respondent's compliance with the mandates of this Consent Order.

XII. PARTIES BOUND

42. This Consent Order shall apply to and be binding upon the EPA and ODEQ, and shall be binding upon the Respondent, its employees, agents, successors, and assigns. Each signatory to this Consent Order represents that he or she is fully authorized to enter into the terms and conditions of this Consent Order and to legally bind the party it purports to represent.

43. In the event that Respondent transfers title or possession of the smelter facility, Respondent shall notify the EPA and ODEQ at least 30 days prior to any such transfer and shall continue to be bound by all of the terms and conditions of this Consent Order unless the EPA and ODEQ agree otherwise and modify this Consent Order accordingly.

44. In the event that Respondent transfers title or possession of the smelter facility, Respondent shall provide any such transferee with a copy of this Consent Order together with a written notice in any instrument conveying an interest in the smelter facility indicating the interest conveyed is subject to certain property use restrictions retained by the City due to the presence of hazardous substances beneath the cap area at the smelter facility. Any transferee of the smelter facility will be required to provide the EPA and ODEQ continuing access to the

smelter facility for the purposes of monitoring its environmental status, taking remedial action, or otherwise discharging the EPA's and ODEQ's regulatory responsibilities, and to exercise continuing due care, as described in Section VII, in avoiding future releases at or from the smelter facility.

XIII. FORM OF NOTICE

45. All notices required to be given pursuant to this Consent Order shall be in writing, unless otherwise expressly authorized. Notices or submissions required by this Consent Order shall be deemed timely if deposited with the United States Postal Service or an equivalent delivery service on or before the due date. Response times under this Consent Order shall run from the date of receipt, unless otherwise specified. Documents, notices, and other correspondence to be submitted pursuant to this Consent Order shall be sent by certified mail, return receipt requested, express mail service, or some equivalent delivery service providing proof of delivery to the following addresses or to such other addresses as the Respondent, ODEQ and the EPA hereafter may designate in writing:

As to the Environmental Protection Agency

Chief
Cost Recovery Section (6SF-AC)
Superfund Division
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

Chief
Superfund Branch (6RC-S)
Office of Regional Counsel
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202-2733

As to ODEQ

Scott Thompson
Director, Waste Management Division
Oklahoma Department of Environmental Quality
707 North Robinson, P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677

As to Respondent

The City of Henryetta
Attention: City Manager
115 South 4th St.
Henryetta, Oklahoma 74437

XIV. PUBLIC COMMENT

46. This Consent Order shall be subject to a thirty day public comment period pursuant to Section 122(i) of CERCLA, 42 U.S.C. § 9622(i). In accordance with Section 122(i)(3) of CERCLA, 42 U.S.C. § 9622(i)(3), the EPA may withdraw its consent to this Consent Order if comments received disclose facts or

considerations which indicate that this Consent Order is inappropriate, improper or inadequate.

XV. ATTORNEY GENERAL APPROVAL

47. This Consent Order shall be subject to prior written approval of the Attorney General of the United States. In the event that this Consent Order is disapproved by the Attorney General, this Consent Order shall be null and void.

XVI. EFFECTIVE DATE

48. The effective date of this Consent Order shall be the date upon which the EPA issues written notice to the Respondent and ODEQ that the public comment period pursuant to Paragraph 46 of this Consent Order has closed and that comments received, if any, do not require modification of or EPA withdrawal from this Consent Order, and that this Consent Order has been approved by the Attorney General.

IT IS SO AGREED AND ORDERED:

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

By: Myron O. Knudson
Myron O. Knudson, P.E.
Director, Superfund Division
U.S. EPA, Region 6

9/6/00
Date

IN RE: THE CITY OF HENRYETTA
CERCLA DOCKET NO. 6-05-2000

FOR THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY:

By: Mark S. Coleman

Mark S. Coleman
Executive Director
Oklahoma Department of Environmental Quality

3-28-00

Date

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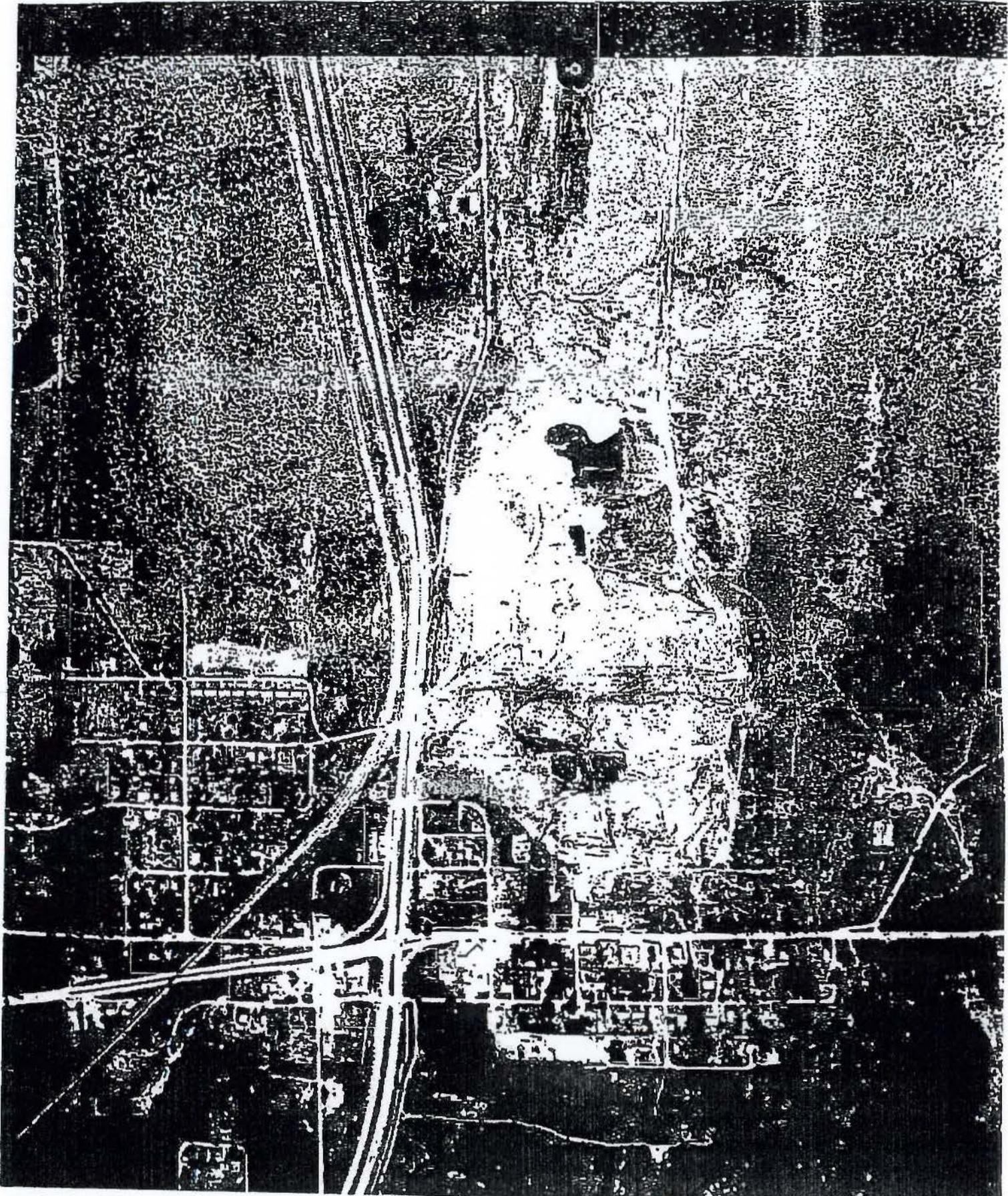
IN RE: THE CITY OF HENRYETTA
CERCLA DOCKET NO. 6-05-2000

APPENDIX A

ADMINISTRATIVE ORDER ON CONSENT
U.S. EPA DOCKET NO. 6-05-2000

SITE DEPICTION

APPENDIX A



APPENDIX B

ADMINISTRATIVE ORDER ON CONSENT
U.S. EPA DOCKET NO. 6-05-2000

OPERATION AND MAINTENANCE PLAN

APPENDIX B

OPERATION AND MAINTENANCE PLAN FORMER EAGLE-PICHER SMELTING FACILITY Henryetta, Oklahoma

The following is a plan for the operation and maintenance (O&M) of the environmental response action at the former Eagle-Picher Industries Smelting Facility (EPMS), located at the northeast intersection of Highway 75 and Highway 266 in Henryetta, Oklahoma. The primary goal of an O&M plan is to prevent erosion of the cover material and exposure of hazardous materials by maintaining a vegetative cover and erosion control measures. The soil cover needs to be inspected at least twice per year for the first five years, then at least annually thereafter. It must be inspected immediately following a heavy rainfall event. Specific O&M activities are recommended for the various remediated areas throughout the EPMS. The main areas of the EPMS are discussed below.

The Central Plateau (CP) encompasses approximately 31 acres of level terrain, including 2 acres occupied by a business, Permocast. Slopes range from zero to 1 percent. The level terrain of the CP may be suitable for future commercial development.

The Consolidated Waste Area (CWA), north of the CP, encompasses approximately 6.5 acres. It consists of a nearly level plateau of approximately 3 acres, with 3.5 acres of relatively steep north and west facing slopes. The slopes range from 5:1 to 2:1. The entire CWA is unsuitable for future construction development because of the highly contaminated materials buried there.

Some of the material buried in the CWA is rich in minerals of ore grade quality. If it is removed for processing, all health and safety precautions must be observed. After excavation, the remaining waste must be buried again, capped to reduce infiltration, and revegetated to prevent erosion.

A 1.5 acre sediment basin in the north central area of the EPMS site collects surface runoff, which then flows through a pipe to discharge into a natural drainage north of the EPMS.

East of the sediment basin is an area of approximately 8 acres previously used as a stockpiling and loan-out area for a coal shipping business. Shallow ponds in the area collected coal fines and other sediments when the business was active. During site remediation, fine sediments with unconsolidated structure were observed to a depth of at least 15 feet within the area. The sediments were not laboratory tested to identify possible contaminants. The ponds were backfilled, and the area is now level, but the buried sediments make it an undesirable site for future development.

Another backfilled pond is situated at the north side of the EPMS. This North (Coal Fines) Pond encompasses approximately 6.5 acres, and contains unconsolidated coal fines and other sediments to a depth of at least 15 feet. During remediation efforts, the

