
**EPA Superfund
Explanation of Significant Differences for
the
Record of Decision:**

**Tar Creek Superfund Site Operable Unit 4
Ottawa County, Oklahoma
April 2010**

EXPLANATION OF SIGNIFICANT DIFFERENCES

I. INTRODUCTION

Site Name and Location:

Tar Creek Superfund Site, Operable Unit 4 – Chat Piles, Other Mine and Mill Waste, and Smelter Waste
Ottawa County, Oklahoma

Lead and Support Agencies:

U.S. Environmental Protection Agency (EPA) - Lead Agency
Kansas Department of Health and Environment (KDHE) - Support Agency

Statute and Regulation that Requires Explanation of Significant Differences (ESD):

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 117(c), 42 U.S.C. § 9617(c), and the National Oil and Hazardous Substances Contingency Plan (NCP) at 40 CFR § 300.435(c)(2)(i).

Purpose of ESD:

The purpose of this document, called an Explanation of Significant Differences or ESD, is to explain significant changes that have occurred in one of the operable unit¹ remedies selected to address contamination at the Tar Creek Superfund Site (the “Site”). Specifically, this ESD says that EPA will offer relocation to the residents of Treece, Kansas, as part of its remedy for Operable Unit 4 (OU4) of the Site. This relocation includes both residential and business properties.

In 2007, Congress provided EPA with an exemption from the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA) for Oklahoma Site residents.² This exemption enabled EPA to relocate Oklahoma Site residents at a much lower cost. As explained in EPA’s OU4 Record of Decision³ (ROD) (February 2008) and as explained below, with this

¹ The NCP, 40 CFR Section 300.5, defines an operable unit as a discrete action that comprises an incremental step toward comprehensively addressing site problems. This discrete portion of a remedial response manages migration, or eliminates or mitigates a release, threat of a release, or pathway of exposure. The cleanup of a site can be divided into a number of operable units, depending on the complexity of the problems associated with the site.

² See Water Resources Development Act of 2007 (WRDA), Public Law 110-114, at Section 3135 (Effective November 8, 2007).

³ See EPA’s Record of Decision, Operable Unit 4, Chat Piles, Other Mine and Mill Waste, and Smelter Waste, Tar

2007 URA exemption, EPA decided that it would make the OU4 remedy more cost-effective if the Site residents living near the greatest concentration of large chat piles were relocated. Consequently, EPA's selected remedy documented in the 2008 ROD for OU4 includes voluntary relocation for these Oklahoma residents.

The residents of Treece, Kansas also live near this concentration of large chat piles, and now Congress has provided EPA with an exemption from the URA for the relocation of Treece residents.⁴ Consequently, EPA has decided that it is cost effective to also offer Treece residents the opportunity to relocate. Similar to the relocation performed for the towns of Picher, Cardin and Hockerville, relocation for Treece will also be voluntary. Once residents are relocated, EPA has determined that the vacated homes in Treece will be demolished so that other people do not move into the area. Depending on the number of residents who participate in the voluntary relocation, municipal services such as water and sewer service may not be readily available to residents who remain.

EPA documented its remedy for OU4 in a February 2008, ROD. As explained in the ROD, piles of gravel-like milling waste called "chat" are some of the principal sources of lead contamination on the Site. Chat makes an excellent road construction material, and it has other safe uses as well when managed according to the criteria provided in the Chat Rule, 40 CFR Part 278, and its preamble; consequently, as part of the remedy selected in the OU4 ROD, EPA is encouraging chat sales for safe uses as a cost-effective way to remove chat from the Site.

Supported by requests from the State of Oklahoma, the Quapaw Tribe of Oklahoma and the community, EPA's goal is to prevent another generation of residents living near the source materials⁵ from being exposed to lead contamination. In EPA's July 30, 2007, Proposed Plan for OU4⁶ our preferred alternative did not include relocation of Site residents because EPA determined it was not cost effective. Without relocation, EPA decided that the remedial action, including chat sales, had to be completed in 20 years in order to prevent exposing another generation.

On November 8, 2007, however, the Water Resources Development Act of 2007 (WRDA), Public Law 110-114, became law. Section 3135 of WRDA is specific to Ottawa County, Oklahoma and it exempted relocation of the Site residents from the URA and its costs. With the

Creek Superfund Site (February 2008) at Section 16.0 (Description of Alternatives).

⁴ On October 29, 2009, H.R. 2996: Department of the Interior, Environment, and Related Agencies Appropriations Action, 2010 became Public Law 111-88. Section 430 of P.L 111-88 exempts EPA relocation of the residents of Treece, Kansas from the URA.

⁵ "Source material," as used in the OU4 Record of Decision, means mine and mill waste including chat, fine tailings, overburden, development rock, smelter waste and other tailings. Source material is generally found in chat piles, chat bases (the area once occupied by a chat pile), smelter wastes, and tailings ponds.

⁶ EPA's Proposed Plan for the Site (July 30, 2007) was made available to the public for comment in July 2007. The Proposed Plan can be found in the information repositories maintained with ODEQ Central Records at the Oklahoma City Office, at the Miami, Oklahoma, Public Library, and at EPA's offices in Dallas, Texas (document repository addresses and contact information appear below in this ESD).

cost savings provided by WRDA, EPA decided that it would be cost-effective to relocate the Oklahoma residents on the Site who live near the large concentrations of contaminant source material (*i.e.*, the large concentration of chat piles in the core of the Site). EPA determined relocation of those Oklahoma residents would be cost effective in part because, with the residents relocated, EPA could extend the remedial action, and allow chat sales to continue for an additional ten years. This ten-year extension meant that certain planned activities would take place later in the remedial action, and, when spending happens later, there are savings associated with the increased value of money over time. In addition, the more chat that is addressed through chat sales, instead of other more costly cleanup measures, the less expensive the remedy becomes. Now that Congress has made EPA's relocation of Treece residents exempt from the URA requirements, EPA determined that it would be cost effective to offer voluntary relocation to the Treece residents.

In the National Contingency Plan (NCP) at 40 CFR § 300.435(c)(2), EPA has developed an administrative process which balances the public's continuing need for information about, and input into, post-ROD remedial action decisions, with EPA's need to move forward expeditiously with design and implementation of the remedy after fundamental decisions have been made in the ROD. 55 Fed. Reg. 8666, 8772 (March 8, 1990). After a ROD is issued by EPA, if the remedial action taken differs significantly from the remedy selected in the ROD, but does not fundamentally alter the remedy selected in the ROD, EPA notifies the public that an Explanation of Significant Difference (ESD) is available as part of the administrative record.⁷ While the ESD is being prepared and made available to the public, the EPA may proceed with the remedy.⁸

EPA's decision to offer voluntary relocation to the residents of Treece is not a fundamental change to the ROD. As described above, EPA's OU4 ROD already explained why relocation of Oklahoma residents under a congressionally-provided exemption from the URA was cost-effective and consistent with the NCP. Now we are making the same remedial decision with respect to the residents of Treece. This scope of the voluntary relocation differs significantly from the remedy described in the OU4 ROD, but it does not fundamentally alter the remedy.

The authority for the remedial action described in this Explanation of Significant Differences has been delegated to the Director of the Superfund Division, EPA, Region 6.

Administrative Record:

This ESD will become part of the Administrative Record for Tar Creek OU4. The Administrative Record is available to the public for review during regular business hours at the following two locations:

⁷ See 40 CFR § 300.435(c)(2)(i).

⁸ See A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents, OSWER Directive 9200.1-23P (July 1999) at p. 7-2.

Miami Public Library
200 N. Main Street
Miami, Oklahoma 74354
(918) 542-3064

Johnston Public Library
210 West 10th Street
Baxter Springs, KS
(620) 856-5591

II. SUMMARY OF SITE HISTORY, CONTAMINATION PROBLEMS, AND SELECTED REMEDY

Tar Creek Operable Unit 4

Site History

The first ore discoveries and earliest mining operations in Ottawa County, Oklahoma occurred in the vicinity of Peoria (6 miles east and 1 mile south of Lincolnvilleville) in 1891. The next major ore discoveries occurred 1.5 miles northeast of Lincolnvilleville near Quapaw in 1902, followed by discoveries in 1905 near Commerce. The real expansion of zinc and lead mining at the Site occurred after a major ore discovery in 1914 near the current site of Picher, Oklahoma. Following this discovery, there was a major expansion of mining in what became known as the Picher Mining Field (Picher Field) of Oklahoma and Kansas. By 1918, the Oklahoma section of the Picher Field was well defined by producing mines, with 230 mills built or under construction.

Depletion of high-grade ores caused a marked decline in annual production after 1946, and depressed metal-market prices forced a cessation of most mining activities in 1958. The last record of significant production from Ottawa County occurred in 1970.

With few exceptions, the crude ore produced at the Site was mined utilizing underground mining methods. Based on production records maintained by the U.S. Department of Interior, Bureau of Mines, a total of 181,048,872 tons of crude ore was produced from the Oklahoma portion of the District. Milling of this ore produced 8,884,898 tons of zinc concentrates and 1,686,713 tons of lead concentrates. With the exception of a limited amount of lead concentrates treated at the Ontario Smelter, all of the concentrates produced from the Site were transported off-Site for the conversion of the concentrates to metal by smelting.

The wastes from the mining operations were discarded mining and milling tailings. The mill tailings, locally known as chat, are primarily composed of small chert fragments, intermingled with sand-sized particles. After the excavated rock was processed and the metal ore extracted, the mining tailings that remained were deposited into piles that were up to 200 feet in height. Many of these chat piles remain on the Site, including some piles

which are over 100 feet high. An inventory conducted in 2005 as part of the Remedial Investigation for OU4 identified 83 chat piles occupying 767 acres with 31 million cubic yards, 243 chat bases (or former piles) occupying 2079 acres with an estimated 6.7 million cubic yards.

In addition to piles of mining wastes, a large but lesser quantity of floatation pond tailings from the floatation milling process was produced. Most of the floatation ponds have since evaporated leaving behind very fine mining waste sediment which remains on the Site. Fine tailings generated from milling and washing chat are currently found in 63 ponds occupying 820 acres and total approximately 9 million cubic yards.

Over the years, the mining wastes have been used and continue to be used for a variety of unsafe purposes including the following: railroad ballast; sandblasting sand; sandbag sand; roadway, driveway, alleyway, and parking lot aggregate; general fill material in residential areas; and impact-absorbing material in playgrounds. EPA describes acceptable uses of chat, including use in hot mix asphalt, in its ROD for OU4 and in the Chat Rule, 40 CFR Part 278.

The Site first came to the attention of the State of Oklahoma and EPA in 1979 when acid mine drainage began flowing to the Site surface from underground mines through abandoned mine shafts and boreholes. The Governor of Oklahoma formed the Tar Creek Task Force to investigate the effects of acid mine drainage on the area's surface and ground water. Based upon the information discovered by the Tar Creek Task Force, EPA proposed, in July 1981, to add the Site to the Superfund National Priorities List (NPL), 40 CFR Part 300, Appendix B. The NPL means the list, compiled by EPA pursuant to CERCLA section 105, of uncontrolled hazardous substance releases in the United States that are priorities for long-term remedial evaluation and response. The Site was added to the NPL in September 1983.

Contamination

Mining and milling operations have resulted in the accumulation of large volumes of chat and fine tailings on the Site. These waste materials are found in chat piles, chat bases (a "chat base" is an area once occupied by a chat pile), haul roads, railroad grades and tailings ponds (a "tailings pond" is an area where a mill or a chat washing operation has discharged water contaminated with fine tailings waste) at various locations throughout OU4 of the Site. These mine and mill wastes contain elevated levels of lead, zinc and cadmium. The media surrounding these accumulations were also evaluated including soils, surface water and ground water.

Chat is a type of waste tailings produced by the gravity separation milling process once used in the Tri-State Mining District. Chat consists of coarse gravel intermingled with other material such as medium to fine sands, silt and clay. The highest concentrations of lead in chat are generally found in the fine tailings material. A total of 83 chat piles covering a total area of 767.05 acres and with a total volume of 31.32 million cubic yards

were identified. The concentration of cadmium in the chat ranged from 43.1 milligrams per kilogram (mg/kg) or parts per million (ppm) to 199.0 mg/kg with an average of 94.0 mg/kg. Lead in these samples ranged from 210 mg/kg to 4,980 mg/kg with an average concentration of 1,461 mg/kg. Zinc ranged from 10,200 mg/kg to 40,300 mg/kg with an average concentration of 23,790 mg/kg.

A chat base is an area that was once occupied by a chat pile. Chat bases can be covered with vegetation or are sometimes found bare. There are 243 chat bases identified at the Site, covering a total area of 2,079.26 acres. The concentration of cadmium in the chat bases ranged from 51.0 mg/kg to 151.0 mg/kg with an average of 96.2 mg/kg; lead concentrations ranged from 650 mg/kg to 3,020 mg/kg with an average concentration of 1,863 mg/kg; and zinc concentrations ranged from 9,520 mg/kg to 40,300 mg/kg with an average of 33,600 mg/kg.

Two types of fine tailings were identified: 1) fine tailings generated as a waste during washing of chat, and 2) flotation tailings generated as a waste during the metal extraction process or milling. A total of 63 tailings ponds covering a total area of 820.47 acres were defined. Based on field drilling and mapping, it was estimated there were 7.21 million cubic yards of washed fine tailings and 1.95 million cubic yards of flotation tailings at the Site. The concentration of cadmium in the washed fine tailings ranged from 10.0 mg/kg to 320.0 mg/kg with an average concentration of 79.7 mg/kg; lead concentrations ranged from 220 mg/kg to 26,600 mg/kg with an average concentration of 3,658 mg/kg; and zinc concentrations ranged from 1,730 mg/kg to 70,000 mg/kg with an average concentration of 15,964 mg/kg.

The concentration of cadmium in the flotation tailings ranged from 26.3 mg/kg to 450.0 mg/kg with an average concentration of 133.0 mg/kg; lead concentrations ranged from 1,130 mg/kg to 17,800 mg/kg with an average concentration of 5,694 mg/kg; and zinc concentrations ranged from 4,690 mg/kg to 103,000 mg/kg with an average concentration of 29,842 mg/kg. With few exceptions, flotation tailings contain higher cadmium, lead, and zinc concentrations than washed fine tailings.

Selected Remedy

The Selected Remedy for Tar Creek Operable Unit 4 (OU4) is Voluntary Relocation, Phased Consolidation, Chat Sales and On-site Disposal. Based on State, Tribal and community concerns as well as changes in the cost effectiveness of relocation following the enactment of Water Resources Development Act of 2007 (WRDA), EPA included relocation in its Selected Remedy for the Site. As explained above, relocating the residents who are facing the greatest risk of exposure allowed EPA to extend the timeframe for chat sales to 30 years in its Selected Remedy.

The Selected Remedy addresses source materials, rural residential yard contamination, transition zone soil contamination, and contamination in water drawn from rural

residential wells.

The Selected Remedy utilizes various elements, including the following:

PHASE 1

Phase 1 addressed voluntary relocation of residents, chat sales, and Phase 1 will address source materials in a manner that will reduce the overall footprint of contamination and reduce the need for land use restrictions, institutional controls, and operation and maintenance. The following are

Phase 1 actions:

- Residents located in Picher, Cardin and Hockerville have been offered the opportunity to relocate following the procedures and priorities established by the Lead Impacted Communities Relocation Assistance Trust (LICRAT).
- Chat and chat bases from distal areas,⁹ including associated historic chat covered haul roads and non-operating railroad grades, will be excavated to the underlying native soil, transported and released to an on-site chat processor or future processing location located in a previously contaminated area of the Site, injected into mine workings, or disposed in an on-site repository.
- Transition zone soils (soils around and underneath source materials) will be addressed by excavation followed by natural soil rebuilding.
- Smelter wastes will be excavated and disposed in an on-site repository. Smelter affected soils will be managed in the same manner as transition zone soils.
- Fine tailings will be injected into mine workings or covered in place. The covered fine tailings may be consolidated to reduce the footprint of the final cover.
- Source material in Tar, Lytle, Elm or Beaver Creek or other Site waterways, will be addressed on a priority basis through either excavation and/or the installation of a flexible membrane liner, as needed as determined by EPA. As an interim measure, sheet piling, berms, constructed wetlands, or other engineering controls will be installed for near-stream source materials to help prevent contamination from migrating to surface water.
- An alternative water supply will be provided to any household where mining-related contaminants in water drawn from rural residential wells exceed 0.015 mg/L for lead for rural households. Rural households that are within the area that has been designated for relocation under the Lead Impacted Communities Relocation Assistance Trust (LICRAT) relocation program, but which do not elect to participate in the relocation program, would be included in the households eligible for an alternative water supply (estimated two residences).
- Rural residential yards that are found to have concentrations of soil lead that exceed 500 ppm will be excavated to a maximum depth of 12 inches, and the excavated area will be backfilled with clean soil, contoured to promote drainage and revegetated.

⁹ "Distal Areas" generally means those areas located outside the high density mining areas and includes rural areas as shown in Figure 3 of the OU4 ROD.

This includes residential yards that are identified for relocation. The provisions of the preceding sentence apply to approximately 4 households, based on the RI sampling. That is, if those eligible for relocation decide not to relocate, their yards will be remediated.

- On-site repositories will be constructed to accept Site source materials for final disposal. On-site repositories will be closed when they reach capacity or at completion of the remedial action. Closure will be accomplished by covering the repository with a soil cover, contoured to promote drainage, and revegetated.

PHASE 2

Phase 2 addresses certain source areas that remain after Phase 1 cleanup activities. These areas may include chat bases, tailings ponds, unmarketable chat piles and bases, and remaining chat from distal area consolidation. Chat sales will continue.

- The remedy will be reviewed, at a minimum, every five years since hazardous substances remain on-site with concentrations that exceed concentration levels that allow for unrestricted use and unrestricted exposure. The remedy will be reviewed to ensure protection of human health and the environment. As part of the five-year review, EPA will evaluate the progress of chat sales. Chat piles and bases remaining after 10 years will be evaluated for commercial viability. This determination will be made using input from the chat/land owners, appropriate tribal representatives, and the commercial operators.
- Unmarketable chat piles and bases will be excavated, transported and released to an on-site chat processor or future processing location in a previously contaminated area of the Site, injected into mine workings, or they will be disposed in an on-site repository.
- Abandoned chat haul roads and non-operating railroad grades that are contaminated will be managed the same as unmarketable chat piles and bases. That is, they will be excavated, transported to an on-site chat processor, and released to that processor, or they will be disposed in an on-site repository.
- Institutional controls and operation and maintenance activities will be implemented, as needed as determined by EPA, at repositories and covered, fine tailings ponds.
- Environmental monitoring will be conducted, as needed as determined by EPA, to test for contamination in ambient and near source air, surface water, ground water, and sediment during remediation activities.

The remedial action that EPA is taking on OU4 conforms to the ROD as described above. As explained in this document, the significant differences in the remedial action, as described in this draft ESD, relate to the voluntary relocation of residents of Treece, Kansas. None of these differences fundamentally change the selected remedy.

Cherokee County Operable Unit 4 – Treece Subsite

The Cherokee County Superfund site is located in the extreme southeast portion of the state of

Kansas and encompasses an area of approximately 115 square miles. EPA divided the Cherokee County site into seven operable units. The Treece subsite, which covers approximately 11 square miles, is one of the six subsites which make up the Cherokee

County, Kansas Superfund site and is designated as Operable Unit 4 of the Cherokee County site. Operable Unit 4 of the Cherokee County site is part of the former Picher mining field which is centered near the town of Picher, Oklahoma. The Picher mining field extended northward from Oklahoma into southeastern Kansas and was one of the most productive lead and zinc mining areas in the United States. The Treece subsite is part of the larger Tri-State Mining District which covers approximately 500 square miles in southeast Kansas, southwest Missouri, and northeast Oklahoma.

The town of Treece, Kansas is located immediately north of the Oklahoma state line and approximately ½ mile west of Highway 69. The 2008 population estimate for Treece is 139 individuals, and recent press reports list the population as approximately 100 residents. There are numerous chat piles and chat bases located within 1/10 of a mile of Treece. Similar to residents in Picher, Cardin, and Hockerville, residents in Treece are located in areas with concentrated sources of potential exposure.

Waste at Cherokee County Operable Unit 4 consists of mining waste including development rock, waste rock, chat and fine grained flotation impoundment tailings. The mine wastes contain heavy metals at concentrations above natural background soil levels. The metals which are the contaminants of concern include cadmium, lead, and zinc.

In August 1997, EPA signed a ROD to address the mining waste at two of the Cherokee County site operable units. The Operable Units addressed in the Cherokee County 1997 ROD were OU-3 (Baxter Springs subsite) and OU-4 (Treece subsite). An Amended Record of Decision for OU3 and OU4 of the Cherokee County site was signed by EPA in September 2006.

The major components of the selected remedy for Baxter Springs and Treece include the following actions,

- Excavate, consolidate, and/or cap all surficial mine waste followed by disposal and capping.
- Utilize subaqueous mine waste disposal to the maximum extent practicable.
- Encourage source reduction via responsible chat sales before and during remedy implementation.
- Adopt Institutional Controls for future development specified in an earlier ROD

EPA anticipates that these actions will take eight to ten years to implement. With respect to the release in Cherokee County, this time frame is consistent with the goal described in the Tar Creek OU4 ROD which is to prevent another generation of residents living near the source materials from being exposed.

The residents of Treece, however, remain very close to the release in Ottawa County. The huge Ottawa County Oklahoma chat piles will remain an attractive nuisance to

children and adolescents for up to 30 years because the Tar Creek OU4 ROD calls for chat sales to proceed over a period of about 30 years. Consequently, EPA will be permanently relocating Treece residents (on a voluntary basis). As explained in the OU4 ROD, relocation of the residents will enable EPA to extend the remedial action, and allow chat sales to continue for an additional ten years, making this aspect of the remedy cost effective.

III. DESCRIPTION OF THE SIGNIFICANT DIFFERENCES AND THE BASIS FOR THE DIFFERENCES:

The purpose of this ESD is to explain that there have been significant changes in the remedial action selected for OU4 of the Tar Creek Site, and to provide the reasons that these changes were made.

In 2007, Congress provided EPA with an exemption from the Uniform Relocation and Real Property Acquisition Policies Act (URA) for Oklahoma Site residents.¹⁰ This exemption enabled EPA to relocate Oklahoma Site residents at a much lower cost. As explained in EPA's OU4 Record of Decision¹¹ (ROD) (February 2008) and as explained above,¹² with this URA exemption, EPA decided that it would make the OU4 remedy more cost-effective if the Site residents living near the greatest concentration of large chat piles were relocated. Consequently, EPA's selected remedy documented in the 2008 ROD for OU4 includes voluntary relocation for these Oklahoma residents.

The residents of Treece, Kansas also live near this concentration of large chat piles, and now Congress has provided EPA with an exemption from the URA for the relocation of Treece residents.¹³ Consequently, EPA has decided that it is cost effective to also offer Treece residents the opportunity to relocate. Relocation for Treece will also be voluntary because EPA understands that some residents may wish to remain in their homes for a period of time. Once residents are relocated, EPA has decided that the vacated homes in Treece will be demolished so that others do not move into the area. Depending on the number of residents who participate in the voluntary relocation, municipal services such as water and sewer service may not be readily available to residents who remain. KDHE will file an Environmental Use Control (EUC) as authorized in Kansas Statute Annotated (K.S.A.) 65-1, 221 through 65-1, 235 on property acquired by the Treece Relocation

10 See Water Resources Development Act of 2007 (WRDA), Public Law 110-114, at Section 3135 (Effective November 8, 2007).

11 See EPA's Record of Decision, Operable Unit 4, Chat Piles, Other Mine and Mill Waste, and Smelter Waste, Tar Creek Superfund Site (February 2008) at Section 16.0 (Description of Alternatives).

12 See Section I (Introduction)

13 On October 29, 2009, H.R. 2996: Department of the Interior, Environment, and Related Agencies Appropriations Action, 2010 became Public Law 111-88. Section 430 of P.L 111-88 exempts EPA relocation of the residents of Treece, Kansas from the Uniform Relocation Act requirements.

Assistance Trust. The EUCs are an institutional control that is a legal means of restricting or prohibiting human activity and property use to prevent or reduce exposure to contamination and will be compatible with the remedy selected in the ROD. The anticipated EUC includes preventing future occupancy of the property. The State will be the responsible agency for implementation and enforcement of this institutional control.

The following elements define the voluntary relocation component for Treece:

- Relocation assistance shall be provided as outlined by the State of Kansas, and authorized in Kansas Statute Annotated (K.S.A.) 49-511 through 517. A public trust created by the State of Kansas, K.S.A. 49-512, shall administer relocation assistance. The trust shall also hold and dispose of acquired property.
- The Kansas Department of Health and the Environment (KDHE) will fund the trust using money provided by EPA through a cooperative agreement with KDHE.
- The estimated number of properties being considered for the trust buyout program is approximately 77. Residential and business properties are included.
- Structures that remain after residents have been relocated will be removed or demolished and disposed by the public trust.
- EPA will not acquire property under this relocation program. Final disposition of the properties will be determined by the Kansas public trust.
- The estimated cost to EPA will be approximately \$3,500,000, itemized as follows:

Property replacement	\$2,657,770
Moving expenses	\$ 74,000
Family rent compensation	\$ 72,000
Business rent compensation	\$ 24,000
Demolition costs	\$ 265,000
Contracting costs	\$ 100,000
Subtotal	\$3,192,770
5% Contingency	\$ 159,639
KDHE Agency Costs	\$ 147,591
Total	\$3,500,000

Note: The projected cost is based on an order-of-magnitude engineering cost estimate that is expected to be within +50 or -30 percent of the actual project cost.

This change increases the revised total estimated cost of the OU4 ROD by approximately two percent, as follows:

Activity	Alternative 5	ESD	Total
Voluntary Relocation	569	77	646
Present Worth	\$167,288,000	\$3,500,000	\$170,788,000

Note: The projected cost is based on an order-of-magnitude engineering cost estimate that is expected to be within +50 or -30 percent of the actual project cost.

IV. SUPPORT AGENCY COMMENTS

A letter of concurrence from the Kansas Department of Health and the Environment is included as Attachment A.

V. PUBLIC PARTICIPATION ACTIVITIES

Although a formal comment period is not required when issuing an ESD, EPA issued the ESD in draft form to allow for public review and comment. Written comments were accepted between February 12, 2010 and March 15, 2010. In addition, EPA held a formal public meeting on March 8, 2010, to present the ESD to the public. A responsiveness summary documenting EPA's responses to questions and comments raised during the comment period are included as Attachment B.

As required by the NCP, EPA will publish a notice of availability and a brief description of this ESD in a major local newspaper of general circulation following the signing of this ESD,

In accordance with Section 117(d) with CERCLA and Section 300.825(a) of the NCP, this ESD will become part of the Site's Administrative Record which is available for public review at the locations identified previously in this document.

VI. STATUTORY DETERMINATIONS

The significant changes to the remedial action include the addition of provisions that call for:

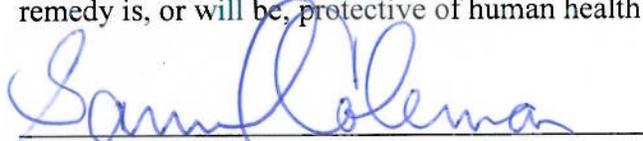
- 1) the voluntary relocation of the residents of Treece, Kansas, including both residential and business properties;
- 2) the demolition and disposal of structures (approximately 77) vacated by residents who relocate;
- 3) an estimated increase in the cost of the remedy for OU4 of approximately \$3,500,000

The remedy selected in the 2008 OU4 ROD remains fundamentally unaltered and the statutory determinations made in the ROD still apply:

The Selected Remedy is protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, is cost effective, and utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable.

High concentrations of lead are addressed under the Selected Remedy; however, the concentrations of lead are not so high as to be several orders of magnitude above levels that allow for unrestricted use and unlimited exposure. Therefore, the lead is not considered to be a principal threat under the NCP; consequently, there is no expectation under the NCP that the lead be treated.

Because this remedy will result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unrestricted use and unrestricted exposure, a statutory review will be conducted within five years after initiation of the remedial action to ensure that the remedy is, or will be, protective of human health and the environment.



Samuel Coleman, P.E.
Director
Superfund Division

13 April 2010
Date

Attachment A – Concurrence Letter



Mark Parkinson, Governor
Roderick L. Bremby, Secretary

DEPARTMENT OF HEALTH
AND ENVIRONMENT

www.kdheks.gov

April 12, 2010

Mr. Gary Baumgarten
U.S. EPA Region 6 (6SF-RA)
1445 Ross Avenue
Dallas, TX 75202-2733

The Kansas Department of Health and Environment (KDHE) reviewed the United States Environmental Protection Agency's (USEPA) Superfund Explanation of Significant Differences (ESD) for the Record of Decision: Tar Creek Superfund Site Operable Unit 4, Ottawa County, Oklahoma, April 2010. KDHE appreciates the efforts of USEPA in helping this project move forward to protect the citizens of Treece, Kansas who voluntarily choose to take part in the relocation efforts.

KDHE concurs with the determinations stated in the ESD and looks forward to working with USEPA and the Treece Relocation Assistance Trust to successfully complete the Treece Relocation Project. Please feel free to contact KDHE's Program Manager, Bob Jurgens at 785-296-1914 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Roderick L. Bremby", is written over a printed name.

Roderick L. Bremby
Secretary
Kansas Department of Health & Environment

cc: File: Cherokee County Superfund Site, Treece Subsite OU-4, C3-011-00032 (1 - Treece Buyout)

Attachment B – Responsiveness Summary

**Summary and Response to Specific Legal and Technical Questions on the Explanation of Significant Differences
Tar Creek Superfund Site Operable Unit 4 Ottawa County, Oklahoma February 2010**

Comment 1: We believe you are doing what you think is best for the Superfund site in the way of returning the area to a safe environmental location. What is the future plan to maintain it? How large of an area does the buyout cover?

Response: Once residents are relocated, EPA has decided that the vacated homes in Treece will be demolished so that others do not move into the area. The Kansas Department of Health and Environment (KDHE) will file an Environmental Use Control (EUC) as authorized in Kansas Statute Annotated (K.S.A.) 65-1, 221 through 65-1, 235 on property acquired by the Treece Relocation Assistance (TRA) Trust. The EUCs are institutional controls that are legal means for restricting or prohibiting human activity and property use to prevent or reduce exposure to contamination. The EUCs will be consistent with the remedy selected in the Record of Decision (ROD). The anticipated EUCs include provisions that will prevent the property from being occupied in the future.

EPA will not acquire property under this relocation program. Final disposition of the properties will be determined by the TRA Trust.

Comment 2: The Tar Creek OU4 Record of Decision shows a cost of \$137,000,000 for the cleanup and \$3,500,000 to replace the lives of residents. The numbers do not add up and is a waste of money.

Response: The Selected Remedy described in the OU4 Record of Decision (ROD) is cost-effective because the remedy's costs are proportional to its overall effectiveness (see 40 CFR §300.430(f)(1)(ii)(D)). This determination was made by evaluating the overall effectiveness of various remedial alternatives that satisfied the threshold criteria described in the National Contingency Plan (i.e., that are protective of human health and the environment and comply with all Federal and any more stringent State ARARs). Overall effectiveness was evaluated by assessing three of the five balancing criteria in combination (long-term effectiveness and permanence; reduction in toxicity, mobility, and volume through treatment; and short-term effectiveness). The overall effectiveness of each alternative was then compared to each alternative's costs to determine cost-effectiveness. The relationship of the overall effectiveness of the Selected Remedy described in the ROD was determined to be proportional to its costs and, consequently, that remedy was found to represent a reasonable value for the money to be spent. As explained in section 20.3 (Cost-Effectiveness) of the ROD, the selected remedy is also the least expensive of the action alternatives, comparing present values.

Comment 3: If the \$3,500,000 is not enough to complete the buyout, can EPA get additional

money?

Response: The \$3,500,000 is an estimate for the cost of the relocation. EPA Superfund cost estimates are expected to be accurate within a range of +50 to -30 percent. If costs increase, EPA will reevaluate the situation and take appropriate action within its statutory and regulatory authority.

Comment 4: The intent of the Treece Relocation Project is to ensure Kansas residents affected by the former mining operations near Picher, Oklahoma and Treece, Kansas are relocated due to contamination concerns from the on-going remediation efforts and remaining chat piles. In addition, the loss of infrastructure associated with the Picher, Cardin, and Hockerville, Oklahoma relocation project will greatly limit services to residents in the community of Treece, Kansas. The boundaries of the Treece relocation area should not be limited to the Treece city limits. KDHE believes the buyout area boundaries should be determined by the Treece Relocation Assistance Trust and defined in the Trust's yet to be finalized business rules. Affected properties will be prioritized for funding prior to program implementation.

Response: On October 29, 2009, H.R. 2996: Department of the Interior, Environment, and Related Agencies Appropriations Action, 2010 became Public Law 111-88. Section 430(a) of the Public Law states: "As soon as practicable after the date of enactment of this Act, the Administrator of the Environmental Protection Agency (referred to in this section as the "Administrator") is encouraged to consider all appropriate criteria relating to the buyout and relocation of residents of properties in Treece, Kansas, that are subject to risk relating to, and that may endanger the health of occupants as a result of risks posed by chat (as defined in section 278.1(b) of title 40, Code of Federal Regulations (as in effect on the date of enactment of this Act)."

Comment 5 a: Setting aside the wisdom of EPA's decision to offer voluntary relocation to the residence of Treece, Kansas, it is not clear from the ESD why EPA has chosen to include this element within the remedy for OU4 at Tar Creek. None of the individuals to whom the voluntary relocation will be offered live within the boundaries of the Tar Creek Superfund Site. As set forth in the very first sentence of the ROD, "[t]he Tar Creek Superfund Site is located in Ottawa County, Oklahoma." But none of these individuals live in Ottawa County, Oklahoma. Instead, they all apparently live within the boundaries of a wholly separate site, the Cherokee County Superfund Site.

Response: Following the procedures in the National Contingency Plan, this ESD adds the residents of Treece to Operable Unit 4 (OU4) of the Tar Creek Superfund Site. So, while it is true that these residents were not originally part of the Site, they are now. With this ESD, EPA is expanding the definition of the Site to include Treece residents. Treece is within one mile of some of the biggest Tar Creek Superfund Site chat piles. Treece is also part of the Cherokee County Superfund Site, and EPA has conducted response actions in Treece to address the threats posed by contamination located in Kansas.

Comment 5 b: Because the residents of Treece, Kansas do not live within the boundaries of the Tar Creek Site, EPA does not have sufficient data and information within its Administrative Record to support its decision to include this action within the Tar Creek remedy. The Tar Creek OU4 Remedial Investigation did not gather or develop data relating to these residents or their properties. Nor did the Tar Creek OU4 Feasibility Study consider the cost effectiveness of offering voluntary relocation to residents of Treece, Kansas.

Despite these deficiencies, the ESD concludes, with no analysis or support, that "relocation of the residents will enable EPA to extend the remedial action and allow chat sales to continue for an additional 10 years, making this aspect of the remedy cost effective." It is not clear, and EPA fails to explain, how the voluntary relocation of residents of Treece, Kansas will impact the remedy for Tar Creek OU4. EPA did not consider the costs, let alone cost effectiveness, of relocating residents of Treece, Kansas when it analyzed the cost effectiveness of the Tar Creek OU4 remedy. In addition, EPA has already determined that the relocation of residents of Picher and Cardin alone, without relocating the residents of Treece, made the Tar Creek OU4 remedy cost effective. No apparent additional cost effectiveness will be provided by relocating the residents of Treece, Kansas, and EPA provides no information or data supporting its conclusion to the contrary.

Response: EPA's February 20, 2008, ROD for OU4 addressed Ottawa County, Oklahoma, and our decision to undertake voluntary relocation in Ottawa County was supported by requests from the State of Oklahoma, the Quapaw Tribe and the community, EPA's goal is to prevent another generation of residents living near the Tar Creek source materials from being exposed to lead contamination. In EPA's July 30, 2007, Proposed Plan for OU4 our preferred alternative did not include relocation of Site residents because EPA determined it was not cost effective. Without relocation, EPA decided that the remedial action, including chat sales, had to be completed in 20 years in order to prevent exposing another generation.

On November 8, 2007, however, the Water Resources Development Act of 2007 (WRDA), Public Law 110-114, became law. Section 3135 of WRDA is specific to Ottawa County, Oklahoma and it exempted relocation of the Site residents from the Uniform Relocation Act (URA) and its costs. With the cost savings provided by WRDA, EPA decided that it would be cost-effective to relocate the Oklahoma residents on the Site who live near the large concentrations of contaminant source material (i.e., the large concentration of chat piles in the core of the Site). EPA decided relocation of those Oklahoma residents would be cost effective because, with the residents relocated, EPA could extend the remedial action, and allow chat sales to continue for an additional ten years. This ten-year extension meant that certain planned activities would take place later in the remedial action, and, when spending happens later, there are savings associated with the increased value of money over time. In addition, the more chat that is addressed through chat sales, instead of other more costly cleanup measures, the less expensive the remedy becomes.

For some time, the State of Kansas and the community of Treece had been urging EPA to provide voluntary relocation to the residents of Treece. On October 29, 2009, H.R. 2996: Department of the Interior, Environment, and Related Agencies Appropriations Action, 2010 became Public Law 111-88. Section 430 of P.L 111-88 exempts EPA relocation of the residents of Treece, Kansas from the Uniform Relocation Act requirements. Now that Congress has made EPA's relocation of Treece residents exempt from the URA requirements, EPA decided that it would be cost effective to offer voluntary relocation to the Treece residents. Treece residents are located at approximately the same distance as Picher residents from the Tar Creek Superfund Site chat piles and fine tailings deposits, so it made sense to offer voluntary relocation, now that it was cost effective as explained in the ESD.

After a ROD is issued by EPA, if the remedial action taken differs significantly from the remedy selected in the ROD, but does not fundamentally alter the remedy selected in the ROD, EPA notifies the public that an Explanation of Significant Difference (ESD) is available as part of the administrative record. While the ESD is being prepared and made available to the public, the EPA may proceed with the remedy.

EPA's decision to offer voluntary relocation to the residents of Treece is not a fundamental change to the ROD. As described above, EPA's OU4 ROD already explained why relocation of certain Ottawa County residents under a congressionally-provided exemption from the URA was cost-effective and consistent with the NCP. Now we are taking essentially the same remedial decision with respect to the residents of Treece. Since this remedial decision regarding Treece residents was essentially the same as the decision regarding Ottawa County residents, there was no need to expend EPA resources to gather additional data. The cost-effectiveness of this action is documented in the ESD, which is based on the reasoning in the ROD which follows the NCP process. This action differs significantly from the remedy described in the OU4 ROD, but it does not fundamentally alter the remedy.

Comment 5 c: In addition, EPA has not explained how it determined the particular properties eligible for relocation, where those properties are located, or whether any of those properties have been the subject of previous removal and/or remediation activity within the Treece Subsite of the Cherokee County Superfund Site. For example, residential property remediation at the Treece Subsite was completed in 2000 by responsible parties pursuant to a consent decree. Non-residential remedial activities will be conducted by responsible parties pursuant to a second consent decree entered in 2009. EPA has offered no information or explanation supporting additional expenditure on property that has previously been determined to be remediated, much less why such expenditures should be attributed to the Tar Creek Site.

Response: On October 29, 2009, H.R. 2996: Department of the Interior, Environment, and Related Agencies Appropriations Action, 2010 became Public Law 111-88. Section 430(a) of the Public Law states: "As soon as practicable after the date of enactment of this Act, the Administrator of the Environmental Protection Agency (referred to in this section as the

“Administrator”) is encouraged to consider all appropriate criteria relating to the buyout and relocation of residents of properties in Treece, Kansas, that are subject to risk relating to, and that may endanger the health of occupants as a result of risks posed by, chat (as defined in section 278.1(b) of title 40, Code of Federal Regulations (as in effect on the date of enactment of this Act)).” In addition, Relocation assistance shall be provided as outlined by the State of Kansas, and authorized in Kansas Statute Annotated (K.S.A.) 49-511 through 517. As explained above in the immediately preceding response, EPA selected the residents of Treece for relocation when it became cost-effective to do so, based on the Congressional exemption from the URA. While remedial actions taken under the Cherokee County Superfund Site ROD address certain risks associated with the release of hazardous substances in Kansas, the likelihood of exposure to hazardous substance contamination in the nearby Tar Creek Superfund Site remained a threat. The voluntary relocation action described in the ESD will help eliminate this exposure threat.

Under the National Contingency Plan, a site includes the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action. It makes sense to include Treece as part of the Tar Creek Superfund Site response because the release of lead and other metals in chat and fine tailings located on the Tar Creek Superfund Site is the contamination of concern and Treece, which is in close proximity, is an area where the likelihood of exposure makes a response action necessary.

Comment 6: I am in favor of the offering to buy out residents of Treece, Kansas due to the life threatening and life-quality diminishing aspects from the mining operations. I have worked with families living in the Picher-Cardin area and feel we cannot ethically turn our backs on these other victims, and other generations.

Response: Comment noted.

Comment 7: With the recognition by EPA and the state of Kansas that there is little difference in conditions from Picher, Oklahoma and Treece, Kansas, with residents facing both the risk of subsidence and environmental exposures, it is a real relief that this action is being taken at this time, to offer the opportunity of voluntary buy-outs to residents. Residents in Picher fought and struggled to have a chance at buy-out, while the residents merely a mile away were saying little and wondering if anyone was connecting the dots that would ever include or even notice them.

I would like to commend the EPA for the genuine efforts made at the public meeting last week for Treece residents to answer all the questions asked by the citizens about how the buy-out would proceed. All of the staff from both EPA regions as well as the states' environmental departments were professional and showed a great deal of respect for each attendee. This effort will be protective of human health and should be included in the OU4 efforts.

Response: Comment noted.

Comment 8: Nothing was said about the dust that keeps coming into Treece from the work being done west of town.

Response: EPA continues to work with the construction contractors to ensure that the roads are wetted on a regular basis to prevent dust emissions. As part of an air monitoring program, EPA Region 7 has set up air monitoring equipment in the Treece area and the sampling results are provided to the residents during meetings with the community. The results from the air monitors show that the concentration of lead in the air is below the lead standard of 0.15 micrograms per cubic meter.

Comment 9: EPA has not adequately discussed the results from the blood lead testing that was conducted by EPA.

Response: Representatives from the Agency for Toxic Substances and Disease Registry (ATSDR) were in Treece in September 2009 doing blood lead testing. ATSDR tested 73 people who live in Treece. Fifty-seven of those tested were seven years and older and 16 were children that were six years of age and younger.

The results showed that there was one child who had what is considered to be an elevated blood lead level. Since this was a screening test, ATSDR contacted the child's parents and asked that the child be taken in for a more accurate test than the finger prick that was done in September 2009. The Centers for Disease Control says that blood lead concentrations of 10 micrograms per deciliter are associated with adverse health effects in children. Based on the blood testing conducted, two children were found to have blood lead levels of between five to 10 micrograms per deciliter.

Comment 10: A commenter noted that there has been nothing done to repair their property. The commenter noted problems with their foundation, water under the house, mold under and inside the house since their yard was cleaned up.

Response: EPA worked closely with the homeowners to address problems after their yard was cleaned up. If a yard was recently cleaned up, the owner should contact EPA to discuss the owner's concerns.

Comment 11: Treece, Kansas should have been bought out at the same time as Picher, Oklahoma. When Picher, OK was bought out it put a hardship on everyone in Treece. The commenter does not understand why Treece was not bought out at the same time. What is the reason?

Response: In August 1997, EPA Region 7 signed a Record of Decision (ROD) to address the mining waste at two of the Cherokee County site operable units. The Operable Units addressed in the Cherokee County 1997 ROD were OU-3 (Baxter Springs subsite) and OU-4 (Treece subsite). An Amended Record of Decision for OU3 and OU4 of the Cherokee County site was signed by EPA Region 7 in September 2006. Relocation of Treece residents was not determined to be necessary as part of the Treece subsite cleanup.

When EPA Region 6 requested comments on the Proposed Plan of Action for Tar Creek Operable Unit 4, EPA received no comments concerning buying out residents in Treece, Kansas.

Based on concerns from the citizens of Treece, Kansas, representatives from EPA visited the Treece and Picher area in August 2009. On October 29, 2009, H.R. 2996: Department of the Interior, Environment, and Related Agencies Appropriations Action, 2010 became Public Law 111-88. Section 430(a) of the Public Law states: "As soon as practicable after the date of enactment of this Act, the Administrator of the Environmental Protection Agency (referred to in this section as the "Administrator") is encouraged to consider all appropriate criteria relating to the buyout and relocation of residents of properties in Treece, Kansas, that are subject to risk relating to, and that may endanger the health of occupants as a result of risks posed by chat.

EPA has considered all appropriate criteria and issued the Draft ESD to offer relocation to the residents of Treece, Kansas, as part of its remedy for Tar Creek Operable Unit 4.

Comment 12: A commenter states "This is Stupid" with additional tax dollars at work. When this (the buyout) was going on in Picher, the EPA never cared what the people wanted or thought. Residents sat in years of meetings and never listened. So why does EPA have an interest in what the community thinks now? Another commenter says that EPA did not care about their comments during several years of meetings and wonders why EPA cares about receiving comment now. The commenter notes that EPA ruined properties.

Response: When EPA was developing the Selected Remedy described in the Tar Creek Superfund Site ROD, the public participation requirements of CERCLA Subsection 113(k)(2)(B)(i-v) and 117, 42 U.S.C. Subsection 9613(k)(2)(B)(iv) and Section 9617, were met during the remedy selection process. A Community Involvement Plan was prepared in February 1997. This plan describes the community involvement activities that the EPA has undertaken, and will continue to undertake, during the remedial activities planned for the Site.

A Fact Sheet was distributed to the community in January 2004 to announce the beginning of the Remedial Investigation and Feasibility Study (RI/FS). The Fact Sheet informed the public of the completion of an Administrative Order on Consent with DOI and two mining companies to implement the RI/FS for Operable Unit 4. EPA held a meeting on March 25, 2004, to discuss the RI/FS with the community.

The RI/FS and Proposed Plan for the Site were made available to the public in July 2007. These documents can be found in the Administrative Record File for the Proposed Plan and in the information repositories maintained with the ODEQ Central Records at the Oklahoma City Office, at the Miami Public Library, and at EPA's offices in Dallas, Texas. The notice of the availability of these documents was published in the Miami News Record on July 28, 2007. The initial notice announced a 30-day public comment period ending August 30, 2007, but EPA extended that comment period an additional 32 days, until October 1, 2007, at the request of the

ODEQ.

EPA held a public meeting regarding the Proposed Plan on August 28, 2007, at Picher-Cardin High School. At this meeting, representatives from EPA answered questions about the Site and the remedial alternatives outlined in the Proposed Plan. EPA response to the comments received during the public comment period for the Proposed Plan is included in the Responsiveness Summary (Part 3), which is part of the ROD.

EPA also awarded a Technical Assistance Grant (TAG) to the Local Environmental Action Demanded (LEAD) group in May 2001. The \$50,000 grant was used by LEAD to hire a technical advisor and conduct community outreach.

Although EPA was not required by law to do so, EPA has published this draft ESD and requested public comments before going final. This demonstrates EPA's commitment to community involvement in its decisions.

Comment 13: If people decide not to move, are they going to be supplied with all utilities or have to live by lamps, since phone service and cable will not be put back in?

Response: Utility options are not known at this time; however, KDHE is still investigating utility alternatives. More definitive answers should be available prior to the relocation application process.

Comment 14: A commenter thinks that all cleanup should be stopped until the Town of Treece has been bought out and all the residents have moved out. All EPA is doing is stirring up dust and making it hard to breathe.

Response: The State's general permits require that fugitive dusts and runoff be controlled in a fashion so that dusts do not leave the property line or the boundary of the construction activity. These regulations exist and apply independent of EPA's actions. In addition, the ROD calls for the implementation of Best Management Practices (BMPs) as appropriate. BMPs are broadly defined by EPA under Section 304 of the Clean Water Act (including its implementing regulations at 40 CFR § 122.44(k)) as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of water of the U.S. BMPs also include treatment requirements, operating procedures, and practices to control industrial site runoff, spillage or leaks, or drainage from raw material storage piles, erosion controls, dust suppression methods, or air monitoring as needed as determined by EPA for verification purpose. In general, BMPs components include:

- Controlling process water to avoid discharge to surface water during and up to a 25-year storm event.
- Constructing berms around mill ponds or surface impoundments capable of retaining water without seepage.

- Developing contingency measures and response plans to address releases from source water, process water, sediment and storm water.
- Controlling storm water runoff within the process areas, controlling soil erosion on-site, and controlling drainage.
- Containment of stockpiles of chat to prevent spread of contaminated material.
- Dust mitigation to minimize dust generated from the processing of chat and on-site haul roads to include wetting, mist curtains, and foam blankets.
- Air monitoring during chat processing, as needed as determined by EPA, to confirm air quality and effectiveness of dust mitigation.
- Controlling releases from trucks hauling raw and/or processed chat off-site to prevent fugitive dust and off-site tracking of contaminated soil to include covering truck loads of chat with tarps and washing trucks prior to leaving the site and entering public roads to prevent tracking
- Decontamination of personnel and equipment
- Access controls like fences and gates.

Comment 15: A commenter wrote that people need to know that if they remain in their home that rural water could cost each household approximately \$1800 for a meter. Also, the sewer system may not work properly causing each homeowner to need a septic system. Rural Water District #3 will require an easement from each property owner to be filed at the Court House. Sections 11 and 12 will have to be annexed into Rural Water District #3. All abandoned meters and lines will have to be isolated from good lines to prevent cross contamination.

Response: EPA appreciates the information provided by the commenter. Utility options are not known at this time; however KDHE is still investigating utility alternatives. More definitive answers should be available prior to the application process.

Summary and Response to Specific Questions on Relocation and Operation of the Treece Relocation Assistance Trust

Comment 1: When the appraisals start, if property owners do not agree with the offer for the property, will there be a procedure for discussion between the trust, appraiser, and property owners?

Response: According to the Kansas Department of Health and Environment (KDHE), property values used for the purposes of the relocation efforts will be based on an amount equal to the average cost of comparable housing elsewhere in Cherokee County. The business rules have not been finalized, but KDHE anticipates the Treece Relocation Assistance (TRA) Trust will solicit appraisals prepared based on comparisons from different communities in Cherokee County.

The TRA Trust business rules have not been finalized, but by using multiple property appraisals for eligible property, KDHE does not anticipate including provisions for using an arbitrator

during relocation negotiations.

Once the TRA Trust is established, a public meeting will be scheduled to introduce the trust members and allow residents to ask questions and voice their opinions and concerns.

Comment 2: If we decide to move our home, how far will you move it? Also, some cities will only allow you to move into a mobile home park. I do not live in a mobile home park and do not want to move into one.

Response: According to the KDHE, owners of mobile homes will have the option of moving their homes; however, according to KDHE the cost paid by the TRA Trust cannot exceed the value of the property.

Comment 3: If a person does not accept the buyout offer will there still be sewer and water?

Response: Utility options are not known at this time; however KDHE is still investigating utility alternatives. More definite answers should be available prior to the application process.

Comment 4: Does a person have to be paid before they move to another place, or do they have to stay in our residence in Treece, Kansas before receiving a buyout?

Response: KDHE says that occupied residences will take first priority, but all homes will be considered. A home unoccupied for an extended period of time may essentially be considered a storage structure.

Comment 5: How will the buyout work if one person owns the land and another person owns the property?

Response: KDHE says appraisals will be considered for the house and the land; however, KDHE says the total value will not exceed an amount normally provided for similar property with only one owner. KDHE says both parties involved may receive assistance; however the prioritization for payment has not been finalized. The TRA Trust will evaluate these scenarios on a case-by-case basis.

Comment 6: A commenter's son has asthma. Will children be the first to be relocated under the buyout?

Response: KDHE says residents living in their homes continuously since March 13, 2006, will have first priority. Upon development of the TRA Trust, additional prioritization may be determined for categories such as, but not limited to properties served by city utilities, properties within a certain distance of the city limits, etc.,

Comment 7: A commenter was disappointed that nothing was mentioned about persons who are

renting properties in and around Treece.

Response: KDHE says that renters who have resided in their Treece homes since March 13, 2006, and who can produce a valid rental contract or other proof of rental arrangement relocation will be included in the relocation efforts. The trust shall provide assistance in an amount equal to the average cost of 12 months' rent for comparable housing elsewhere in the county. Individuals also may receive no more than \$1,000 for moving expenses.

Comment 8: Nothing was mentioned about when residents (owners and renters) will be informed about relocating. People need to know this so they can be prepared and start locating a new residence. No timeline for any of these items were mentioned.

Response: To facilitate the relocation of the citizens of Treece, Governor Mark Parkinson has appointed five Kansans to the TRA Trust that is charged with administering the relocation assistance. The TRA Trust will make the final decisions regarding the buyout procedure for Treece. The governor's appointments are subject to Senate confirmation.

The EPA has budgeted \$3.5 million for the buyout. Under Superfund law, the State must provide \$350,000, which is ten percent, in matching funds. The Governor has included the ten percent match in his Fiscal Year 2011 budget proposal. The \$350,000 in state assistance must be approved by the legislature.

To make sure the Trust members have the information they will need once they are in position, EPA and the Kansas Department of Health and Ecology (KDHE) are working together to gather information.

KDHE is taking surveys to develop a list of the people that want to be bought out. KDHE is working toward completion of appraisals by late spring or summer. Until the Trustees are confirmed, and the legislature provides matching funds, there can be no certainty as to when the buyout process will be complete.

Comment 9: If people live in Picher, Oklahoma and then move to Treece, Kansas after they get bought out in Picher, are they going to get bought out again?

Response: According to the KDHE, the answer is yes, but they will be the in the last group considered if they were not a resident on March 13, 2006. The TRA Trust will establish the rules which will address this issue.

Comment 10: If a resident decides to take their mobile home, and the land is bought, does the money go to the mortgage company or to the land owner?

Response: The TRA Trust, which is not in place yet, will determine the final rules associated with the buyout. One of the decisions the trust will have to make is how to deal with properties

when money is still owed to a mortgage company.

Comment 11: Are the appraisers going to start at one end of town and go to the other end of town all at once or little by little doing an appraisal here and there?

Response: KDHE says that, although a final plan for conducting the appraisals has not been developed, it is hoped that appraisals of all properties will occur at one time. Conducting the appraisals at one time would result in a cost savings since appraisers would not have to visit the area several times. Also, conducting the appraisals at one time would accelerate the buyout process, according to KDHE.