

Scared for life: Treece, Kan. seeks buyout, closing of town

In 1870 on a farm called the Cook Forty in Galena, Kan. a valuable discovery was made when “black jack”, or zinc ore, was found. The ore, a product of millions of years of geological activity, ignited a mining boom that would last for the next 100 years and cover the corners of the states of Kansas, Missouri and Oklahoma. The mines provided the livelihoods for many during those years but in turn they left behind a legacy of pollution and environmental degradation that is unrivaled anywhere in the United States.

Over the years the mining activity in what was known as the Tri State Mining District produced 50 percent of the zinc and 10 percent of the lead in the United States. Production in the mining fields peaked between the years of 1918 and 1941 when there were 11,000 miners and possibly three times that many support personnel working in the area. Over the life of the district, 23 million tons of zinc concentrates and four million tons of lead concentrates were produced. The Kansas side of the district alone produced 2.9 million tons of zinc and 650 thousand tons of lead valued at \$436 million and \$91 million respectively.

The depth of the ore varied across the district, being shallower in the east and deeper to the west. On the Kansas and Oklahoma

sides of the district the common method used to extract the valuable minerals from the ground was the room and pillar method. This method involved mining room shaped areas while leaving a similar sized area in place for

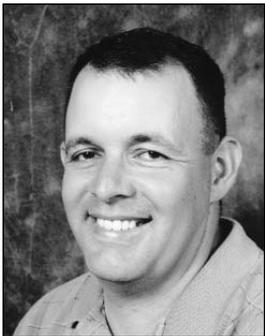
were extended up leaving inadequate support in place.

The rock layers below the surface of the ground where the zinc ore was found were also water-bearing formations. Keeping water levels down in the mines

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support. Room walls were commonly 25 to 100 feet high and pillars 20 to 50 feet thick. This method left what appeared to be a honeycombed area below the local

require up to 63 pumping plants operating 24 hours per day. In 1947 there were more than 36 million gallons of water pumped from the mines daily.



*Bob Kirby
Tech Assistant*



This image reflects what can happen to undermined areas where inadequate support is left in place. The cities of Treece, Kan. and Picher, Okla. are both in danger of experiencing subsidence such as this in residential areas of the communities.

communities in the district. As the mines played out over the years the support walls that were left in place began to be mined out to turn more profit or room walls

After World War II production in the Tri State Mining district began to decline. The decline continued until 1970 when the last active mine, located two miles

west of Baxter Springs, was shut down. The one hundred year boom had finally gone bust. After the mines shut down the pumps that allowed the subterranean areas to stay dry were shut off, effectively

filling the underground voids with huge quantities of water.

In the years following the closure of the mines problems began to present themselves to the people still living in the area.

Mines that had their support pillars mined out to extract the last bit of profitable ore began to collapse, leaving huge craters open above the ground and in some instances causing injury or even death. The vast underground water supplies filling the voids began to seep out. In the time the water was underground, it picked up iron sulfide from material left in the mine walls and was acidic in addition to being laden with toxic heavy metals. Upon reaching the surface, the water would run red, further polluting area wells and surface water supplies. The tailing piles or "chat piles" would produce lead laden dust when the wind blew.

As the years passed these problems continued to grow in magnitude. In 1979 a delegation of federal legislators expressed the concerns of their constituents in the Tri State Mining District to other members of Congress. Congressmen Whitaker of Kansas, Taylor of Missouri and Synar of Oklahoma requested that the U.S. Bureau of Mines look into the situation and present their recommendations.

In 1981 the United States Environmental Protection Agency became involved, designating the Tri State Mining District as the Tar Creek Superfund Site. In the ensuing years and after numerous studies, remedial actions were taken to abate the health hazards associated with the mine waste. The actions included capping of open shafts, plugging abandoned wells, removal and covering of waste material with compost and residential soil removal and replacement. A more recent step to protect the lives and welfare of



City Hall in Treece, Kan. stands on ground that may be heavily undermined due to past mining practices. The city is seeking inclusion into the buyout program offered by Sen. Jim Inhofe, R-Oklahoma. Kansas State Representative Doug Gatewood, D-Columbus, is coordinating state action to get Treece included.

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people living in the area has been voluntary buyouts for families with children under the age of six years. Over the years EPA has spent an estimated \$150 million to remediate the area.

While remedial action did have some effect overall on the health and welfare of residents living in the area, many hazards were still

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present. One of those problems presented itself in the form of a cave-in along U.S. Highway 69 that runs through the small town of Picher, Okla. While the cave-in did not shut the highway down entirely it did limit the weight of vehicles using the road daily. The subsidence of the highway brought an awareness of problems that still existed under ground. In 2004

the United States Corps of Army Engineers undertook a study to determine the extent of the underground caverns and the potential problems they presented to the health of local residents and property in the area.

On January 31, 2006 the results of the USACE study were released. The results indicated problems exceeding what were originally anticipated. After the release of the study some residential portions of Picher were evacuated due to fears of imminent collapse.

In May, United States Senator Jim Inhofe, R-Oklahoma, issued a statement regarding the situation, "Historically, the EPA has held the



A "chat pile" overlooks the Tar Creek Superfund Site in northern Ottawa County in northeast Oklahoma. The piles are a common site on the landscape blowing dust contaminated with lead over broad portions of the area.

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position that their goal is remediation of Tar Creek, but they now recognize that circumstances have changed dramatically and require rethinking of how best to deal with the issues. We believe that the final EPA remedy for Tar Creek should begin with a buyout of the remaining residents.”

Recently Senator Inhofe announced plans for voluntary buyout of Picher and Cardin residents using \$20 million of Oklahoma state and federal funds with the homes in danger from mine subsidence to be first on the list.

The city council in Treece, Kan., which is just across the state line from Picher, Okla., has passed a resolution seeking inclusion into the buyout program offered to their Oklahoma neighbors. Both communities have similar problems with pollution and undermining. The problem with getting Treece included in the buyout lies in the fact that Treece, Kan. lies in US EPA Region 7 while Picher, Okla. lies in US EPA

Region 6. This sounds like a good example of bureaucrats “at work” to me. According to some residents, Treece, Kan. was actually in Oklahoma until a survey moved the state line south.

Kansas Governor Kathleen Sebelius has requested a federal appropriation in response to concerns from residents in the area. In April, State Representative Doug Gatewood, D-Columbus, said he would coordinate the state effort to obtain a federal appropriation for a buyout of the former mining community of Treece. Representative Gatewood has met with Kansas' federal legislators including Senators Roberts and Brownback and Representative Ryun to discuss concerns of residents in the area

and seek the community’s inclusion in the buyout program.

With the future of their community still uncertain, Treece residents move forward with their lives in the hope that someday they can be free of the legacy of pollution that has scarred the landscape of their corner of Kansas.



These old pillars stand watch over a wasteland that at one time provided a living to as many as 44,000 people.

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