



ATSDR Activities at the Tar Creek Superfund Site

What is ATSDR?

The Agency for Toxic Substances and Disease Registry (ATSDR) is a public health agency of the U.S. Department of Health and Human Services. It was created by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also known as Superfund).

ATSDR's mission is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances.

What is the Tar Creek Superfund Site?

The Tar Creek Superfund Site is in Ottawa County, Oklahoma. The site is an area of approximately 40 square miles and includes the five mining communities of Picher, Cardin, Quapaw, Commerce, and North Miami. The Tar Creek site also includes lands belonging to 10 tribal nations.

Starting in the early 1900s, the Tri-State Mining District, which included the Tar Creek site, was extensively mined for lead and zinc. These operations lasted until the early 1970s. The Tri-State Mining District was one of the largest lead and zinc producing mining operations in the world. Years of mining activities resulted in the accumulation of a large amount of tailings and other mining wastes.

The tailings, locally known as chat, were stored in huge piles. Chat is a gravel-like material ranging in particle size from fine-grained to 3/8 inch.

Approximately 75 million tons of chat (50% of the chat produced) remains on the surface of the ground.

Chat has been and is used locally in industrial, commercial, recreational, and residential products. Children who live or play near chat piles might ingest or inhale lead contaminated dust.

How did ATSDR become involved with the Tar Creek site?

The Tar Creek Superfund Site was listed by the U.S. Environmental Protection Agency (EPA) on the National Priorities List (NPL) in September 1983.

In 1993 after lead screening at the Indian Health Service (IHS) clinic in Ottawa County indicated that 35% of children tested had elevated blood lead levels, ATSDR conducted an exposure investigation. This investigation evaluated lead levels in soil, paint, dust, and water at nine houses identified by IHS as home to children with blood lead levels of 10 µg/dL or greater.

Investigation results indicated elevated levels of lead in paint and dust/soil in two homes, but no other significant sources of lead were found. Additionally, in 1995, ATSDR provided technical assistance and resources to the Oklahoma State Department of Health (OSDH) to conduct blood lead level screening in all children who live in Ottawa County and are impacted by the Tar Creek site. ATSDR has also worked with EPA to provide health recommendations regarding cleanup plans being considered for the Tar Creek site.

Since 1998, ATSDR, through an interagency agreement with EPA, has funded additional blood lead screening and health education activities by the Ottawa County Health Department.

In 2003, ATSDR began to compile and review environmental and human biological sampling data. Further analysis of this data will provide a better understanding of potential sources contributing the elevated blood lead levels in children and will identify areas for further inquiry.

A report to Congress, due July 31, 2004, will summarize the information and findings to date and identify significant sources/pathways of exposure to lead that may be contributing to elevated blood lead levels in children at the Tar Creek Superfund Site.

What is ATSDR doing now at the Tar Creek site?

In order to determine potential sources contributing to increased blood lead levels and assess possible public health hazards at the Tar Creek site, ATSDR is:

- compiling and reviewing all available blood lead data from 1995 through 2002 for children ages six and under in Ottawa County;
- comparing the data on lead levels in residential soil and OSDH blood lead data to evaluate potential exposure pathways;
- gathering and evaluating information regarding tribal health concerns;
- continuing to provide funding, through a cooperative agreement, to the Ottawa County Health Department for blood lead screening and health education activities;
- providing public health input to the Army Corps of Engineers on their watershed management project; and
- reviewing available data and providing recommendations to EPA Region VI on aspects of their work concerning Operable Unit-2 (residential) and Operable Unit-4 (chat).

What happens next?

ATSDR is committed to addressing the public health concerns of the communities affected by the Tar Creek Superfund Site. ATSDR will evaluate available environmental data, health effects data, and community health concerns and develop recommendations to address concerns about exposure to hazardous substances and other potential hazards.

Who should I contact for more information?

For more information about ATSDR activities at the Tar Creek site, please contact:

Jennifer Lyke, ATSDR regional representative in Dallas, toll-free at 1-800-533-3508 or at 214-665-8362; or call

LaFreta Dalton, ATSDR health communication specialist, toll-free, at 1-888-422-8737.

ATSDR's toll-free number is answered Monday through Friday from 9 a.m. to 5 p.m. Eastern time. If you call after business hours, please leave a message. Someone will return your call as soon as possible.

When calling ATSDR's toll-free number, please mention that you are calling about the Tar Creek site in Oklahoma.

**For additional information,
visit ATSDR's Web site at
<http://www.atsdr.cdc.gov>**