

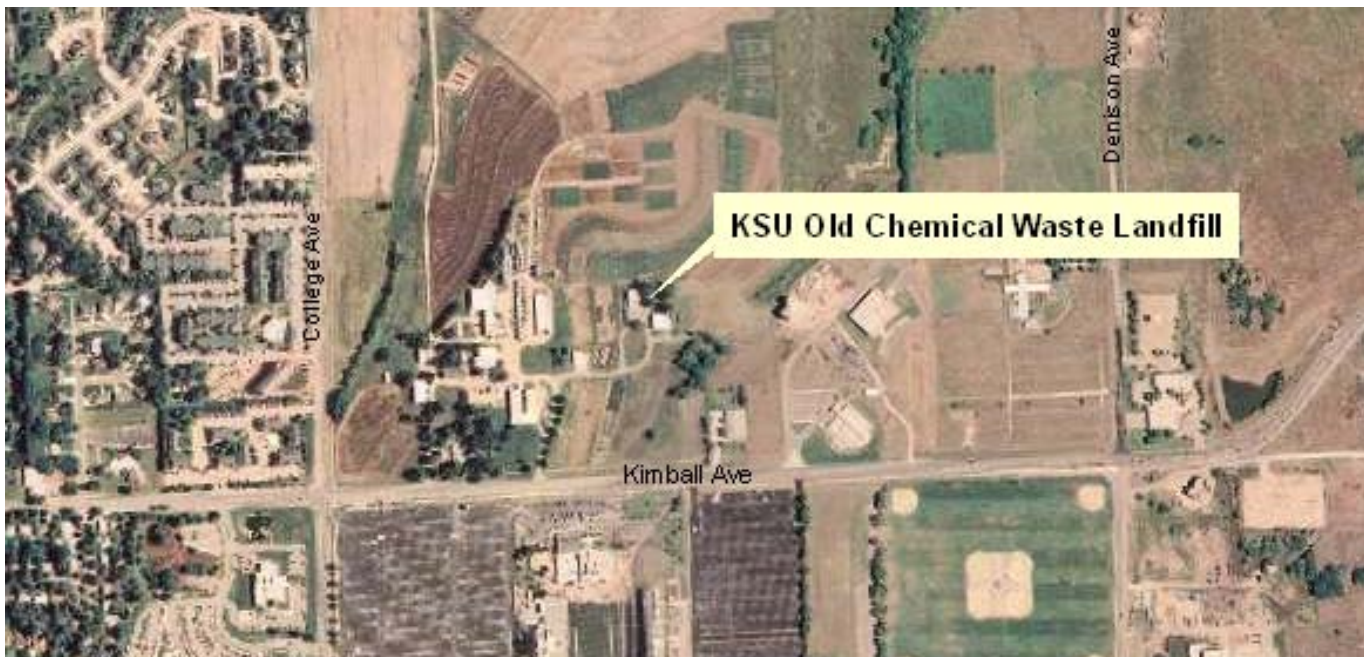


KDHE Fact Sheet On:

Kansas State University Old Chemical Waste Landfill Proposed Corrective Measures

This fact sheet presents information regarding a corrective measures proposal to address soil and ground water contamination at Kansas State University's (KSU) Old Chemical Waste Landfill (OCWLF). This closed landfill is northwest of the intersection of Kimball Avenue and Dennison Avenue in Manhattan, Kansas, located in the NW 1/4, SE 1/4, Sec. 1, T10S, R7E, of Riley County, Kansas. More specifically, the OCWLF is on the north side of Kimball Avenue in Manhattan, across from the KSU football stadium's east parking lot. The OCWLF is within a fenced area and is presently covered by an asphalt parking lot and a metal building. The land surrounding the OCWLF is owned and controlled by KSU.

The Kansas Department of Health and Environment (KDHE) is soliciting public input regarding KSU's proposal. KDHE plans to make a Final Remedy Decision on KSU's proposal, taking the public's concerns into consideration, after the end of the public comment period, which begins October 18, 2010 and ends November 19, 2010.



Regulatory History of KSU's Handling of Hazardous Waste at the OCWLF

The landfill was opened as the "Atomic Waste Burial Plot" and added to the radiation materials license issued by the Atomic Energy Commission, forerunner of the Nuclear Regulatory Commission (NRC). In 1965, the NRC relinquished its authority to regulate the radioactive material disposed in the landfill to KDHE. KSU started burying chemical and radioactive waste at the OCWLF in the early 1960s. Records show burial of waste chemicals continued until 1979 and burial of low-level radioactive waste continued until 1987.

Such disposal of waste chemicals was not regulated at the time, but with the Resource Conservation and Recovery Act (RCRA) taking effect in 1980, KSU re-evaluated their handling of hazardous waste. KSU submitted Part A of a RCRA Hazardous Waste Permit Application to EPA Region 7 in October 1980 with the intent of accumulating waste for an extended period of time before having it hauled away for disposal. Submittal of the application triggered interim permit status for KSU as a treatment, storage, and disposal (TSD) facility. In July 1983, after KSU decided they no longer intended to store hazardous waste, KDHE amended KSU's TSD status to that of a hazardous waste generator. As generators of hazardous waste are not required to obtain permits, KSU wished to have their interim permit status terminated. KDHE and KSU entered into discussions regarding a consent agreement that would allow KDHE to retain authority over anticipated ground water investigations and potential clean-up, without interfering with the termination of interim status. In September 1990, KDHE terminated KSU's RCRA interim status.

As the OCWLF contains radioactive waste, it is also subject to KSU's Radioactive Materials License, number 38-C011-01, under the jurisdiction of the KDHE. Also, the KDHE Radiation Control Program will apply, by license condition, the regulations of *Title 10 Chapter 61* of the United States Nuclear Regulatory Commission (NRC) to any proposals to leave the OCWLF in place. These regulations address the land disposal of certain classes of radioactive waste and when taken together with the state regulations under the jurisdiction of KDHE, significantly influence possible remedies for closure and long term care of the OCWLF.

The first consent order was signed by the KDHE Secretary in April 1989, which stated KSU must submit a preliminary hydrogeologic report on the potential for ground water contamination in the OCWLF area. After submittal and review of the preliminary hydrogeologic investigation report, which identified ground water contamination, a second consent order was signed by the KDHE Secretary in July 1990 requiring detailed study of the problem followed by a remedy proposal. KSU began routine ground water monitoring in 1990 and is currently sampling multiple zones of the ground water underlying, and east of, the fenced area semi-annually for a variety of contaminants.

KSU's Evaluation of Potential Corrective Measures

KSU has submitted to KDHE a Corrective Measures Study (CMS) Report; it provides their evaluation of potential remedial options for the clean-up of the OCWLF, and proposes a final remedy approach. KSU evaluated potential corrective measures using the following four (4) threshold criteria:

1. Protection of human health and the environment;
2. Attainment of media cleanup standards set by KDHE;
3. Controlling the sources of releases; and
4. Compliance with applicable standards for the management of waste.

And the following five (5) balancing criteria:

1. Long-term reliability and effectiveness;
2. Reduction of toxicity, mobility, and volume of wastes;
3. Short-term effectiveness;
4. Implementability; and
5. Cost.

Summary of Corrective Measures Proposed by KSU

After evaluating potential remedial options, KSU is proposing to excavate the landfill and dispose of all waste off-site. In addition, KSU is proposing to install and operate an interceptor trench to extract contaminated ground water. The extracted ground water is to be treated by KSU before it gets discharged into the City of Manhattan sanitary sewer system.

KDHE's Next Step Toward the Final Remedy Decision

The proposed corrective measures have been evaluated by KDHE using criteria specified in EPA's RCRA Corrective Action Plan (CAP) [OSWER Directive 9902.3-2A May 1994.] Now, as part of the corrective action process, KDHE will consider public input on the proposed corrective measures. Therefore, if any member of the public would like to take part in this decision, they should submit written comments during the public comment period (October 18 to November 19) to:

Kansas Department of Health and Environment
Bureau of Waste Management
Hazardous Waste Permitting Section
1000 SW Jackson, Suite 320
Topeka, Kansas 66612
Attn: Mostafa Kamal
Phone: (785) 296-1609
Email: mkamal@kdheks.gov

After KDHE has reviewed public comments, the agency will:

- Establish any revisions necessary to the proposed corrective measures based on comments received, as the Final Remedy Decision;
- Send out a response addressing the comments received, including the Final Remedy Decision to KSU and to any individuals that submitted comments.

More Information

The public is invited to two KDHE availability sessions to answer questions related to the proposed corrective measures on November 9, 2010 at 3:00-5:00 PM and again at 6:30-8:30 PM at the Manhattan Fire Department Headquarters Training Center, 2000 Denison Avenue. The latter session will begin with a short presentation on the history of the facility and the proposed corrective measures.

The principle reports and documents related to this corrective measures proposal are available for public review as an administrative record for KDHE's upcoming Final Remedy Decision at the Manhattan Public Library, 629 Poyntz Ave, Manhattan, Kansas, or from the KDHE, 1000 SW Jackson, Suite 320, Topeka, Kansas. A limited number of documents will also be available on the KDHE Bureau of Waste Management website, www.kdheks.gov/waste. For additional information, please contact KDHE at the above address.