

KANSAS GEOLOGICAL SURVEY

The University of Kansas
1930 Constant Ave
Lawrence KS 66047-3726
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www.kgs.ku.edu

January 25, 2006

Mr. Michael Martindale, Director
Lane County Public Works
P. O. Box 806
Dighton, KS 67839

RE: Proposed expansion of the Lane County Construction and Demolition Landfill

Dear Mr. Martindale:

I have received your request for comment by the Kansas Geological Survey (KGS) on a permit application for expansion of the construction and demolition landfill in Lane County. The landfill site is located in SE ¼ of S17 T18S R28W, east of Dighton, Kansas.

I examined the USGS Dighton 7½-minute topographic map, a 2002 orthophotograph, and a report and map on the geology and ground-water of Lane County (Prescott, 1951, KGS Bulletin 93), and water data available of the KGS web site (www.kgs.ku.edu/Hydro/hydroIndex.html). The geologic map indicates that the landfill site is on Pleistocene Sanborn Formation that overlies Tertiary Ogallala formation. The Sanborn Formation is primarily loess and re-deposited loess. Loess is wind-deposited silt, and some of the loess in the Sanborn Formation has been eroded and deposited by surface water. The thickness of this unit is highly variable and generally less than 25 feet in Lane County. The Ogallala is composed primarily of alluvium, and is a major aquifer in the state. The site is relatively flat with some intermittent streams.

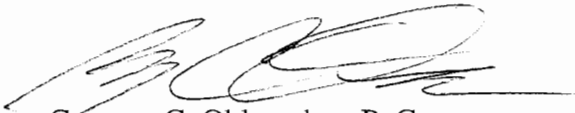
- The Kansas Geological Survey's main concern is for potential ground-water contamination at this site. Monitoring wells at this site indicate that the depth to water is about 45 feet below the surface. The saturated thickness of the Ogallala aquifer at this location is less than 100 feet. The overlying Sanborn Formation may not restrict contaminant migration into the Ogallala.
- The Kansas Geological Survey has no knowledge of landslide, karst, or poor ground conditions that might affect this application.

The above discussion represents the information that the Kansas Geological Survey has on this proposed landfill site. Other geologic conditions, not discussed here, might affect the stability or safe operation of this landfill. The information provided in this letter is from countywide studies and should not be used as a substitute for detailed site investigations by a licensed geologist or engineer. It is the responsibility of the applicant to produce the detailed site evaluation.

The Kansas Geological Survey does not approve or exempt landfill sites. A clarification of KDHE policy can be found on the KDHE Bureau of Waste Management Web Site (<http://www.kdheks.gov/waste/>) under new downloads: BWM policy #05-01.

If you have any questions regarding these issues, please contact Gregory Ohlmacher at (785)-864-2194 or ohlmac@kgs.ku.edu.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Ohlmacher', with a stylized flourish at the end.

Gregory C. Ohlmacher, P. G.
Engineering Geologist

LANE COUNTY PUBLIC WORKS
Michael Martindale / Director
P.O. Box 806
Dighton, KS. 67839

January 12, 2006

Kansas Geological Survey
University of Kansas
1930 Constant Ave.
Lawrence, KS. 66047-3726

To Whom It May Concern:

Lane County is currently trying to expand their C&D Landfill by digging a new pit. The site is located in the north 20 acres of the southeast quarter of section 17, township 18 south, range 28 west, all in Lane County Kansas. It is located one mile north, two miles east and one half mile back south of Dighton, Kansas.

The Kansas Dept. of Health and Environment has passed new regulations that require us to get statements of approval or exemption from your agency in regards to the siting of the new C&D unit with respect to the stability of the ground.

I do not believe that this C&D unit will cause any problems. If you have any questions, call me at 620-397-5391.

Sincerely,

Michael Martindale

Michael Martindale
Lane County Public Works Director

*depth to water ~ 45'
Sand burn - 20-30' less
Ogallala - 100-130'*