

## KANSAS GEOLOGICAL SURVEY

The University of Kansas  
1930 Constant Ave  
Lawrence KS 66047-3726  
phone 785-864-3965  
fax 785-864-5317  
[www.kgs.ku.edu](http://www.kgs.ku.edu)

February 22, 2006

Mr. Justin Obermeyer, E.I.T.  
Shaw Environmental, Inc.  
103 College Ave. SE, 3<sup>rd</sup> Floor  
Grand Rapids, MI 49503

**RE: Request for information—Fault Activity in Johnson County, Kansas**

Dear Mr. Obermeyer:

I have received your request for information on faults with Holocene displacement in Johnson County. The data is needed for the application to modify the existing Johnson County Landfill located at 18181 West 53<sup>rd</sup> Street, Shawnee, Kansas.

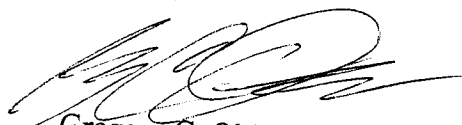
Several faults are mapped in Johnson County (O'Connor, 1971, KGS Bulletin 203). All of these faults are recognized based on displacements in Pennsylvanian-age bedrock. The age of the fault movement is unclear. The Kansas Geological Survey has no knowledge of Holocene-age fault displacement in Johnson County. Bulletin 203 is available online at:  
<http://www.kgs.ku.edu/General/Geology/Johnson/index.html>.

As for determining the nearest fault with Quaternary displacement or activity, I recommend you visit the Quaternary Faults and Folds website of the U. S. Geological Survey:  
<http://earthquake.usgs.gov/regional/qfaults/>. The interactive map shows all the known Quaternary structures, along with links to information about the structures and a tool to measure distances. The map shows Quaternary structures in southwestern Kansas, southern Oklahoma, eastern Colorado, and southeastern Missouri.

The above discussion represents our best assessment based on the information that the Kansas Geological Survey has about this locality and/or proposed project at the time of this writing. Other geologic conditions, not discussed herein, or for which the Kansas Geological Survey has no knowledge, may affect the viability or safe operation of this facility or property. The information provided in this letter is from regional or countywide studies and should not be used as a substitute for detailed site characterization by a licensed geologist or engineer. It is the responsibility of the applicant to provide any required site characterizations.

If you have any questions, please contact Gregory Ohlmacher (785)-864-2194 or [ohlmac@kgs.ku.edu](mailto:ohlmac@kgs.ku.edu).

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Ohlmacher', with a stylized, sweeping flourish extending to the right.

Gregory C. Ohlmacher, P. G.  
Engineering Geologist

cc. James R. McCauley



Shaw Environmental, Inc.  
103 College Ave. SE  
Grand Rapids, Michigan 9503  
Phone: (616) 774-3522  
Fax: (616) 774-3527

# Fax

To: Jim McCauley From: Justin Obermeyer

Fax: 785-864-5317 Pages: 3 w/ cover

Phone: 785-864-3965 Date: 02-02-06

RE: Request for Information CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Original letter will be mailed.

If you have any questions, please contact

me at 616-774-3522

#### Confidentiality Notice

This information contained in this fax is intended for the use of the individual or entity named and may contain information that is confidential, privileged and/or otherwise exempt from disclosure under applicable law. If you are not the intended recipient, any dissemination, distribution or copying of this communication is strictly prohibited. If you received this communication in error, please notify us immediately by telephone and return the original fax to us at the address shown. Thank you!



Shaw Environmental, Inc.

Shaw Environmental, Inc.

103 College Ave. SE, 3<sup>rd</sup> Floor  
Grand Rapids, MI 49503  
Phone: 616.774.3522  
Fax: 616.774.9527

February 2, 2006  
Project 109255

Mr. Jim McCauley  
Kansas Geological Survey  
1930 Constant Ave., Campus West  
The University of Kansas  
Lawrence, Kansas 66047-3726

Re: Request for Information – Fault Activity in Johnson County, Kansas

Dear Mr. McCauley:

On behalf of our client, Deffenbaugh Industries, Inc., we are respectfully requesting written confirmation as to the presences of any faults that have displaced within Holocene Times in Johnson County, Kansas.

Deffenbaugh is applying for a permit modification for the exiting Johnson County Landfill located at 18181 West 53<sup>rd</sup> Street, Shawnee, Kansas. As part of the permit modification request, Deffenbaugh must provide information regarding the nearest Holocene fault to the site. Enclosed is a site location map for your use.

If you have any questions or require any additional information, please contact me at (616) 774-3522. Thank you in advance for your time.

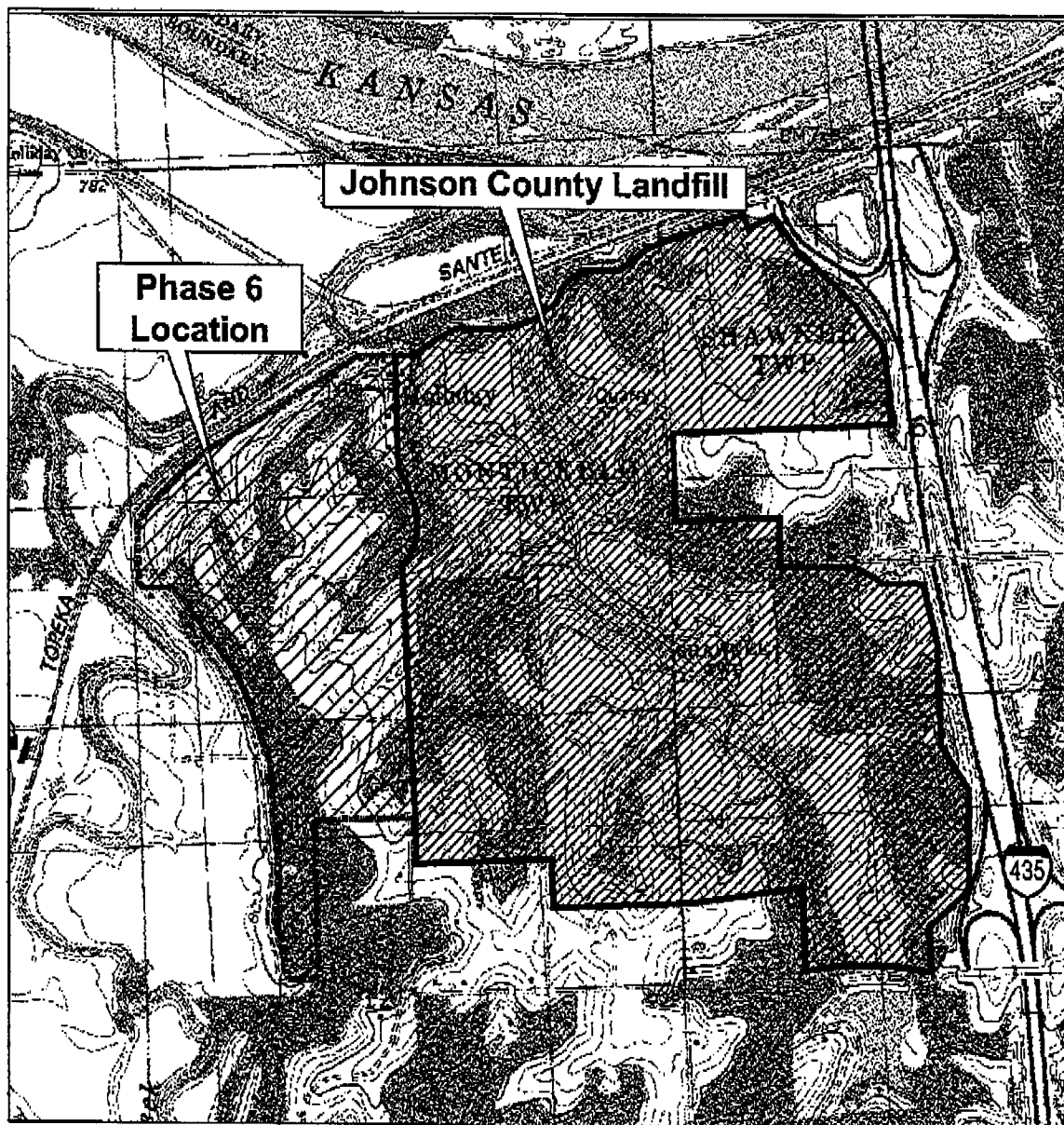
Sincerely,

Shaw Environmental, Inc.

Justin Obermeyer, E.I.T  
Project Engineer/RSO

Attachments: Site Location Map

cc: Darryl Basham – Deffenbaugh Industries, Inc.



*Taken from the*  
**SHAWNEE, KANSAS**  
*7.5 Series U.S.G.S. Topographic Quadrangle*



XXREF Files: IMAGE Files: c39D94p3.tif  
Files: N:\CADDATA\DWG\Deffenbaugh\109S



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DATE 12/30/04

DWN NAM

APP JCO

REV \_\_\_\_\_

PROJECT NO.

**109255.01**

DEFFENBAUGH INDUSTRIES, INC.  
JOHNSON COUNTY LANDFILL  
SHAWNEE, KANSAS

### PHASE 6 LOCATION MAP



# NEIC: Earthquake Search Results

U. S. G E O L O G I C A L S U R V E Y

E A R T H Q U A K E D A T A B A S E

FILE CREATED: Tue Feb 21 12:57:18 2006  
 Geographic Grid Search Earthquakes= 1  
 Latitude: 40.000N - 38.000N  
 Longitude: 94.000W - 96.000W  
 Catalog Used: PDE  
 Data Selection: Historical & Preliminary Data

| CAT | YEAR | MO | DA | ORIG      | TIME | LAT   | LONG   | DEP | MAGNITUDE | IEFM | DTSVNWG      | DIST |
|-----|------|----|----|-----------|------|-------|--------|-----|-----------|------|--------------|------|
|     |      |    |    |           |      |       |        |     |           | NFPO |              | km   |
|     |      |    |    |           |      |       |        |     |           | TFS  |              |      |
| PDE | 1999 | 05 | 13 | 141822.75 |      | 39.10 | -94.70 | 5   | 3.00      | LgGS | .D . ....I.. |      |

**USGS National Earthquake Information Center**

[USGS Privacy Statement](#) | [Disclaimer](#)



*Earthquake, M=3:*  
*SW NE NW, 13-115-24E*  
*Quarry { 6#7 of 125-24E*  
*1#12 of 125-23E*  
*Earthquake may have*  
*been related to a*  
*mine collapse.*