

EXHIBIT B-12

Comments Submitted to EPA by Peter Bormuth

West Bay Exploration Company (WBEC), Haystead #9 SWD
(Permit #MI-079-2D-0010)

**Administrative Record
Item # 58**

May 2, 2013

Peter Bormuth

Elkins, Timothy

From: peter bormuth <earthprayer@hotmail.com>
Sent: Thursday, May 02, 2013 9:08 AM
To: Elkins, Timothy
Subject: RE: West Bay Haystead #9

Tim

Thank you for your consideration.

-----Comment-----

i would like the EPA to consider the recent experience of the Ohio Department of Natural Resources with regard to Class II oil waste injection wells in the Youngstown area. Since March 2011 the Youngstown area experienced 12 low magnitude seismic events along a previously unknown fault line. These events ranged from a 2.1 to 4.0 magnitude events on the Richter scale and were recorded by the Ohio Seismic Network. In their Preliminary Report on the Northstar Class II Injection Well in March 2012 (see Appendix F) the Ohio DNR concluded that “all of the events were clustered less than a mile around the well.”

The report indicates that to induce an earthquake a number of circumstances must be met:

- A fault must already exist within the crystalline basement rock
- That fault must be in a near-failure state
- An injection well must be drilled deep enough and near enough to the fault and have a path of communication to the fault; and
- The injection well must inject a sufficient quantity of fluids at a high enough pressure and for an adequate period of time to cause failure, or movement, along that fault (or system of faults).

The Ohio DNR report, after concluding that the Northstar Class II Injection Well had caused the earthquakes in the Youngstown area called for a number of reforms to the permitting process including the requirement of “a complete suite of geophysical logs (including, at a minimum, gamma ray, compensated density-neutron, and resistivity logs) to be run on newly drilled Class II disposal wells.”

I request that these logs be required in Michigan as well “to ensure the health, safety, and general welfare” of the people to protect them from induced seismicity. The possibility of course exists that there might be a previously unknown fault line here in Jackson County.

-----end of comment-----

I look forward to receiving the drilling logs. Would you know if there are actual core samples that have been preserved? or is this material discarded?

Peter Bormuth

142 West Pearl St.

Jackson, MI 49201

(517) 787-8097

From: elkins.timothy@epa.gov
To: earthprayer@hotmail.com
Subject: RE: West Bay Haystead #9
Date: Wed, 1 May 2013 22:42:58 +0000

Mr. Bormuth,

Thank you for your comments and participation at the Haystead 9 public hearing as well. I will make sure your comments are included in the administrative record, and a response to your comments will be included in the EPA's responsiveness summary.

I will be happy to send you the drilling logs which you requested below. Because I need to follow formal FOIA procedures to track your request and my response, I will forward your request to one of our Record Management Analysts who will create a tracking number. I understand this material may be time sensitive to our comment period, so I will help deliver these documents to you as quickly as possible. Based on the number of pages and time required to fill your request, I do not anticipate any charge for this request.

Again, thank you for your participation and interest in the proposed Haystead 9 SWD injection well.

Tim Elkins
U.S. EPA Region 5
Underground Injection Control
77 W. Jackson Blvd., WU-16J
Chicago, IL 60604
312-886-0263

From: peter bormuth [mailto:earthprayer@hotmail.com]
Sent: Tuesday, April 30, 2013 10:21 PM
To: Elkins, Timothy
Subject: West Bay Haystead #9

Mr. Elkins

Thank you for your presence tonight at the public hearing.

-----Comment-----

During your preliminary introduction you stated that the ultimate confining zone protecting the USDW (not the permitted confining zone) for this well (West Bay Haystead #9) is the Coldwater shale strata and you stated that it was 1000 feet thick.

I would like it entered into the record that the Stratigraphic Succession Map of the Lower Peninsula published by the MDEQ and the Michigan Basin Geological Society in 2000 shows the Coldwater shale to be only 250 feet thick and also shows the inclusion of a significant volume of Berea Sandstone in the shale. As you know Berea Sandstone is porous and permeable.

-----End of Comment-----

You stated that you had specific information on the well site. I assume that must come from the drilling logs on the existing wells on the property. I would like to receive copies of those drilling logs under the Freedom of Information Act if you would so kindly provide me with that information.

Once again, thank you and your staff for your efforts in holding the public hearing. I have further comments that I am composing and will submit them by e-mail before the filing deadline.

Sincerely,

Peter Bormuth
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(517) 787-8097