

**BEFORE THE ENVIRONMENTAL APPEALS BOARD  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C.**

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In the Matter of:	)	
West Bay Exploration Co. of	)	Permit Appeal No. UIC 15-03
Traverse City, Michigan	)	
West Bay #22 SWD	)	
Permit No. MI-075-2D-0009	)	
Jackson County, Michigan	)	

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**PETITIONER PETER BORMUTH'S MOTION FOR CLARIFICATION UNDER 40 C.F.R. § 124.19(m)**

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**TABLE OF CONTENTS**

	<i>Page</i>
<b>Table of Contents</b> .....	<i>i</i>
<b>Table of Authorities</b> .....	<i>ii</i>
<b>Introduction</b> .....	<b>1</b>
<b>Request for Clarification</b> .....	<b>1</b>
<b>1. The Petitioner seeks clarification on the effect of the remand order on Haystead #9 (UIC Permit No. 075-2D-0010) and the proposed Savoy well (UIC permit No. MI-075-2D-0014)</b> .....	<b>1</b>
<b>2. The Petitioner seeks clarification as to whether the Board is requiring the Region to address the issuance of the Sunoco Inkster Permit No. MI-163-3G-A002 with regard to the Salina Group B-Unit</b> .....	<b>3</b>
<b>3. The Petitioner seeks clarification with regard to the method the Region uses to determine injection pressure</b> .....	<b>3</b>
<b>4. The Petitioner seeks clarification with regard to the “area of review”</b> .....	<b>4</b>
<b>5. The Petitioner seeks clarification with regard to anhydritic shales</b> .....	<b>5</b>
<b>Conclusion</b> .....	<b>5</b>

## TABLE OF AUTHORITIES

### **Statutes**

40 C.F.R. Part 124.19

40 C.F.R. § 124.19(m)

40 C.F.R § 146.6

SDWA section 1431

42 U.S.C. §300i

### **Cases**

*In re Bear Lake Props.*, 15 E.A.D. 630, 643-44 (EAB 2012)

*In re Env'tl. Disposal Sys*, 12 E.A.D. 254, 295 (EAB 2005)

## INTRODUCTION

The Petitioner thanks this Board for their detailed review of UIC Permit No. MI-075-2D-0009 and their July 26, 2016 Order remanding the permit to Region 5. The Petitioner requests clarification from this Board under 40 C.F.R. § 124.19(m) of the following points.

## REQUEST FOR CLARIFICATION

- 1. The Petitioner seeks clarification on the effect of the remand order on Haystead #9 (UIC Permit No. MI-075-2D-0010) and the proposed Savoy well (UIC Permit No. MI-075-2D-0014).**

The Petitioner wants to know if the factually identical Haystead #9 well will be allowed to continue to operate during the period of this remand? The two wells, Haystead #9 and West Bay #22, are geologically and factually identical and situated within 4 miles of each other in the southeastern corner of Jackson County. All of the geological issues noted by the Board and designated for remand to Region 5 also apply to Haystead #9. As this Board is aware, the petitioner's identical arguments on Haystead #9 were dismissed by this Board because the Petitioner failed to provide the EPA with his supporting documents at the public hearing on Haystead #9 and this Board subsequently denied his Motion to Supplement the record with the identical scientific studies he cited in this case. While this Board carefully distinguished between the central basin zone and the shelf & bank facies zones of the Salina and Niagara formations in the southern Michigan basin (an analysis that the Petitioner agrees with), there is no distinction between the lithology of the Haystead #9 well and the West Bay #22 well. Counsel for the EPA, Mr. Vezner noted that the Petitioner brought the exact same arguments against the Haystead #9 well and urged this Board to dismiss Petition UIC 15-03 on that basis. Since the Board declined

to accept Mr. Vezner's argument and issued an Order for Remand, the Petitioner believes this Board's ruling in *In re Bear Lake Props.*, 15 E.A.D. 630, 643-44 (EAB 2012) demands that the Board's review of the UIC permit decisions *extends to the boundaries of the UIC permitting program*, which is limited to the protection of underground sources of drinking water." *In re Bear Lake Props.*, 15 E.A.D. 630, 643-44 (EAB 2012) (citing cases); *see also In re Env'tl. Disposal Sys.*, 12 E.A.D. 254, 295 (EAB 2005). This Board obviously cannot allow Haystead #9 to continue to operate if West Bay #22 is withdrawn by Region 5 upon remand since Haystead #9 would pose a clear and present danger to underground sources of drinking water in Jackson County.<sup>1</sup> Would the Board please clarify its position on this issue?

The MDEQ just approved another Class II underground injection permit in Jackson County (UIC permit No. MI-075-2D-0014) and Region 5 opened public comment on this proposed permit before the Board issued their Remand Order on July 26, 2016. This proposed well is within 4 miles of the Haystead #9 and the West Bay #22 wells and is within one mile of Clark Lake. It is geologically and factually identical to those wells. Would the Board consider requiring the EPA to withdraw this permit until the Region complies with the Remand Order? It seems arrogant and unreasonable for the Region to open a new and identical proceeding while a decision on this case was pending or during the period the Region addresses the Board's Remand Order.

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<sup>1</sup> SDWA section 1431, 42 U.S.C. §300i gives the EPA Administrator broad authority to act to protect the health of persons in situations where there may be an imminent and substantial endangerment. Specifically, section 1431 provides that, upon receipt of information that a contaminant is likely to enter an underground source of drinking water the EPA Administrator may take any action they deem necessary to protect human health.

**2. The Petitioner seeks clarification as to whether the Board is requiring the Region to address the issuance of the Sunoco Inkster Permit No. MI-163-3G-A002 with regard to the Salina Group B-Unit.**

The B-Unit is a massive salt formation and the upper portion non-salt element of the B-Unit is an anhydrite rich argillaceous carbonate called the B Evaporite. The EPA issued Permit No. MI-163-3G-A002, for underground injection on June 14, 2006 for the Sunoco Inkster Facility in Wayne County. It specifically authorized the dissolution of Salina B-Group salt and anhydrite layers through injection of salt water for the purpose of enlarging pre-existing natural gas storage caverns. The information in the administrative record in this case shows that the B-Unit layers (whether massive salt or B Evaporite anhydrite containing layers) cannot possibly act as an aquiclude. The Petitioner asked the Board to look at the permit and the construction and abandonment and plugging diagrams of the Sunoco well and to compare them with the West Bay #22 well. An examination of the documents in the administrative record reveal an identical technology with only one difference: a second string in the Sunoco well returned brine to the surface. The Board inexplicably failed to require the EPA to discuss this information in its Remand Order and the Petitioner would like clarification directing the Region to address this issue with regard to the Salina Group B-Unit upon remand.

**3. The Petitioner seeks clarification with regard to the method the Region uses to determine injection pressure.**

Through the documents the Petitioner introduced into the administrative record, the Petitioner raised the possibility that injection pressure alone might create fractures in the confining layer(s). The Petitioner noted that in the Sunoco Inkster Permit No. MI-163-3G-A002

the Region determined that a maximum injection pressure of 382 psig was safe. With the Haystead #9 well (UIC Permit No. MI-075-2D-0010) the Region determined that a maximum injection pressure of 737 psig was safe. With the Savoy Creque well (UIC Permit No. MI-091-2D-0004), since withdrawn, the Region determined that a maximum injection pressure of 1998 psig was safe. With this West Bay #22 well, the region determined that a maximum pressure of 683 psig was safe. While the variables the Region used to calculate maximum injection pressure were consistent, the allowed injection pressures seem to have been arbitrarily reached.<sup>2</sup> Would the Board please have Region 5 discuss this issue on remand?

**4. The Petitioner seeks clarification with regard to the “area of review”.**

As this Board correctly noted, under 40 C.F.R § 146.6 the area of review is defined as “the projected radius of the distance that injected fluids may migrate.” Region 5 asserts that their model shows that after 20 years of continuous injection, the injected fluid would only migrate between 68 and 835 feet. The Petitioner introduced calculations based on evidence in the administrative record that the injected fluid could move 1,700 feet and this number does not take into account the additional pressure dynamics resulting from the confined swelling of the anhydrite or anhydritic shales. The Petitioner believes the EPA model was faulty. Would the Board please have the Region address the Petitioner’s argument on remand?

The Petitioner also introduced the abstract by A. Preuhs & L. Lemke, *Modelling Bedrock Transmissivity; Implications for Contaminant Transport in an overlying Glacial Aquifer System*

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<sup>2</sup> The EPA used 0.433 lb/ft for the specific pressure gradient in the Michigan basin and used 14.7 psi for the value of one atmosphere. The EPA used a fracture gradient of 0.8 psi/ft as the default value for Michigan.

which this Board accepted and requested that the Region respond to on remand. The dioxane plume has travelled over 3 miles and this is without an artificial pressure gradient pushing it. Will this Board please have the Region clarify the scientific reasons for its statement that the injected brine will only travel between 68 and 835 feet.

**5. The Petitioner seeks clarification with regard to anhydritic shales.**

The Petitioner introduced evidence into the administrative record that in anhydritic shales, where a chemical component influences swelling behavior, swelling pressures in the range of 2.0 – 2.5 MPa have been observed in situ and that thus such shales containing anhydrite could not function as a confining layer. The Petitioner seeks clarification from the Board that the Region must address this argument.

**CONCLUSION**

The Michigan DEQ is funded by a 1% tax on all oil and gas production in the State, giving it a vested interest in permitting oil & gas wells. This naturally leads to a need for underground injection wells to dispose of the unwanted brines, waste products and fracking fluids. Michigan Governor Snyder recently appointed Heidi Grether as head of the Michigan DEQ. Grether worked for BP America from 1993 to 2012, where she was a lobbyist and manager heavily involved in the company's response and cover-up of the 2010 Deepwater Horizon accident in the Gulf of Mexico. Before that, she worked for Amoco Corp. as director of government affairs. This selection of an oil lobbyist to head the Department responsible for environmental quality and safety in our State means that both the financing of the agency and the direction of the agency are under the control



of oil/energy companies. As the Flint water crisis shows, this regulatory situation is fraught with danger for our sources of drinking water.

The Petitioner thanks this Board once again for their thorough and detailed Remand Order, and requests that they grant clarification on the points addressed in this Motion.

Respectfully submitted,

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Dated: August 1, 2016

## CERTIFICATE OF SERVICE

I hereby certify that on August 1, 2016 I did send a copy of my Motion for Clarification under 40 C.F.R. § 124.19(m) to Kris Vesner, EPA Region 5, Environmental Protection Agency, 77 West Jackson Boulevard (C-14J), Chicago, IL 60604 and to William Horn, Mika, Meyers, Becket & Jones, 900 Monroe Ave. NW, Grand Rapids, MI 49503 by regular mail.

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