

Emerson Joseph Addison III  
17210 Maple Hill Drive  
Northville, MI 48168  
248-348-5401  
emerson.addison@gmail.com

Ms. Eurika Durr, Clerk of the Board  
Environmental Appeals Board  
U.S. Environmental Protection Agency  
1201 Constitution Avenue, NW  
WJC East Building, Room 3334  
Washington, DC 20004

Via Electronic Mail Filing

Re: ORDER TO SHOW CAUSE WHY PETITION SHOULD NOT BE DISMISSED FOR LACK OF JURISDICTION on Draft Class II Permit in Clare County, Michigan, issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well

Dear Ms. Durr:

Enclosed, please find Proof of Service and Response Brief: ORDER TO SHOW CAUSE WHY PETITION SHOULD NOT BE DISMISSED FOR LACK OF JURISDICTION Draft Class II Permit in Clare County, Michigan Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well. Also find Revised Petition for Review and Response to Revised response to comments MI-035-2R-0034, and Signed Revised RTC on Draft Class II Permit in Clare County MI Issued to Muskegon Develop. Co. #MI-035-2R-0034 regarding the above referenced matter. Additionally, the Report on faulty well design and construction by Professor Ingraffea, (Ingraffea, Anthony, 2013, Fluid Migration Mechanisms Due to Faulty Well Design and/or Construction: An Overview of Recent Experiences in the Pennsylvania Marcellus Play, Physicians, Scientists, and Engineers for Healthy Energy) has also been attached.

Please do not hesitate to contact me with any questions and concerns you should have.

Sincerely,

Emerson Joseph Addison III  
[emerson.addison@gmail.com](mailto:emerson.addison@gmail.com)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
ENVIRONMENTAL APPEALS BOARD

-----  
IN THE MATTER OF:

MUSKEGON HOLCOMB CLASS II WELL PERMIT

PERMIT NO. MI-035-2R-0034  
-----

APPEAL NO UIC 19-02  
PERMIT NO. MI-035-2R-0034-UIC

Response Brief: ORDER TO SHOW CAUSE WHY PETITION SHOULD NOT BE DISMISSED  
FOR LACK OF JURISDICTION  
Draft Class II Permit in Clare County, Michigan  
Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well

## CERTIFICATE OF SERVICE

13 November, 2019

I hereby certify that copies of the foregoing Response Brief: ORDER TO SHOW CAUSE WHY PETITION SHOULD NOT BE DISMISSED FOR LACK OF JURISDICTION Draft Class II Permit in Clare County, Michigan Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well, and EPA Revised Response to Comments on Draft Class II Permit in Clare County, Michigan, Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well, were served by Electronic Mail (email) the following persons, on the day of 13 November, 2019 were sent to:

By electronic filing to:

- \* Clerk of the Board  
U.S. Environmental Protection Agency  
Environmental Appeals Board  
1200 Pennsylvania Avenue, NW  
Mail Code 1103M  
Washington, DC 20460-0001

By electronic mail to:

- \* Muskegon Development Company  
c/o: Gina A. Boozer, Esq.  
Joseph E. Quandt, Esq.  
Khun Rogers PLC  
412 South Union Street  
Traverse City, MI 49684  
[gabozzer@krlawtc.com](mailto:gabozzer@krlawtc.com)  
[jequandt@krlawic.com](mailto:jequandt@krlawic.com)

By electronic mail to:

- \* Bill Myler, President, Muskegon Development Company  
1425 S. Mission Rd  
Mt. Pleasant, MI 48858  
989-772-4900  
Email: [billmyler@muskegondevelopment.com](mailto:billmyler@muskegondevelopment.com)

By electronic mail to:

- \* David Bell, Lead Engineer, Muskegon Development Company  
1425 S. Mission Rd  
Mt. Pleasant, MI 48858

989-772-4900  
Email: [davidbell@muskegondevelopment.com](mailto:davidbell@muskegondevelopment.com)

By electronic mail to:

\* Linda Holst  
Deputy Director, EPA Region 5  
312-886-6758  
Email: [holst.linda@epa.gov](mailto:holst.linda@epa.gov)

By electronic mail to:

\* Leverett Nelson  
Regional Council, EPA Region 5  
312-866-6666  
Email: [nelson.leverett@epa.gov](mailto:nelson.leverett@epa.gov)

By electronic mail to:

\* Robert A. Kaplan  
Senior Adviser, EPA Region 5  
312-886-3000  
Email: [kaplan.robert@epa.gov](mailto:kaplan.robert@epa.gov)

By electronic mail to:

\* Tom Turner  
Office of Regional Counsel  
U.S. EPA, Region 5  
77 W. Jackson Blvd (C-14J)  
Chicago, IL 60604  
Tel. (312) 886-6613  
Email: [turner.thomas@epa.gov](mailto:turner.thomas@epa.gov)

DATED: November 13, 2019

Sincerely,

Emerson Joseph Addison  
17210 Maple Hill Drive  
Northville, MI 48168  
[emerson.addison@gmail.com](mailto:emerson.addison@gmail.com)  
248-348-5401

**TABLE OF CONTENTS**

TABLE OF CONTENTS.....5

TABLE OF AUTHORITIES.....6

STATEMENT OF COMPLIANCE WITH WORD LIMITATION.....7

I. INTRODUCTION..... 8 - 9

II. RESPONSE TO ORDER TO SHOW CAUSE WHY PETITION SHOULD NOT BE  
DISMISSED FOR LACK OF JURISDICTION.....9 – 12

A. **“National efforts to reduce environmental risks are based on the best available  
scientific information”** ..... 10

B. **“Federal laws protecting human health and the environment are administered and  
enforced fairly, effectively and as Congress intended” - EPA mission statement** ... 10 - 12

III. CONCLUSION ..... 12 - 13

IV. ATTACHMENTS ..... 14

**TABLE OF AUTHORITIES**

Ingraffea, Anthony, 2013, Fluid Migration Mechanisms Due to Faulty Well Design and/or Construction: An Overview of Recent Experiences in the Pennsylvania Marcellus Play, Physicians, Scientists, and Engineers for Healthy Energy ..... 9 – 10, 12 - 13

“Revised Response to Comments on Draft Class II Permit in Clare County, Michigan, Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well.” .....10, 11, 12

"Petition for Review and Petitioner Response to EPA Revised Response to Comments on Draft Class II Permit in Clare County, Michigan Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well” ..... 9, 10

U.S. Code of Federal Regulations (CFR). Title 40: Protection of Environment 40 C.F.R. § 124.19 Appeal of RCRA, UIC, NPDES and PSD Permits ..... 8 – 9, 12, 13

**STATEMENT OF COMPLIANCE WITH WORD LIMITATION**

This brief complies with the 14,000-word limitation found at 40 C.F.R. § 124.19 (d)(3).  
See 40 C.F.R. § 124.19 (d)(1)(iv).

**RESPONSE BRIEF:**  
**ORDER TO SHOW CAUSE WHY PETITION SHOULD NOT BE DISMISSED FOR LACK OF JURISDICTION**

**I. Introduction:**

In July 2018, the U.S. Environmental Protection Agency Region 5 issued an Underground Injection Control Permit (“Permit”) to Muskegon Development Company (“Muskegon”). The Permit authorized Muskegon to convert an existing oil production well in Clare County, Michigan, the Holcomb 1-22 well, for injection of fresh water to enhance oil recovery from Muskegon’s other nearby production wells.

Mr. Emerson J. Addison III timely appealed the Region’s permit decision to the Environmental Appeals Board (“Board”). The Board remanded the Permit in part and denied review in part. See generally *In re Muskegon Dev. Co.*, 17 E.A.D. 740 (EAB 2019). The Board directed the Region to address two issues on remand. First, the Board held that the current state of the Region’s Response to Comments document (“RTC”), providing Agency responses to public comments on the draft version of the Permit, substantially impeded a determination as to whether the Region considered and meaningfully responded to certain comments and thereby exercised its considered judgment in issuing the Permit. *Id.* at 746-52. Second, the Board held that it was unable to determine whether the Region appropriately evaluated the environmental justice implications of the permitting action. *Id.* At 754-56.

The Board specified that “[a]nyone dissatisfied with the Region’s decision on remand must file a petition seeking Board review in order to exhaust administrative remedies under 40 C.F.R. § 124.19(l). Any such appeal shall be limited to issues the Region addresses on remand.” *Muskegon Dev.*, 17 E.A.D. at 762 n.11.

On September 26, 2019 the EPA issued a “Revised Response to Comments on Draft Class II Permit in Clare County, Michigan, Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well.” After responding to the aforementioned issues, the EPA determined that “none of the comments submitted have raised issues which would alter EPA’s basis for determining that it is appropriate to issue Muskegon Development a permit to operate the Holcomb 1-22 injection well.”

On October 25, 2019, Mr. Addison filed a document with the Board captioned “Petition for Review and Petitioner Response to EPA Revised Response to Comments on Draft Class II Permit in Clare County, Michigan, Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well.” In the body of his filing, Mr. Addison alternatively refers to the document as “[t]his Petition for Review / Reply Brief.”

This document references the “Revised RTC on draft” that the EPA submitted in response to the Remand of the permit, because the original EPA Response to comments did not include responses to several comments.

In response to this latest filing, the EAB stated:

“The Board adjudicates appeals from an Underground Injection Control final permit decision under 40 C.F.R. part 124. It is not apparent from Mr. Addison’s filing what decision he is appealing or the basis

for the Board’s jurisdiction over his Petition for Review. Mr. Addison does not reference any of the part 124 regulatory provisions or any other authority to support the Board’s jurisdiction over his Petition for Review. He also does not attach the “Revised RTC on draft” document that he cites in his filing, nor does he reference or attach any new permit decision made by the Region after the Board’s remand.”

“Accordingly, the Board orders Mr. Addison to show cause why his petition should not be dismissed for lack of jurisdiction. Mr. Addison must file his response to this Order on or before Wednesday, November 13, 2019.”

## **II. Response to Order to Show Cause why petition should not be dismissed for lack of jurisdiction:**

My Petition for Review (alternatively referred to as Petition for Review of remanded response to comments... etc.) should not be dismissed for lack of jurisdiction because, under 40 C.F.R. §124.19 Appeal of RCRA, UIC, NPDES and PSD Permits, there are grounds for review based on erroneous facts and EAB discretion:

(4) *Petition contents.* (i) In addition to meeting the requirements in paragraph (d), a petition for review must identify the contested permit condition or other specific challenge to the permit decision and clearly set forth, with legal and factual support, petitioner's contentions for why the permit decision should be reviewed. The petition must demonstrate that each challenge to the permit decision is based on:

**(A) A finding of fact or conclusion of law that is clearly erroneous, or**

**(B) An exercise of discretion or an important policy consideration that the Environmental Appeals Board should, in its discretion, review.**

I believe that EAB discretion is justified in this case on the grounds that granting this permit conflicts directly with the EPA’s stated objectives, as defined by its mission statement, to ensure that “Federal laws protecting human health and the environment are administered and enforced fairly, effectively and as Congress intended,” and its duty to ensure that “National efforts to reduce environmental risks are based on the best available scientific information.” (EPA mission statement <https://www.epa.gov/aboutepa/our-mission-and-what-we-do>)

I also believe that the responses to comments contained in the “Revised Response to Comments on Draft Class II Permit in Clare County, Michigan, Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well” were insufficient to demonstrate that this well will be safe and properly monitored.

Additionally, the EPA relies on erroneous facts and conclusions to support its decision. These erroneous facts and conclusions include its biased use of science, its misinterpretation of statistics provided in a key piece of evidence against the issuance of this permit (the Ingraffea report), its erroneous exclusion of the study results contained in the Ingraffea report due to its mistaken belief that the statistics on well failures do not apply to wells in Michigan due to differences in geology and fracking operations (an interpretation which Professor Ingraffea personally assured me was incorrect,

explicitly stating that YES, his statistics and his study do apply to Michigan, as they are largely concerned with failures due to construction and design flaws, as opposed to geology surrounding well sites or fracking operations. In other words, Cornell University Professor Emeritus of Civil and Environmental Engineering, Anthony R. Ingraffea, personally told me his study applies to this well (he also encouraged me to invite you to personally contact him via his personal cell phone number, which I provide in this response brief and in my previous filing regarding this case).

Thus, there are a number of ways in which granting this permit conflicts directly with the EPA's Mission Statement, especially regarding "Federal laws protecting human health and the environment are administered and enforced fairly, effectively and as Congress intended," and ensuring that "National efforts to reduce environmental risks are based on the best available scientific information."

**A. "National efforts to reduce environmental risks are based on the best available scientific information"**

In my Petition for Review / Response to the remanded response to comments, I clearly demonstrate that the science used to grant this permit is not the best available science. To do this, I literally called the author of one of the studies admitted into the official record (Professor Ingraffea, author of a report which has already been submitted and referenced multiple times) and asked him about the current state of the science.

He said there are a lot of risks, the science is far from settled on this matter, and that, despite the EPA's contention that his study did not apply to the Muskegon Permit because much of the information (but not all) came from the Pennsylvania Marcellus Shale formation and fracking wells, his study was applicable because the failure rates and statistics reported in his study were largely dependent on aspects of construction and design (industry standard practices), rather than on geology.

During our phone call, Professor Emeritus Ingraffea explained that construction, monitoring, maintenance, operation, and various other practices governing these wells are standardized across the industry; thus, the failure rates reported in his study do apply, as many of these failures are caused primarily by design and construction flaws, rather than by specifics of geology or use of fracking. In other words, the geological area of the well and presence of fracking are NOT the issues in the majority of these cases.

As previously mentioned, Anthony R Ingraffea is Professor Emeritus in Civil and Environmental Engineering at Cornell University. To borrow the words of the EPA's mission statement, Professor Emeritus Ingraffea literally IS "the best available scientific information" on this subject.

And during our conversation, I asked him if I could include his cell phone number in my response so that if the EPA didn't believe me, they could call him directly. He gave me permission to do this, and he is expecting your call. Again, his number is: 607-351-0043.

**B. "Federal laws protecting human health and the environment are administered and enforced fairly, effectively and as Congress intended" - EPA mission statement**

The second major way in which granting this permit conflicts directly with the EPA's mission statement is through the poor administration and enforcement of UIC regulations.

Specifically, the part about “administering and enforcing” federal laws is problematic. I know this because in the EPA’s remanded response to the originally omitted comments, the EPA gives some numbers (Revised Response to Comments on Draft Class II Permit in Clare County, Michigan, Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well, page 20).

Notably, in its remanded response to Comment #25: Structural failures inside injection wells are common, the EPA states:

“The “statistics” that commenters mentioned do not reflect EPA’s experience in Michigan. In a review of all active Class II injection wells in Michigan over the past five years, the failure rate has been no higher than 5% in any given year.” (Revised Response to Comments on Draft Class II Permit in Clare County, Michigan, Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well, page 20)

1 in 20 is bad odds. But it gets much, much worse.

In the EPA’s remanded response to “Comment #26: Please protect the water supply,” the EPA replies:

“In federal fiscal year 2017, EPA inspected 518 wells, reviewed 13,560 monitoring reports, witnessed 226 mechanical integrity tests, reviewed reports from 32 well mechanical integrity or geologic reservoir tests, and issued four information collection orders.” (Revised Response to Comments on Draft Class II Permit in Clare County, Michigan, Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well, page 22)

There is a big problem with this reply. Specifically, the number of active wells that the EPA is responsible for overseeing. A simple Google search reveals that:

“There are **more than 900,000 active oil and gas wells in the United States**, and more than 130,000 have been drilled since 2010, according to Drillinginfo, a company that provides data and analysis to the drilling industry.”

I got this information with a simple Google search, but the EPA doesn’t even need to do that. The EPA knows EXACTLY how many active wells are in the U.S. (or at least I hope it knows), and by extension, the EPA knows how insignificant its monitoring efforts are.

518 inspections out of 900,000 wells is insignificant. Reviewing 13,560 monitoring reports out of 900,000 is about 1.5%, which is also insignificant. Those are the best number the EPA puts up in the monitoring department, and those are just reports. Not on-site inspections or technical analysis. 226

mechanical integrity tests out of 900,000 is even less significant than the 518 inspections. 32 report reviews from mechanical integrity or geologic reservoir testing is pathetic. And only 4 orders for information collection? To put that one in perspective, the odds of being struck by lightning in a given year in the United States are approximately 1 in 700,000 (Google). From the perspective of an oil and gas operator, the odds of being struck by lightning over a 4 year time span are significantly higher than the odds of being asked for more information in any single given year.

### **III. Conclusion:**

I contend that under 40 C.F.R. § 124.19, the EAB has jurisdiction and cause to consider this petition based on the presence of erroneous facts, its own discretion, and due to the conflict between granting this permit and fulfilling the objectives of the EPA as defined by its own mission statement. Moreover, the EAB has the authority to review a petition. The EAB has discretion in reviews and can issue a review “on a clearly erroneous finding of fact or conclusion of law or that the Board should exercise its discretion to review an important policy matter or an exercise of discretion by the permit issuer.” (Practice Manual, August 2013)

Granting this permit would create a situation in which the EPA is unable to properly monitor this well and enforce Federal guidelines protecting human health and the environment. Granting this permit would also also represent a failure to ensure that “national efforts to reduce environmental risks are based on the best available scientific information.” Given that these matters pertain directly to the EPA Mission Statement, there is an apparent contradiction here that also warrants EAB discretion.

Therefore, the EAB has jurisdiction to review this permit and consider this project in light of EPA mission and policy objectives. Isn't this sort of thing part of the reason the EPA was created in the first place? And given that I have demonstrated that there are problems with the science and the monitoring of this well, problems which would create fundamental failures at the EPA to fulfill its mission, a review is warranted.

As ordered by the EAB, “Accordingly, the Board orders Mr. Addison to show cause why his petition should not be dismissed for lack of jurisdiction.”

Petition contents must demonstrate “An exercise of discretion or an important policy consideration that the Environmental Appeals Board should, in its discretion, review.”

I argue that, given the extremely low odds of the EPA ever inspecting this well or any other individual well, and given that part of the EPA's mission is to ensure that “Federal laws protecting human health and the environment are administered and enforced fairly, effectively and as Congress intended,” the clause from §124.19 Appeal of RCRA, UIC, NPDES and PSD Permits, 4.B “(B) An exercise of

discretion or an important policy consideration that the Environmental Appeals Board should, in its discretion, review.” is applicable.

In short, the EPA’s argument about well monitoring and inspections (Revised Response to Comments on Draft Class II Permit in Clare County, Michigan, Issued to Muskegon Development Company (Permit No. MI-035-2R-0034), Holcomb 1-22 Well, page 22) is an inadvertent admission of the EPA’s own inability to properly monitor this well. This inability to perform proper monitoring directly conflicts with the EPA’s mission statement, which includes “fairly” and “effectively” monitoring and enforcing Federal laws protecting human health and the environment.

A second objective on the EPA’s mission is to ensure that “National efforts to reduce environmental risks are based on the best available scientific information.” Again, Anthony R Ingraffea, Professor Emeritus in Civil and Environmental Engineering at Cornell University, would argue that the science is ongoing and incomplete, and that the EPA’s efforts to reduce environmental risks, such as this one, are NOT based on the “best available scientific information.”

I argue that by granting this permit, the EPA is in violation of its mission statement in at least these two aforementioned ways, and that this contradiction in its raison d’être is a matter that warrants EAB discretionary review. Moreover, the EPA erroneously dismissed Professor Ingraffea’s report. An erroneous dismissal of a factual paper presented by an expert certainly qualifies as an erroneous finding of fact warranting review. But again, if there is any doubt to my argument, I encourage you to call Professor Ingraffea. He gave me permission to include his cell phone number so that you can call him. Here is his number one final time: **607-351-0043**. He is expecting your call.

Sincerely,

Emerson Joseph Addison III  
17210 Maple Hill Drive  
Northville, MI 48168  
248-348-5401  
[emerson.addison@gmail.com](mailto:emerson.addison@gmail.com)

#### **IV. ATTACHMENTS**

Revised Petition for Review and Response to Revised response to comment MI-035-2R-0034.pdf

Signed Revised RTC on Draft Class II Permit in Clare County MI Issued to Muskegon Develop. Co.  
#MI-035-2R-0034.pdf

PSE\_\_Cement\_Failure\_Causes\_and\_Rate\_Analaysis\_Jan\_2013\_Ingraffea.pdf

Muskegon Order to Show Cause Why Petition Should Not Be Dismissed. pdf