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

PETITION FOR REVIEW OF PERMIT DECISION
UNDER 40 C.F.R. PART 124

**FOR** 

THE ISSUANCE OF UNDERGROUND INJECTION

CONTROL (UIC) PERMITS

TO BEAR LAKE PROPERTIES, LLC

**Permit Numbers** 

PAS2D215BWAR

and

PAS2D216BWAR

William A. Peiffer, Jr. and Paul T. Stroup, Petitioners

### **CERTIFICATE OF SERVICE**

I hereby certify that copies of the foregoing Petition for Review of Permit Decision Under 40 C.F.R. Part 124 in the matter of Permit Numbers <u>PAS2D215BWAR</u> and <u>PAS2D216BWAR</u> were served by United States First Class and Certified Mail on the following persons, this 8<sup>th</sup> day of July, 2011:

Joseph Rotechi Bear Lake Properties, LLC 3000 Village Run Road Unit 103, #223 Wexford, Pennsylvania 15090

Karl Kimmich
Bear Lake Properties, LLC
3000 Village Run Road
Unit 103, #223
Wexford, Pennsylvania 15090

John Holko Bear Lake Properties, LLC 3000 Village Run Road Unit 103, #223 Wexford, Pennsylvania 15090

The Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue Northwest Washington, D.C. 20004

EPA Region III 1650 Arch Street Philadelphia, PA 19103-2029

Andrea L. Stapleford

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

PETITION FOR REVIEW OF PERMIT DECISION

UNDER 40 C.F.R. PART 124 FOR

THE ISSUANCE OF UNDERGROUND INJECTION CONTROL (UIC) PERMITS

In re: Bear Lake Properties, LLC, Permittee

Permit Numbers PAS2D215BWAR and PAS2D216BWAR

# PETITION FOR REVIEW OF PERMIT DECISION UNDER 40 C.F.R. PART 124

AND NOW comes Andrea L. Stapleford, Esquire, on behalf of Petitioners William A. Peiffer, Jr. and Paul T. Stroup and files this Petition pursuant to 40 C.F.R. §124.19(a), based upon the following:

# INTRODUCTION

Petitioner William A. Peiffer, Jr. (hereinafter referred to individually as "PETITIONER PEIFFER"), an adult individual with an address of 49 East Congress Street, Corry, Pennsylvania 16407, and Petitioner Paul T. Stroup (hereinafter referred to individually to as "PETITIONER STROUP"), an adult individual with an address of 450 Scrambling Road, Corry, Pennsylvania 16407, both of whom may herein be referred to collectively as "PETITIONERS", petition for

review of the issuance of two (2) Underground Injection Control (UIC) Permits, Bearing Permit Numbers PAS2D215BWAR and PAS2D216BWAR (hereinafter the "PERMITS"), which were issued to Bear Lake Properties, LLC (hereinafter the "PERMITTEE"), on June 8, 2011, by the U.S. Environmental Protection Agency (EPA) Region III. Petitioners contend that the issuance of the Permits is based on clearly erroneous findings of fact and on the improper exercise of discretion by the EPA. Specifically, the Petitioners challenge the issuance of the Permits on the grounds set forth herein.

#### **HISTORY**

The Permits issued by the EPA Region III, the issuance of which was announced on June 8, 2011, authorize the Permittee to construct and operate two (2) UIC Class IID commercial brine disposal injection wells, the Bittinger #1 and the Bittinger #4, at the Permittee's disposal facility located in Columbus Township, Warren County, Pennsylvania. The Permits were issued under the authority of the federal UIC regulations found at 40 C.F.R. Parts 124, 144, 145, 146, and 147.

## THRESHOLD PROCEDURAL REQUIREMENTS

Petitioners satisfy the threshold requirements for filing this Petition for Review under Part 124, to wit:

 Petitioner Peiffer has standing to file this Petition for Review inasmuch as he submitted written comments to the issuance to the Permits on March 30, 2011. A copy of Petitioner Peiffer's written comments is attached hereto as Exhibit A.

- 2. Petitioner Stroup has standing to file this Petition for Review inasmuch as he participated in and presented oral comments on the draft permit at the Public Hearing, held on the issuance of the Permits. The Public Hearing was held on March 23, 2011, at 7:00 p.m., at the Columbus Township Social Hall, Warren County, Pennsylvania.
- 3. The issues raised by Petitioners in this Petition were raised either during the public comment period at the Public Hearing or by written comment and therefore were preserved for review.

#### **ARGUMENT**

Petitioners challenge the issuance of the Permits and file this Petition for Appeal pursuant to 40 C.F.R. Part 124.19, based upon the following:

1. <u>In its permit application, Permittee stated that there are only thirty-five (35) water wells located in Columbus Township.</u>

This fact was questioned during the comment period of the public hearing. As shown by the attached Exhibit B, Pages 1-18, there are in fact 464 water wells located in Columbus Township alone. (The information included in Exhibit B was compiled using information available from the municipal offices of both Columbus Township and the City of Corry.) On Exhibit B, Pages 1-18, those entries which show a real property address in blue are located in Columbus Township and each property has at least one (1) functioning water well it. (Those entries which show a property address in orange are located in the City of Corry and are not relevant for purposes of this question. For those properties which show a property address in black or red, it is possible that there is a

functioning water well on the property, but this could not be determined with certainty and, consequently, these properties were not included in the total count of water wells within Columbus Township.) The information provided on Exhibit B, Pages 1-18, shows that Permittee's contention that there are only thirty-five (35) water wells in Columbus Township is factually incorrect.

The EPA cannot rely on the inaccurate information provided by Permittee for the issuance of the Permits. The EPA did not have sufficient information to enable it to make an informed decision with regard to the issuance of the Permits. The rendering of the EPA's decision based on this inaccurate and insufficient information is an exercise of discretion that warrants review and, subsequently, the revocation of the Permits.

2. <u>In its permit application, Permittee stated that there is only one (1) water well located within one (1) mile of Bittinger #1.</u>

Both written comment and public testimony expressed concern that the number of water wells was not adequately surveyed by Permittee, as evidenced in item 7 of the Responsiveness Summary. Subsequently, Permittee amended the number of water wells to show that there are ten (10) water wells which are located in New York State and which are within one mile of the proposed injection well facility. Despite the addition of information regarding the number of water wells located in New York State which are within a one-mile radius of the facility, noticeably absent is any information which provides the number of water wells in Pennsylvania which are also located within one mile of either of the facility. Given the proximity of the facility to the New York-

Pennsylvania state line, information regarding water wells in both states must be considered.

Permittee never amended the information which was provided with regard to Bittinger #1, and Permittee continued to provide incorrect information with regard to Bittinger #4 in that it did not properly report the number of water wells that are located within one (1) mile of Bittinger #4.

As shown by the attached Exhibit C, there are at least eight (8) water wells in Pennsylvania alone which are located within a one-mile radius of both Bittinger Wells. All eight (8) wells are located in Columbus Township and are identified on Exhibit C as water well numbers 14 through 21. Arguably, there are nine (9) water wells located within one mile of Bittinger #1 given the location of water well #22. Exhibit C also shows the location of the water wells in New York which were included in the amended count provided by Permittee. As stated above, Permittee never provided amended information with regard to Bittinger Well #1 and, also, never included in its information the accurate number of water wells located in Pennsylvania. Accurate information about both Bittinger Wells from both New York and Pennsylvania must be included and considered to provide complete and comprehensive information. Both the initial information as well as the amended information submitted by Permittee is factually incorrect.

The EPA cannot rely on the inaccurate information provided by Permittee for the issuance of the Permits. The EPA did not have sufficient information to enable it to make an informed decision with regard to the issuance of the Permits. The rendering of

the EPA's decision based on this inaccurate and insufficient information is an exercise of discretion that warrants review and, subsequently, the revocation of the Permits.

3. <u>In its permit application, Permittee stated that the range of depth of water wells in Columbus Township is 90 to 130 feet deep.</u>

This fact was questioned by Petitioner during the comment period at the public hearing. As shown in the key located in the bottom left corner of Exhibit C, noting particularly the information shown with regard to water well #16, the range of depth of water wells in Columbus Township reaches two hundred fifty (250) feet, as opposed to one hundred thirty (130) feet as stated by Permittee. It is significant that one of the deepest water wells, water well #21, which shows a depth of one hundred fifty-five (155) feet, is also the closest well to both Bittinger Wells and is deeper than any of water wells accounted for by Permittee in its application. The depth of the Columbus Township wells, along with their proximity to the Bittinger Wells, was not properly accounted for by Permittee in its permit application.

As a result, the well construction standards, mechanical integrity testing requirements, and monitoring requirements which were established by the EPA with regard to the Bittinger Wells could not have been accurate, given the incorrect information that was provided by Permittee; also, the construction standards and testing and monitoring requirements cannot be sufficient to account for these depths. In addition, the rendering of the EPA's decision based on this inaccurate and insufficient

information is an exercise of discretion that warrants review and, subsequently, the revocation of the Permits.

4. In its permit application, Permittee stated that there are no known gas wells within the zone of endangered influence (calculated based on the simultaneous operation of both proposed injection wells) that are not either owned by Permittee or that are not plugged. As stated in item #6 of the Responsiveness Summary, the EPA conducted its own calculation to verify the information submitted by Permittee; the EPA subsequently confirmed the information submitted by Permittee. Despite this, both the information provided by Permittee and the EPA's confirmation of these numbers was in error.

This fact was questioned by Petitioner during the comment period at the public hearing. As shown by the attached Exhibit D, there are thirty-eight (38) wells located in Pennsylvania within the zone of endangered influence which was calculated by the EPA to be two miles, as stated in item #6 of the Responsiveness Survey.

As Exhibit D shows, many, but <u>not</u> all, of these wells are owned by Permittee, contrary to Permittee's contention that it does in fact own all of these wells. Instead, Pennsylvania gas well owners of record, in addition to Permittee, are shown in red and blue on Exhibit D and, as Exhibit D shows, there are twenty (20) wells which are owned by individuals or producers other than Permittee and which are within the zone of endangered influence. Of these twenty (20) wells, there are only three (3) wells which are or may be plugged, leaving seventeen (17) active wells in Pennsylvania alone which are within the zone of influence and which are not owned by Permittee. As this

information shows, Permittee only owns eighteen (18) of the thirty-eight (38) wells in Pennsylvania which are within the zone of endangered influence.

In addition to the wells in Pennsylvania, there are thirty-two (32) wells located in New York State which are within the zone of endangered influence, as shown on the attached Exhibit E. All but five (5) of the wells in New York appear to be producing, and none of the thirty-two (32) wells are owned by Permittee as shown by the key which is included with Exhibit E.

To summarize, Exhibits D and E show that there are a total of seventy (70) oil or gas wells located in Pennsylvania and New York within the zone of endangered influence. According to the records of the Pennsylvania Department of Environmental Protection and the New York Department of Environmental Conservation, the agencies which provided the information for Exhibits D and E, Permittee owns only eighteen (18) of these seventy (70) wells. This information is substantially different from that which was provided by Permittee in its permit application.

The factual information which was provided by Permittee and which was relied upon by the EPA as a basis for the issuance of the Permits is factually incorrect and insufficient. The EPA cannot rely on the inaccurate information provided by Permittee for the issuance of the Permits. The EPA did not have sufficient information to enable it to make an informed decision with regard to the issuance of the Permits. The rendering of the EPA's decision based on this inaccurate and insufficient information is an exercise of discretion that warrants review and, subsequently, the revocation of the Permits.

5. At item #2 of the Responsiveness Summary, it is stated that the EPA "does not have the jurisdiction to direct an operator to a particular geographic location" and states that the operator is to consider economics, property ownership, and geologic suitability, among other factors, in determining where to locate injection wells.

This requirement, and the accuracy of the information provided with regard to this requirement, was raised during the comment period at the public hearing. Petitioners appreciate the EPA's position on this matter and acknowledge the difficulty that the EPA would face if it were required to locate and determine suitable areas for the location of injection wells, it is the Petitioners' position that both the Permittee and the EPA failed to take into consideration the fact that Columbus Township is the second fastest growing municipality in all of Northwest Pennsylvania (Erie, Warren, and Crawford counties) and has shown the highest percentage of growth in Warren County between the years of 2000 to 2010. Columbus Township is an area of primary growth within the region and has grown in population by 16.8% in the past decade, most closely followed by Triumph Township which grew by 10.5% in the past decade, as shown on the attached Exhibit F. While Permittee may have considered a location that would be convenient for Permittee alone, it has failed to take into consideration the economics of the area, the detrimental effect that locating these wells in Columbus Township will have on the area, and the adverse economic impact that the residents of Columbus Township will suffer as a result.

Failing to take into consideration the rapid growth of Columbus Township and failing to require Permittee to take this same information into consideration is an exercise of discretion which warrants review.

6. At item #4 of the Responsiveness Summary, it is stated that the EPA has no evidence that the proposed location of the injection wells is in an earthquake prone area.

Despite the statement referenced above, item #4 also acknowledges that "[o]ver the past three decades, natural gas has been removed from the pore space within [the reservoir proposed for injection], depleting the formation of much of the natural gas it contained as well as reducing the formation's reservoir pressure. Earthquakes can occur when a geologic formation becomes under-pressurized or when it becomes over-pressurized."

It is stated, also at item #4, that "there has been no evidence of earthquakes due to the removal of this natural gas." Not only is this reasoning flawed in that it is irresponsible for the EPA to wait until an earthquake occurs to determine that a specific injection well facility is located in an earthquake-prone area, but, also, it fails to take into consideration the fact that earthquakes have been acknowledged previously as being a problem resulting from injection wells. When wells are produced, the compressible gas is removed; when production wells are later used as injection wells, the compressible gas is replaced with a non-compressible liquid. This process creates a pressure zone, or bulb, as is discussed in Exhibit G. The processes involved with hydrofracking a well are nearly the same as those involved with injecting fluids under pressure into an injection well, with the primary exception being that the duration of the hydrofracking process is considerably shorter than the duration of injecting fluids into an injection well such as those which are contemplated by the Permits. In hydrofracking, the process may last anywhere from a few hours to a few weeks, whereas the injection process is an ongoing

process which operates twenty-four hours a day, seven days a week, for an extended period of time, yet both of these processes have been documented to result in seismic activity.

As shown in Exhibits H and I seismic activity has been documented in both New York and Ohio, states whose borders are in very close proximity to the Bittinger Wells. In addition, Exhibit H discusses how the introduction of water, or any non-compressible liquid, under pressure into deep rock formations causes seismic activity.

Exhibit I reports information regarding injection-triggered earthquakes in Ashtabula, Ohio, a city which is only approximately sixty (60) miles from Columbus Township. Information reported on page 76 of this Exhibit calls to attention the fact that "[w]hen contrasted with the lack of prior known seismicity in that area of northeastern Ohio, the proximity in time and space of this seismicity to an injection well was strong evidence that increased pore pressure triggered the seismicity." Specific technical information provided on pages 79 and 80 of Exhibit I, as well as additional information provided throughout this Exhibit, further explains that "the proximity between injection and earthquake generation...provides evidence that the injection triggered the seismicity."

Also of great concern because of its proximity to the Bittinger Wells is what occurred with the Tecroney No. 1 Brine Injection Well. As Exhibit J shows, this well was only three and three-quarters (3 ¾) miles from the proposed site of Bittinger #4. The Tecroney Well, located in Clymer, New York, was shut down after only approximately

four years in operation by the New York Department of Environmental Conservation due to seismic activity associated with the Tecroney Well.

Exhibit K reports that "an unusually high number of earthquakes have temporarily shut down two injection wells" in Arkansas. This report also states that "seismic activity like we're seeing in Arkansas is not something new." This information further calls into question the effect that injection wells have on the seismic activity in an area.

Failing to take into consideration all of the relevant information with regard to areas which are or which may become earthquake-prone and considering only that which has occurred to date, particularly given the history provided for other areas which are similarly situated to Columbus Township, is an improper exercise of discretion by the EPA which warrants review and, subsequently, the revocation of the Permits.

7. The public hearing on the injection well applications was held on March 23, 2011, having been rescheduled from February 23, 2011. The public comment period on these applications was initially determined to end on March 30, 2011, but was later extended to April 15, 2011.

Petitioners; Columbus Township, the local government having jurisdiction over the proposed area where the facility would be located; and others desirous of making comment were not notified that the public comment period had been extended to the April 15 date. Over 200 people attended the public hearing held on March 23, 2011, showing considerable interest and concern on the part of the public with regard to the issuance of the Permits. Despite this interest and concern, the EPA failed to notify the above-mentioned parties of the extension. As a result of the EPA's failure, the rights of

the Petitioners, Columbus Township, and the rights of residents of Columbus Township and of neighboring municipalities have been prejudiced.

This lack of notice prevented additional public comment from being submitted and is prejudicial to the rights of those interested parties due to the requirements set forth in 40 C.F.R. §124.13 which provides that "[a]ll persons...who believe any condition of a draft permit is inappropriate or that the Director's tentative decision to...prepare a draft permit is inappropriate must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period." (Emphasis added.)

The lack of notice regarding the extension of the public comment period is an error which cannot be overlooked and which must be reviewed by the Environmental Appeals Board.

#### **CONCLUSION**

The issuance of the two Permits cannot be based on findings of fact which are clearly erroneous. In addition, the EPA has exercised its discretion in manners which are both prejudicial and unsupported by factual considerations. Based on the above and on the information which is submitted herein and as exhibits to this Petition, Petitioners respectfully request that Permit Numbers <a href="PAS2D215BWAR">PAS2D215BWAR</a> and <a href="PAS2D216BWAR">PAS2D216BWAR</a> which were issued to Permittee on June 8, 2011, be revoked.

Respectfully submitted,

Andrea L. Stapleford, Esquire

Stapleford & Byham, LLC

600 Market Street

Warren, Pennsylvania 16365

Telephone: (814) 723-3445

Facsimile: (814) 723-7950

<u>AFFIDAVIT</u>

COMMONWEALTH OF PENNSYLVANIA

:SS

COUNTY OF WARREN

:

ON THIS, the 8th day of July, 2011, ANDREA L. STAPLEFORD, the undersigned, states that she is the attorney for Petitioner and that she is authorized to make this Affidavit on behalf of Petitioner, that the facts set forth in the foregoing Petition For Review Of Permit Decision Under 40 C.F.R. Part 124 are true and correct, not of her own knowledge, but from information supplied to her by the Petitioner, that the purpose of this Affidavit is to expedite the litigation, that an Affidavit of the Petitioner will be supplied if demanded, all subject to the penalties of 18 Pa.C.S. Section 4904 relating to unsworn falsification to authorities.

Andrea L. Stapleford, Esquire

Sworn to and subscribed before me this 8th day of July, 2011.

Notary Public

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal Staci D. Neal, Notary Public City of Warren, Warren County My Commission Expires July 25, 2015

MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

### PROOF OF SERVICE

COMMONWEALTH OF PENNSYLVANIA

SS.

COUNTY OF WARREN

ANDREA L. STAPLEFORD, being duly sworn according to law, deposes and says that she is employed at the offices of Stapleford & Byham, LLC, Attorneys at Law, with offices at 600 Market Street, Warren Pennsylvania, and that on July 8, 2011, at the United States Post Office in Warren, Pennsylvania, she mailed to the following, by certified mail a true and correct copy of the PETITION FOR REVIEW OF PERMIT DECISION UNDER 40 C.F.R. PART 124 in the above-entitled case; said Certified Mail Receipt is attached hereto as Exhibit A.

Joseph Rotechi Bear Lake Properties, LLC 3000 Village Run Road Unit 103, #223 Wexford, Pennsylvania 15090

Karl Kimmich Bear Lake Properties, LLC 3000 Village Run Road Unit 103, #223 Wexford, Pennsylvania 15090

John Holko Bear Lake Properties, LLC 3000 Village Run Road Unit 103, #223 Wexford, Pennsylvania 15090

The Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue Northwest Washington, D.C. 20004

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Sworn to and subscribed before me this 8th day of July, 2011.

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Notarial Seal
Stad D. Neal, Notary Public
City of Warren, Warren County
My Commission Expires July 25, 2015