

**WEST VIRGINIA ENVIRONMENTAL QUALITY BOARD**

**MURRAY AMERICAN ENERGY, INC.,  
WEST VIRGINIA LAND RESOURCES, INC.,  
and MARION COUNTY COAL RESOURCES, INC.,**

**Appellants,**

**v.**

**Appeal No. 20-07-EQB**

**JONATHAN RORRER,<sup>1</sup> ACTING DIRECTOR,  
DIVISION OF MINING AND RECLAMATION,  
DEPUTY SECRETARY FOR OPERATIONS,  
WEST VIRGINIA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION,**

**Appellee, and**

**AMERICAN BITUMINOUS POWER PARTNERS, L.P.,**

**Intervenor-Appellee.**

**FINAL ORDER**

This matter arises from an appeal by Murray American Energy, Inc., (“MAEI”)<sup>2</sup>, challenging two actions by the West Virginia Department of Environmental Protection (“DEP”), which together comprise the issuance of Underground Injection Control (“UIC”) Permit No. 0394-01-049 to Intervenor-Appellee American Bituminous Power Partners, L.P. (“AMBIT”): (1) the May 29, 2020 issuance of UIC Permit No. 0394-01-049 (Reissuance No. 3) to AMBIT, and (2) the June 12, 2020 issuance of Modification No. 1 to UIC Permit No. 0394-01-049 to AMBIT

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<sup>1</sup> Harold Ward no longer holds the office as Director of Division of Mining and Reclamation. Pursuant to Rule 25(d) of the W. Va. Rules of Civil Procedure, Ward’s successor, Acting Director Jonathan Rorrer, is automatically substituted as a party.

<sup>2</sup> This appeal was originally filed by Appellant Murray American Energy, Inc. (“MAEI”) on June 26, 2020. As indicated by the style of this appeal and their participation at hearing, after the pre-hearing conference held on October 29, 2020, the Board granted the motion to add Appellants West Virginia Land Resources, Inc. (“WVLR”) and Marion County Coal Resources, Inc. (“MACCR”), as the new owners of the mining operations and treatment facilities involved in this appeal. WVLR and MACCR became the owners and operators of those facilities following the conclusion of the Murray Energy bankruptcy proceedings in the U.S. District Court for the Southern District of Ohio (Case No. 2:19-bk-56885). See “Motion to Substitute New Appellants, Sept. 23, 2020”; Tr., pp. 36, 43, 45.

(Reissuance No. 3 and Modification No. 1 are collectively referred to as “the AMBIT UIC Permit.”). *See* Notice of Appeal, p. 1; Ex. A.<sup>3</sup>

The AMBIT 2020 UIC Permit Reissuance Application seeks authorization to continue injection of untreated AMD into the Joanne Mine, which is part of the Fairmont Mine Pool, and to increase the injection volume under the previous UIC permit from an average of 52,120 gallons per day (“gpd”) up to an average of 266,400 gpd. (See Certified Record at p. 55). AMBIT also sought to increase the maximum injection volume from 86,400 gpd to 280,000 gpd, which would authorize injection of up to 102,200,000 gallons annually. (*Id.*).

The parties appeared for evidentiary hearings on January 14, 2021, January 27, 2021, and February 4, 2021, whereupon a quorum of the Board received evidence and hear oral arguments of counsel.<sup>4</sup>

The Board heard testimony of six (6) witnesses: Kevin M. Rakes, Manager of Engineering for ACNR Resources, Inc. (Transcript (“Tr.”), p. 32); James A. Kilburg, Ph.D., of Civil and Environmental Consultants, Inc., expert witness in the areas of geology and hydrogeology presented by Appellants (*Id.*, pp. 141, 143); Robert Hudnall, Environmental Program Manager for the DEP Mining UIC Program (*Id.*, p. 229); Joshua Bonner, Geologist IV with the DEP’s Division of Mining and Reclamation (“DMR”) Permitting Section (*Id.*, pp. 414-415); John R. Spencer, Jr., of ARM Services, LLC, expert witness in the area of regulatory permitting presented by AMBIT (*Id.*, pp. 563, 566-567); and Herbert R. Thompson, Owner’s Representative for AMBIT (*Id.*, pp. 652-653).

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<sup>3</sup> The AMBIT 2020 UIC Permit is attached as Exhibit A to the Notice of Appeal.

<sup>4</sup> The hearing transcripts of the proceeding before the Board, along with all exhibits entered into evidence, are hereby incorporated by reference.

At the conclusion of the evidentiary hearing the parties were directed to submit proposed findings of fact and conclusions of law and reply briefs. After consideration of the proposed findings and conclusions, reply briefs, the evidence of record, expert testimony and arguments of counsel,<sup>5</sup> the Board members who heard this appeal have decided to issue this Final Order granting the Appellants' appeal in part and to modify the AMBIT 2020 UIC Permit.

The Board hereby modifies the AMBIT 2020 UIC Permit in order to reduce the injection volumes of untreated AMD into the Joanne Mine. The injection volumes shall be the same as the volumes identified and set forth in AMBIT's 2014 UIC Permit Reissuance Application. The reissuance of the AMBIT 2020 UIC Permit as it applies to increasing the injection volumes of untreated AMD was arbitrary and capricious. The hearing revealed several weaknesses in DEP's UIC permitting review process. Evidence indicates a hurried and/or perfunctory review of the reissuance application. Also, the flow path of the Injectate has not been established by reasonable degree of hydrogeological certainty. No current or updated reliable flow path has been established.

The Board also took into consideration AMBIT's violations of the AMBIT 2014 UIC Permit concerning injection volumes. AMBIT regularly exceeded permitting limits. DEP did not verify or enforce limits. Appellants have active mine operations near the site of the injection borehole. DEP did not consider all stakeholders, including Appellants, when approving significant increases in the injection volumes of untreated AMD.

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<sup>5</sup> All proposed findings submitted by the parties have been considered and reviewed in relation to the record developed in this matter. All argument of counsel, proposed findings of fact and conclusions of law have been considered and reviewed with reference to the evidentiary record before the Board, as well as applicable law. To the extent that the proposed findings of fact, conclusions of law and arguments advanced by the parties are in accordance with these findings of fact, conclusions and legal analysis of the Board and are supported by the evidence, they have been adopted in their entirety. To the extent that the proposed findings, conclusions, and arguments are inconsistent therewith, they have been rejected. Certain proposed findings and conclusions have been omitted as not relevant or necessary to a proper decision. To the extent that the testimony of the various witnesses is not in accord with the findings stated herein, it is not credible.

### **Standard of Review/Burden of Proof**

1. The Board's standard of review is *de novo* (W. Va. Code § 22B-1-7(e)).
2. The DEP's authority to issue UIC permits is based upon the West Virginia Water Pollution Control Act, *W.Va. Code* § 22-11-1, et seq. ("WPCA"), and specifically *W.Va. Code* § 22-11-8(b)(7). The DEP exercises this authority through the regulations found at W.Va. C.S.R. § 47-13-1, et seq. ("the UIC Regulations"). As a Legislative Rule, the DEP's UIC regulations have the force and effect of law. *W.Va. Code* § 29A-1-2(d); *McElroy Coal Co. v. Schoene*, 813 S.E.2d 128, 142 (W.Va. 2018).
3. The Board does not afford deference to the DEP's decision, but rather, the Board acts independently on the evidence before it. *W. Va. Div. of Env't'l Protection v. Kingwood Coal Co.*, 490 S.E.2d 823, 834 (W.Va. 1997).
4. When ruling on an appeal, under *W. Va. Code* § 22B-1-7(g), the Board "shall make and enter a written order affirming, modifying or vacating the order, permit or official action of the chief or secretary, or shall make and enter such order as the chief or secretary should have entered."
5. An agency's exercise of discretion is deemed to be arbitrary and capricious when it "entirely failed to consider an important aspect of the problem, offered an explanation that ran counter to the evidence before [it], or offered one that is so implausible that it could not be ascribed to a difference in view or the product of [agency] expertise." *In re Queen*, 473 S.E.2d 483, 487 (W.Va. 1996).

### **Findings of Fact**

1. According to AMBIT's application for reissuance of the AMBIT UIC Permit (the "AMBIT UIC Permit Application"), AMBIT intends to inject up to 280,000 gallons per day (approximately 102 million gallons per year) of fluids made up of a combination of flow from the seeps of a coal

refuse pile owned and operated by AMBIT, and surface water runoff from the AMBIT site (collectively, “Injectate”) through two Class 5 injection wells into a network of interconnected underground mine voids, including the Joanne Mine, in the Pittsburgh seam of coal located in Marion County, West Virginia (commonly referred to as the “Fairmont Mine Pool”). C.R., pp. 55-56, 84-85.

2. The application for the UIC Permit acknowledges that this Injectate has characteristics of acid mine drainage (“AMD”), including elevated levels of iron, manganese, conductivity and total dissolved solids. C.R., p. 56. The permit application specifies that AMBIT will not pre-treat any of the Injectate prior to disposal into the UIC wells authorized by the AMBIT UIC Permit. C.R., p. 56 (Section VIII.F).

3. A single authorized injection well was constructed under the AMBIT 2014 UIC Permit and in operation at the time of submission of the AMBIT UIC Permit Application: Borehole 201 located at the Joanne Mine parcel near the town of Rachel, West Virginia (the “AMBIT Borehole”). C.R., pp. 52, 56.

4. The Appellants consist of three companies: Murray American Energy, Inc., (“MAEI”), West Virginia Land Resources, Inc. (“WVLR”), and Marion County Coal Resources, Inc. (“MACCR”).

5. As of the filing of this appeal, MAEI and its affiliates were debtors in bankruptcy proceedings pending before the United States Bankruptcy Court for the Southern District of Ohio (the “Bankruptcy Court”). The bankruptcy cases are jointly administered under the lead case *In re Murray Energy Holdings Co.*, Case No. 2:19-bk-56885 (collectively, the “Chapter 11 Cases”).

6. WVLR and MACCR are affiliates of American Consolidated Natural Resources, Inc. (“ACNR”). Tr. 35 – 36; 45; 56. In an August 31, 2020 order entered in the Chapter 11 Cases,

ACNR and its affiliates, including WVLR and MACCR, purchased various assets of MAEI and its affiliates through the bankruptcy proceedings.

7. On September 16, 2020, the debtors in the Bankruptcy Case filed a “Notice of Occurrence of Effective Date” signifying that all prerequisites to the effectiveness of the Confirmation Order and Plan had been met, and the “Effective Date,” as defined in the Chapter 11 Plan, is September 16, 2020. (ECF No. 2172, Case No. 2:19-bk-56885, Bankr. S.D. Ohio).

8. For ease of reference, the Board will refer to ACNR and its affiliates, including WVLR and MACCR, collectively as “ACNR.” The Board will refer to WVLR and MACCR separately when appropriate.

9. Among other assets formerly owned by MAEI, WVLR acquired operations associated with various mined-out areas, including the acid mine drainage (“AMD”) treatment plant known as the Dogwood Lakes AMD Plant. Tr., pp. 45; 53 – 56.

10. MACCR acquired assets associated with the Marion County Mine and is now the operator of that mine. Tr., pp. 35 – 36.

11. ACNR manages the Fairmont Mine Pool, portions of which are partially or completely flooded with water, by pumping water to the surface at various locations to maintain the mine pool at certain elevations – i.e. to control how close to the surface the mine pool reaches. Tr., pp. 49 – 54.

12. ACNR treats water pumped from the mine pool before discharging the water to a surface stream. Tr., pp. 42 – 44; 47 – 50.

13. ACNR is the only person or organization that pumps and treats water from the Fairmont Mine Pool. Tr., pp. 54 – 55. ACNR’s management of the Fairmont Mine Pool is necessary to prevent the mine pool from rising to an elevation that would result in a surface discharge of

untreated AMD, which would have deleterious effects on the quality of surface waters. Tr., pp. 53 – 54.

14. ACNR incurs costs to pump and treat water from the Fairmont Mine Pool. Tr., pp. 55 - 56.

15. The AMBIT UIC Permit Application seeks authorization to continue injection of untreated AMD into the Joanne Mine, which is part of the Fairmont Mine Pool, and to increase the injection volume from an average of 52,120 gallons per day (“gpd”) up to an average of 266,400 gpd, which is an increase of 78,212,200 gallons per year. C.R., p.55. AMBIT also sought to increase the maximum injection volume from 86,400 gpd to 280,000 gpd, which would authorize injection of up to 102,200,000 gallons annually. C.R., p. 55.

16. According to the AMBIT UIC Permit Application, water injected by AMBIT into the Joanne Mine flows east into and through the mined-out voids of the Bethlehem No. 44 mine, Bethlehem No. 41 mine, and into the Dakota mine where the water is then pumped into the Jordan mine via the Paw Paw Syphon pump station. C.R., pp. 56, 88 (Flow Diagram). AMBIT further states that the water is ultimately pumped from the Jordan Mine to the surface for treatment at the Dogwood Lakes AMD Plant. *Id.*

17. As noted above, the Dogwood Lakes AMD Plant was formerly owned and operated by MAEI and has since been transferred to WVLR. Tr., p. 56.

18. The cost to operate the Dogwood Lakes AMD Plant, the location to which AMBIT indicates its water travels, is approximately \$0.04 per hundred gallons. Tr., p. 56. Assuming injection volumes of 80,000,000 gallons per year, WVLR would incur approximately \$32,000 annually to treat this volume of water at the Dogwood Lakes AMD Plant. Tr., p. 56.

19. Appellants dispute that water injected by AMBIT flows in this direction. Appellants maintain that AMBIT’s water flows north and west toward active underground mining operations

at the Marion County Mine (operated by MACCR) and the Harrison County Mine (operated by another ACNR affiliate). Tr., pp. 17 - 18.

20. ACNR performs “protective pumping” in the Consol No. 9 Mine, which lies in between the Marion County Mine and the Joanne Mine, to prevent water from flowing into underground areas of the Marion County Mine where individuals regularly travel. Tr., pp. 40 – 42. Influx of water into these areas of the mine may present a safety hazard to individuals working in the mine. Tr., p. 42.

21. Protective pumping from the Consol No. 9 Mine takes place at the Lwelleyn AMD facility, which is located to the northeast of the Joanne Mine. Tr. 40; Appellants Ex. 2 (map). Water pumped at the Llewellyn AMD facility is then transported via surface pipeline to a reverse osmosis treatment facility operated by ACNR affiliate, West Virginia Water Resources. Tr., pp. 40 – 43.

22. During times when pumping activity has reduced or ceased at the Llewellyn AMD facility, water flows into the traveled areas of the Marion County Mine. Tr., p. 42.

23. ACNR also performs protective pumping at the Consol No. 20 Mine, which lies to the south of the Joanne Mine and to the east of the Harrison County Mine, to prevent water from flowing into underground areas of the Harrison County Mine where individuals may travel. Tr., pp. 43 – 46. Influx of water into these areas of the mine may present a safety hazard to individuals working in the mine. Tr., pp. 46.

24. Protective pumping from the Consol No. 20 Mine takes place at the Thorne AMD facility. Tr., pp. 43 – 44. Water pumped at the Thorne AMD facility is then transported via surface pipeline to the reverse osmosis treatment facility operated by ACNR affiliate, West Virginia Water Resources. Tr., p. 44.

25. The cost to operate the reverse osmosis treatment facility that receives water from Llewellyn and Thorne is approximately \$0.62 per hundred gallons. Tr., pp. 56 – 57. Assuming injection volumes of 80,000,000 gallons per year, it would cost \$496,000 annually to treat this volume of water at the reverse osmosis treatment facility.. Tr., pp. 56 – 57.

26. MACCR is responsible for 40% of the annual costs to treat water at the reverse osmosis facility. Tr., p. 59.

27. Appellants' position on the direction of the subsurface water flow is consistent with findings set forth in the March 2014 report by the U.S. Department of Interior's Office of Surface Mining ("OSM"), entitled "Final Report Fairmont, West Virginia Mine-Pool" (Appellants' Exhibit 4; the "OSM Report"). According to this report, water in the Joanne Mine (into which AMBIT injects water) primarily flows into the Consol No. 9 mine to the north, and into the Consol No. 20 Mine (also known as the Four States Mine) to the south. Appellants' Ex. 4 at 6.

28. Appellants' expert witness, Dr. James Kilburg, testified that geological data in the vicinity of the Joanne Mine supports the flow directions stated in the OSM Report for water that reaches the Joanne Mine. Tr., pp. 161 – 165.

29. Dr. Kilburg further testified that the Paw Paw Syphon pump station does not control the volume or flow direction of water in the Joanne Mine. Tr., pp. 160. That is because the relative elevation of the mined-out Pittsburgh coal seam to the east of the Joanne Mine is higher than the elevation of the same coal seam in the vicinity of the Joanne Mine. Tr., pp. 161 – 162.

30. In Dr. Kilburg's opinion, it is impossible for water from the Joanne Mine void to travel to the Dakota Mine to be pumped by the Paw Paw Siphon pump. To do so, that groundwater "would essentially have to flow uphill," over the ridge formed by the Wolf Summit anticline, down the Shinnston syncline, and then over the Mooresville (Brownsville) anticline, and down into the

Lambert syncline, where the Paw Paw siphon is located. Tr., pp. 160-161; See also Fairmont Mine Pool Map, Appellants' Exhibit No. 2; See also Groundwater Basin Map of Portion of Fairmont Mine Pool, Appellants' Exhibit No. 5. In Dr. Kilburg's words, "[I]t just can't happen." Tr., p. 161.

31. Regardless of which way the untreated AMD flows, once AMBIT injects it into the Joanne Mine, either WVLR or MACCR incurs costs to pump and treat the water. If the water flows east, AMBIT states that the water is eventually pumped and treated at the Dogwood Lakes AMD Treatment Plant now operated by WVLR. If the water flows north, west, or south, as Appellants claim, the water is eventually pumped at either the Llewellyn or Thorne pump stations and transported to the reverse osmosis treatment plant operated by an ACNR affiliate. MACCR is responsible for 40% of the operating costs for the reverse osmosis facility.

32. The AMBIT UIC Permit Application did not accurately state the current average rate of injection and the current maximum rate of injection as of the date that the application was submitted.

- a. The AMBIT UIC Permit Application described the current actual injection volumes as 52,120 average gpd and 86,400 maximum gpd. C.R., pp. 55. AMBIT's consultant, John Spencer, testified that these figures came from AMBIT's prior application submitted on February 13, 2014 (Appellants' Ex. 9). Tr., pp. 617 – 618. The figures do not represent actual measured flow as it existed at the time the AMBIT UIC Permit Application was submitted to DEP on March 5, 2020. Tr., pp. 617 – 618.
- b. In accordance with the terms of prior version of the UIC Permit, AMBIT submitted annual reports to DEP reflecting the total volume of water injected into the Joanne Mine during twelve-month periods beginning on June 1 of each calendar year

through May 31 of the following calendar year. Appellants' Ex. 7. The time period covered by the reports set forth in Appellants Ex. 7 is June 2014 through May 2020. Each report is signed by Steve Friend as AMBIT's "Principal Officer" and certified to be "true, accurate, and complete" under penalty of law.

- c. Each report states under section 7, titled "Any additional pertinent information" that "[a]ll injected volumes are based on instantaneous readings. Flow volumes were calculated from these instantaneous readings."
- d. Total annual injection volumes reflected in Appellants' Exhibit 7 are summarized below:
  - i. June 2019 – May 2020: 78,998,440 gallons (average of 216,433 gpd)
  - ii. June 2018 – May 2019: 80,952,000 (average of 221,786 gpd)
  - iii. June 2017 – May 2018: 704,000 (average of 1,929 gpd)
  - iv. June 2016 – May 2017: 11,132,000 (average of 30,498 gpd)
  - v. June 2015 – May 2016: 6,764,000 (average of 18,531 gpd)
  - vi. June 2014 – May 2015: 9,844,000 (average of 26,970 gpd)
- e. The average actual daily injection volume for the reporting year of June 2019 – May 2020 (216,433 gpd) is over four times greater than what the AMBIT UIC Permit Application indicated it would be (52,120 gpd). Looking at the lowest volume month for this time period, which was 3,340,800 total gallons in February, 2020, the average injection volume for this month was 115,200 gpd ( $3,340,800 \div 29$ ), which is more than twice the purported current average injection volume stated in the AMBIT UIC 2014 Permit Application.

- f. The figures in the AMBIT UIC Permit Application purporting to reflect current actual injection volumes of 52,120 average gpd and 86,400 maximum gpd (C.R., p. 55) are not accurate representations of the actual injection volumes occurring at the borehole as of March 5, 2020, or any time during the reporting periods June 2018 through May 2020.

33. The AMBIT UIC Permit Application incorrectly stated that the receiving (target) void for its injection was not up-dip of any other mine voids and incorrectly stated that there was no active mining in the surrounding area.

34. Both Dr. Kilburg and Mr. Bonner testified the Joanne Mine is up dip of several mine workings. Tr., pp. 169, 475-476. The map exhibits prepared by Dr. Kilburg (Appellants' Exhibits 5 and 6) and the OSM Report (Figure 6, Structure Contour Map) also show this.

35. The AMBIT UIC Permit Application did not sufficiently establish or identify the flow path of the Injectate from AMBIT's injection operations.

36. There is nothing in the OSM Report that would support AMBIT's position that the Joanne Mine water (and hence, its Injectate) flows to the east.

37. Mr. Bonner, who never prepared a report, memo, or any other document stating his assessment of the AMBIT UIC Permit Application or critiquing the OSM Report, testified that he had no evidence "that either proves or disproves" OSM's conclusion as to the flow direction of the Joanne Mine water. However, he believed AMBIT's statement that its Injectate flows east to the Paw Paw Siphon was "plausible," or "not an unacceptable explanation at the time." Tr., pp. 451, 460, 485, 498. Mr. Bonner reviewed the AMBIT UIC Permit Application and signed-off on it the same day that he received it. Tr., p. 461.

38. Dr. Kilburg, who holds a Ph.D. in Geology and has been practicing in the field for more than 40 years, reviewed the OSM Report several times and characterized it as a “very, very good study” that followed the appropriate scientific methodology in reaching its conclusions. Tr., pp. 132, 139, 147, 164-165.

39. Dr. Kilburg holds a Ph.D. in Geology from the University of Pittsburgh. He currently teaches at Carnegie-Melon University in the Civil Environmental Engineering Department, while working as a consultant with Civil and Environmental Consultants, Inc. Approximately 40% of his 43-year career has involved addressing projects requiring “focused groundwater assessments,” and he has experience in working on issues arising in coal mining contexts. Tr., pp. 136-139. Dr. Kilburg was recognized as an expert in the areas of geology and hydrogeology without objection. Tr., pp. 141, 143.

40. To assist the Board in understanding his opinion, Dr. Kilburg prepared: (1) a Groundwater Basin map of the portion of the FMP at issue (Appellants’ Ex. 5), and (2) a map showing Relevant Groundwater Monitoring Points and Flow Out of the Joanne Mine (Appellants’ Ex. 6). These maps are based upon data from the West Virginia Geological Survey, the U.S. Geological Service, and structural contour lines provided by the Appellants. Tr., p. 151. As portrayed by these exhibits, Dr. Kilburg testified that: (a) prior to any mining, the groundwater flow in the relevant area would have been from the structural high on the east (the Wolf Anticline) to a structural low on the west (the Robinson Syncline); and (b) under current conditions, water from the flooded Joanne Mine travels north to the Consol No. 9 mine and south to the Consol No. 20 mine, with a minor amount (estimated at 1 gpm) making its way through an unmined block of coal to the west. Tr., pp. 153-156.

41. In addition, because MACCR is required to engage in protective pumping in Consol No. 9 and its sister subsidiary Harrison County Coal Company is required to protectively pump out of Consol No. 20 (to avoid threats to the active Harrison County Mine), Dr. Kilburg testified that essentially all the fluids injected through the AMBIT Borehole are treated at the Dents Run Reverse Osmosis plant operated by ACNR affiliate, West Virginia Water Resources. Tr., pp. 157, 159.

42. In Dr. Kilburg's opinion, it is impossible for water from the Joanne Mine void to travel to the Dakota Mine to be pumped by the Paw Paw Siphon pump. To do so, that groundwater "would essentially have to flow uphill," over the ridge formed by the Wolf Summit anticline, down a syncline, and then over another ridge presented by the Shinnston syncline. Tr., pp. 160-161; Appellants' Ex. 5. In Dr. Kilburg's words, "[I]t just can't happen." Tr., p. 161.

43. Additional data supporting Dr. Kilburg's opinion on this issue was presented in the form of information regarding the relative mine pool levels at the Joanne Mine monitoring well ("MW") and the Carberry (Bethlehem No. 44 Mine) MW to the east, as depicted on Appellants' Ex. 6 and summarized in a table included in the AMBIT UIC Permit Application (C.R., p 121). That data shows that over a 10-year period, the Carberry MW level has been on average 25 feet higher than the pool level in the Joanne Mine MW to the west, demonstrating a groundwater gradient from east to west in the specific area of the AMBIT Borehole. This both supports Dr. Kilburg's opinions and raises a significant question as to Mr. Bonner's testimony (Tr., pp. 447-451) that the relatively similar pool levels in the Carberry MW and the Paw Paw Siphon demonstrates a possible connection to the Joanne Mine.

44. Mr. Bonner conceded that from a groundwater perspective the Joanne Mine is downgradient of the Paw Paw Siphon, the “Penn Overall” MW (the key monitoring point for the FMP), and the Carberry MW. Tr., pp. 502-504. This further supports the conclusions reached in the OSM Report and by Dr. Kilburg that water from the Joanne Mine flows towards the Consol No. 9, Consol No. 20 and Marion County mines rather than east to the Paw Paw Siphon.

45. According to Mr. Hudnall, AMBIT’s UIC permit as it existed prior to reissuance in 2020 established limitations on the maximum volume of water that could be injected into the Joanne Mine borehole. Tr., pp. 285 – 286. Those limitations were 86,400 gpd or 31,536,000 gallons annually as set forth in AMBIT’s application for the 2014 reissuance of the UIC Permit. Tr., pp. 285 – 286; Appellants Ex. 10; Appellants Ex. 9.

46. Mr. Hudnall testified that, by injecting volumes in excess of these limits during the reporting periods June 2018 through May 2020 as reflected in AMBIT’s Annual Reports, AMBIT was injecting more water than authorized by the existing UIC permit. Tr., pp. 285 – 288; 293.

47. The 2014 version of AMBIT’s UIC Permit did not authorize injection of surface water into the Joanne Mine. Tr., pp. 335 – 336. According to the AMBIT UIC Permit Application, AMBIT was injecting surface water into the Joanne Mine at the time it sought reissuance of the UIC Permit. Tr., pp. 335 – 336; C.R., p. 55. By injecting surface water into the Joanne Mine, AMBIT was in violation of the 2014 version of the UIC Permit at the time it applied for reissuance of the permit. Tr., pp. 335 – 336.

48. DEP did not consider AMBIT’s non-compliance with the 2014 version of the UIC Permit when deciding to re-issue the permit in 2020. Tr., pp. 271; 292 – 295.

## Conclusions of Law

### a. Standing

*W. Va. Code* § 22-11-21 governs who may prosecute an appeal to this Board: “Any person **adversely affected** by an order made and entered by the director in accordance with the provisions of this article, or aggrieved by failure or refusal of the chief to act within the specified time as provided in subsection (e) of section eleven [§22-11-11] of this article on an application for a permit or aggrieved by the terms and conditions of a permit granted under the provisions of this article, may appeal to the Environmental Quality Board, pursuant to the provisions of article one [§§ 22B-1-1 et seq.], chapter twenty-two-b of this code.” (emphasis added).

The phrase “adversely affected” is not defined in the West Virginia Water Pollution Control Act. *W. Va. Code* § 22-11-1, et seq. This Board has previously looked to the law governing standing to assert a claim in a judicial proceeding for assistance in determining whether an appellant is “adversely affected.” See *Keenan v. Mandirola*, EQB Appeal No. 14-04-EQB (April 8, 2015) (“Pursuant to *Friends of the Earth, Inc. v. Laidlaw Environmental Services, Inc.*, to have standing, a party must show (1) it has suffered an injury in fact that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision. 528 U.S. 167, 180-81, 120 S. Ct. 693, 704, 145 L. Ed 2d 610 (U.S.S.C. 2000).”) (internal quotations omitted).

For the reasons stated below, the Board concludes that Appellants are “adversely affected” by the AMBIT UIC Permit within the meaning of *W.Va. Code* § 22-11-21, and thus have established standing to pursue the appeal.

First, with respect to an injury in fact, Appellants are collectively the former and current owners/operators of multiple underground mines and associated water treatment facilities within the Fairmont Mine Pool. These include the Consol No. 9, Consol No. 20, and Marion County Mines, as well as the reverse osmosis treatment facility to the west of the AMBIT Borehole, and the Dakota Mine, Jordan Mine, Paw Paw Siphon pump station, and Dogwood Lakes Treatment Plant to the east of the AMBIT Borehole. Tr., pp. 43, 45, 53-55. The Joanne Mine is part of the Fairmont Mine Pool, and thus injection of water into the Joanne Mine constitutes injection of water into the Fairmont Mine Pool. Appellants are the only entities that maintain the Fairmont Mine Pool at an elevation that prevents a surface discharge of untreated AMD. Tr., pp. 54-55. Appellants also pump water from the Fairmont Mine Pool to prevent actively traveled areas in their underground mining operations from being inundated with water. Appellants manage the elevation of the Fairmont Mine Pool by pumping and treating water at multiple locations. Appellants incur costs to pump and treat water from Fairmont Mine Pool. Thus, the Board finds that Appellants have established an injury-in-fact that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical.

Second, the Board finds that Appellants' injury is fairly traceable to the issuance of the AMBIT 2020 UIC Permit. AMBIT's injection of water into the Fairmont Mine Pool is authorized by the UIC Permit. The AMBIT UIC Permit not only authorizes AMBIT to continue injecting water into the Fairmont Mine Pool, but also allows AMBIT to increase the volume of water injected into the Fairmont Mine Pool up to 102,200,000 gallons per year. Once water is injected into the Fairmont Mine Pool, Appellants bear the responsibility of pumping and treating the water at Appellants' expense.

Third, the Board finds that Appellants' injury will likely be redressed by a favorable decision. Appellants have requested the Board to vacate the AMBIT UIC Permit. Without the UIC Permit, AMBIT would lack regulatory approval to inject water into the Fairmont Mine Pool. AMBIT would have to manage and treat on the surface the volumes of water that AMBIT would otherwise inject into the Fairmont Mine Pool or be subject to enforcement action by DEP. A reduction in the volume of water injected into the Fairmont Mine Pool would reduce the volume of water that Appellants have to pump and treat from the Fairmont Mine Pool at their expense.

**b. Sufficiency of the UIC Permit Application**

The DEP may only act on a UIC permit application that is both complete and accurate. W.Va. C.S.R. §§4 7-13-13.10.c; 47-13-13.11.d; *W.Va. Code* § 22-11-9. Based on the findings set forth above, DEP reissued a UIC permit based upon an application that was not accurate or complete. DEP conducted a hurried and/or perfunctory review of the reissuance application. The AMBIT UIC Permit Application does not contain accurate information concerning AMBIT's actual injection rates into the Fairmont Mine Pool. The volume figures in the application were simply recitations of the same volume figures set forth in the application for the 2014 version of the UIC Permit. The AMBIT UIC Permit Application did not include injection volumes from any of the annual reports that AMBIT submitted to DEP, which AMBIT certified to be accurate and "based on instantaneous readings." Appellants' Ex. 7. By failing to submit an application reflecting accurate information concerning actual injection volumes, DEP did not have accurate important information concerning injection volumes.

Moreover, no reliable flow path of the untreated AMD Injectate has been established. The more credible evidence of record demonstrates that the Joanne Mine pool water (and hence, its

Injectate) does not flow to the east. The Board finds Dr. James Kilburg's testimony more credible concerning the flow path of AMD Injectate.<sup>6</sup>

Accordingly, DEP could not have properly assessed the impact on active mine operations, the Fairmont Mine Pool, the waters of the state, etc. DEP's approval of the application was therefore arbitrary, capricious, and in violation of applicable statutory and legal provisions.

### **ORDER**

For the foregoing reasons, the Board hereby **GRANTS** this appeal in part as set forth more fully in the Findings of Fact, and Conclusions of Law herein. The Board hereby modifies the AMBIT 2020 UIC Permit as follows: Injection volumes of AMD into the Joanne Mine shall be the same as the volumes identified in AMBIT's 2014 reissuance application:<sup>7</sup>

*Average*      **52,120 gallons per day ("gpd")**

*Maximum*    **86,400 gpd**

The Board hereby reminds the DEP of its duty to ensure compliance of the terms and conditions of the AMBIT 2020 UIC Permit as modified. The Board hereby urges DEP to have access to updated/reliable flow path data prior to considering any future increases in injection volumes. Such data should be obtained through dye, tracer, or other types of studies. The Board further urges DEP to review its UIC permitting application review process to ensure compliance with UIC regulations set forth in W. Va. Code R. §47-13-1 et seq. If AMBIT seeks to further modify the 2020 UIC Permit, DEP may want to consider pre-treatment of the injectate.

The Clerk of the Board shall provide certified copies of this ORDER to the parties or counsel of record. Parties have a right to judicial review of this ORDER pursuant to W.Va. Code

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<sup>6</sup> See attached Appellants' Exhibit 2 – Fairmont Mine Pool Map

<sup>7</sup> See Appellants' Exhibit 9

§22B-1-9 and W.Va. Code §29A-5-4. The party seeking judicial review must file its appeal within 30 days after the party received notice of this ORDER.

**ORDERED** and **ENTERED** this 29<sup>th</sup> day of September, 2021.

WEST VIRGINIA ENVIRONMENTAL QUALITY BOARD

By:   
Edward M. Snyder, Ph.D., Chair