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SUPERIOR COURT OF ARIZONA

MARICOPA COUNTY

THE TOWN OF FLORENCE, a political subdivision of the State of Arizona; SWVP-GTIS MR, LLC, a Delaware limited liability company; and PULTE HOME COMPANY, LLC, a Michigan limited liability company,

Appellants,

vs.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY, et al.,

Appellees.

Case No.: LC2017-000466-001 DT

APPELLANTS' OPENING BRIEF

(Assigned to the Hon. Patricia Starr)

Oral Argument Requested

TABLE OF AUTHORITIES

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I. INTRODUCTION

Appellants and the residents, businesses and visitors of the Town of Florence depend upon groundwater for current and future drinking water supplies. Florence Copper, Inc. (FCI) proposes to recover copper from a deposit on a State Land parcel in the heart of Town that is exempt from the Town's zoning and planning restrictions. FCI will use an untested method of sulfuric acid injection and extraction in a location hydrologically connected to the Town's water supply.

In 2013, the Arizona Department of Environmental Quality (ADEQ) issued a Temporary Aquifer Protection Permit ("Temporary APP") to FCI to operate a pilot test facility ("PTF") intended to develop data for commercial permits and operations. The Temporaray APP issued by ADEQ failed to provide adequate environmental protection. After an eight-week evidentiary hearing in 2014, a detailed report from an Administrative Law Judge found numerous fatal flaws in the permit involving both legal and technical issues. The Water Quality Appeals Board (Board) accepted all but one of the ALJ's findings and remanded the permit back to ADEQ.

In 2016, following a flawed public review process, ADEQ issued a new permit that directly defies the 2014 decision. This permit approves a Pollution Management Area (PMA) that extends even farther from the PTF than the one ruled unreasonably large and illegal in 2014. And ADEQ approved the same Point of Compliance (POCs) locations that were ruled too far from the PTF and thus illegal in 2014. The permitted PMA and POCs contain such lax compliance standards that FCI will be immune to enforcement for causing groundwater pollution, even pollution resulting from total project failure. The Board approved ADEQ's decision without change, ignoring its own prior 2014 Decision and

significant technical and legal flaws in the amended permit that the Board, itself, had previously determined precluded approval of the Temporary APP.

Appellants ask the Court to remand the permit back to ADEQ with direction to conform the PMA and POCs to Arizona law and the Board's 2014 binding decision, thereby providing the environmental protection that the law requires and the public expects.

II. STATEMENT OF THE CASE[1]

1. In March 2012, FCI applied for a Temporary APP for an in-situ leach pilot test facility on state trust land leased by FCI.[2] During the pilot test, FCI intends to leach copper from bedrock under its site through injection of a sulfuric acid solution into an ore body that is in direct hydraulic communication with the primary drinking water aquifer for the Town of Florence. The pilot test is intended to answer critical questions about the environmental safety and viability of the in-situ leach injection process in anticipation of FCI's application

[1] The Record on Appeal consists of the 91 PDF documents and items Nos. 92-96 (native format Word, PowerPoint and video) provided to the Court with the June 20, 2018 Stipulation and listed in Exhibit 2, thereto. The PDF documents listed as items 1-92 are Bates' numbered within the range RA000001-RA007948. In this Brief, a reference to one of the 96 items included in the Record on Appeal will be, for example, "**Record-43**" as a reference to item 43 in the Record on Appeal, the February 2, 2017 Notice of Hearing, Bates Nos. RA006919-RA006921.

[2] **Record-69**, *Town of Florence v. ADEQ*, Case No. 16-002-WQAB, Order at 1, Finding of Fact ("FOF") 1 (May 17, 2017) ("2017 Board Order") (RA007462); **Record-2**, *Town of Florence v. ADEQ*, OAH No. 12-005-WQAB, Administrative Law Judge Decision, at 2-3, FOF 1 (September 29, 2014) (RA001784-85) (hereinafter "2014 Decision"). The 2014 Decision was adopted by the Board in **Record-2**, *Town of Florence v. ADEQ*, WQAB No. 12-005-WQAB, Board Order (Nov. 14, 2014) (RA001938) (hereinafter "2014 Board Order"). The 2014 ALJ Decision was attached as Exhibit 3 to Appellant SWVP's May 19, 2015 written comments to ADEQ on the draft permit at issue here and the 2014 Board Decision was attached as Exhibit 4. Those written comments were incorporated by reference into Appellants' September 1, 2016 Notice of Appeal to the Board. **Record-2**, *Town of Florence v. ADEQ*, WQAB No. 16-002, Notice of Appeal, at 7-8 (Sept. 1, 2016) (RA000059).

to conduct full-scale commercial operations on the property.[3]

2. After review and public comment, ADEQ issued Temporary APP No. P-106360 to FCI on July 3, 2013.[4]

3. Appellants timely appealed the permit decision to the Board, who transferred the appeal to the Office of Administrative Hearings. Appellants argued, among other things, that ADEQ's issuance of the permit was arbitrary, unreasonable, unlawful, or based upon technical judgments that were clearly invalid; ADEQ's review of FCI's application failed to satisfy numerous statutory, regulatory, and technical standards; and the permit itself neither satisfied statutory mandates nor adequately protected the drinking water aquifer.[5]

4. An Administrative Law Judge held a 34-day hearing on Appellants' appeal between March 18, 2014 and May 7, 2014.[6]

5. On September 29, 2014, the Administrative Law Judge issued her 145-page decision, in which she recommended that the Temporary APP be rescinded, based upon her findings that ADEQ's decisions on key parts of the permit were arbitrary, unreasonable, and unlawful or based upon a technical judgment that was clearly invalid.

6. The Water Quality Appeals Board accepted all of the Judge's 419 Findings of Fact and all but one of her 73 Conclusions of Law, but decided to remand the permit to ADEQ, rather than rescind the permit.[7]

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[3] **Record 2** (Exhibit 3, thereto) 2014 Decision, p. 14, FOF 65 RA001796; A.A.C. § R18-9-A210(A)(1).

[4] **Record-69,** 2017 Board Order, p. 2, FOF 2 (RA007463); **Record-2**, 2014 Decision, p. 3, FOF 2 (RA001785).

[5] **Record -69**, 2017 Board Order, p. 2, FOF 3 (RA007463); **Record-2** 2014 Decision at 3, FOF 3 (RA001785).

[6] **Record -69**, 2017 Board Order, p. 2 (RA007463), FOF 4; 2014 Decision at 3-6, FOF 8-12 2014 Board Order (RA007463-66).

[7] **Record-2** (Exhibit 4, thereto) 2014 Board Order (RA001938, *et seq*.).

7. No one appealed the Board's Order, which became final.

8. To address the Board's Order on remand, FCI applied for a Significant Amendment to the Temporary APP for the PTF on March 31, 2015.[8]

9. Appellants filed written comments during the public comment period that raised numerous issues and concerns with the draft permit.[9]

10. ADEQ issued its decision approving the Significant Amendment to Temporary APP No. P-106360 ("Significant Amendment") on August 3, 2016.[10]

11. On September 1, 2016, the Appellants filed a Notice of Appeal with the Water Quality Appeals Board in which Appellants alleged 21 legal, technical, and procedural issues regarding ADEQ's approval of the Significant Amendment and the terms of the amended permit.[11]

12. On December 19, 2016, the Board issued a Procedural Order directing that it would allow additional written testimony, in the form of sworn affidavits from experts and legal arguments limited to a 10-page brief, on just three of the ALJ's 2014 Conclusions of Law: Section 3.8 (PMA and POC); Section 3.7.3.2.1 (Monitoring); and Section 3.7.3.3 (Monitoring).[12]

13. The Board held an approximately four-hour hearing on March 6, 2017 under limited procedures to which the parties stipulated. The written expert affidavits were considered direct testimony and only Board members could conduct cross-examination. The parties were allowed limited re-direct of their

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[8] **Record-1** (RA000001, *et seq*.).

[9] **Record-2**, 2014 SWVP-GTIS MR, LLC comments, (incorporated by reference) (RA000074 et seq.).

[10] **Record-1**.

[11] **Record-2**, 2014 Board Order (RA001938, *et seq*.).

[12] **Record-29**, Board Procedural Order (Dec. 19, 2016) (RA006725 *et seq*.); **Record-69** 2017 Board Order, p. 7 7-8, FOF 37-39 (RA007468).

own witnesses.[13]

14. On May 17, 2017, the Board denied the appeal.[14]

15. On July 13, 2017, the Board denied Appellants' motion for rehearing.[15]

16. On August 17, 2017, this Appeal was timely filed in the Pinal County Superior Court.[16] The case was transferred to Maricopa County on October 9, 2017.[17]

17. This Appeal is an action to review a final administrative decision by ADEQ through its Water Quality Appeals Board under A.R.S. Title 49, Chapter 2, Article 3 granting the Temporary APP. Jurisdiction is therefore proper under A.R.S. §§ 12-905(A) and 41-1092.08(H).

III. STATEMENT OF FACTS

A. The Parties

18. Appellant Town of Florence is a political subdivision of the State of Arizona located in Pinal County. The Town is a municipal water provider holding a designation of assured water supply under Arizona law.[18]

19. FCI's property and the pilot test facility are located within the municipal boundaries of the Town.[19] Figure 1 is an oblique aerial showing where the PTF will be developed and its proximity to downtown Florence,

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[13] **Record-61**, Reporter's Transcript of Proceedings (Mar. 6, 2017) (RA007068 *et seq.*).

[14] **Record-69**, 2017 Board Order (RA007493 *et seq.*).

[15] **Record-76**, Order Denying Appellants' Request for Rehearing (July 13, 2017) (RA007524 *et seq.*).

[16] *Town of Florence v. ADEQ*, Case No. CV201701519, Complaint for Judicial Review of Administrative Decision (Aug. 17, 2017).

[17] *Id.*, Order (Oct. 9, 2017).

[18] **Record-2** (Exhibit 3) 2014 Decision, p.10, FOF 38 (RA001792); *id.*, p. 12, FOF 52 (RA001794).

[19] *Id.* at 11, FOF 43 (RA001793).

Merrill Ranch (site of Pulte's development and Southwest Value Partner's property) and other features.

20. Appellant Pulte Home Company, L.L.C., one of the largest home builders in the United States, constructed and continues to expand the Anthem at Merrill Ranch Community on 3,000 acres near FCI's site in Florence.[20]

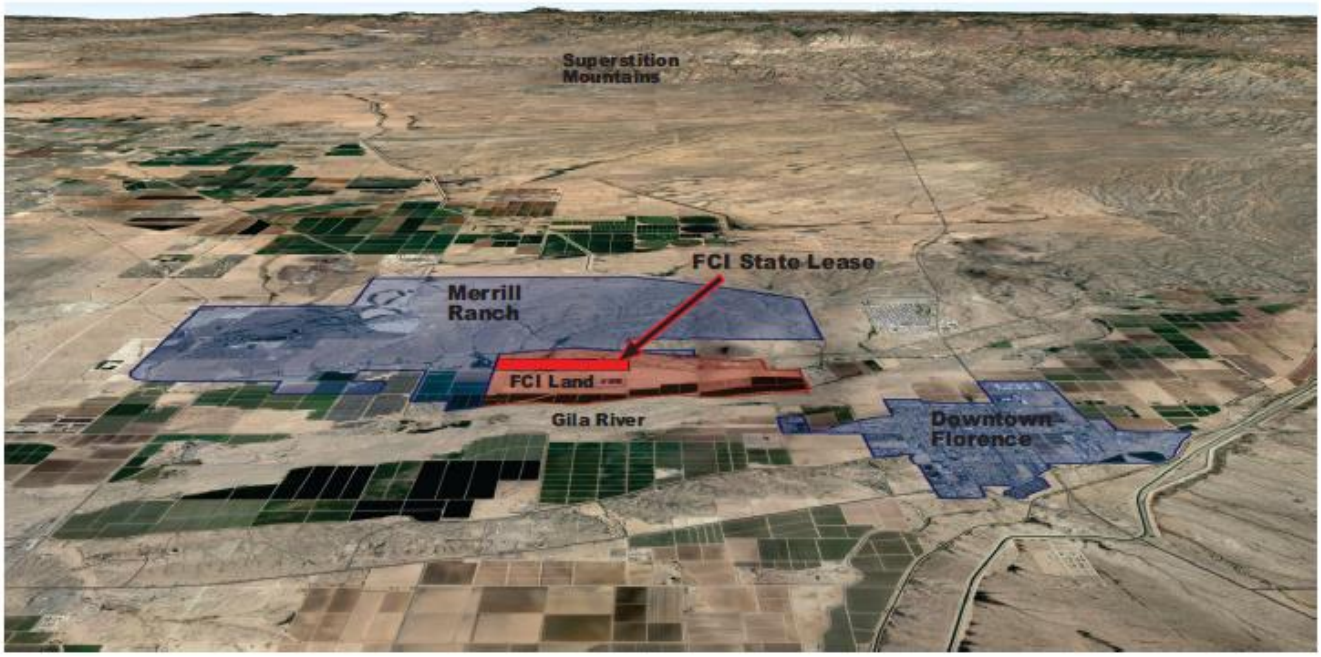

Figure 1 – Regional Setting of the FCI Project

21. Anthem is a 3,000-acre master planned community[21] that includes Pulte's three brands, two family neighborhoods and an active adult retirement community. As of 2014, 2,000 homes already had been constructed and sold in

[20] *Id.* at 10, FOF 40 (RA001792).

[21] **Record-2** (Exhibit 6 thereto) Testimony of Brad Schoenberg, p. 16:7-9 (Ariz. OAH March 20, 2014) (RA001956). Citations to the official transcript of the 2014 proceedings in the Office of Administrative Hearings will be identified by the last name of the witness and the date of the transcript followed by the applicable page and line numbers and Bates' number. The official transcript was attached as Exhibit 6 (RA 001952 *et seq.*) to Appellant SWVP's May 19, 2015 written comments on the draft significant amendment (RA000073), which were incorporated by reference into Appellants' September 1, 2016 Notice of Appeal to the Board. (RA000059 *et seq.*)

the Anthem community,[22] and it is projected that upon completion there will be 7,000 homes and 25,000 to 30,000 people will call Anthem home. Upon build-out, Anthem's homes will be a mere 300 feet away from the State Land parcel on which FCI plans to mine.[23]

22. Before those homes could be built, Pulte had to construct the necessary infrastructure. This massive infrastructure system included roads, curb and gutter, sewer, water, dry and wet utilities, and telecommunications.[24] Schools, a hospital, medical facilities, a grocery store, bank, retail outlets, and houses of worship were all necessary components of Anthem at Merrill Ranch.[25] And most importantly, groundwater water rights for drinking water supplies had to be obtained and drinking water wells and potable water infrastructure had to be constructed. In short, Anthem at Merrill Ranch represents Pulte building a city within Florence at a total projected investment of over one billion dollars.[26]

23. Appellant SWVP is a national real estate developer. SWVP's first entry into the Merrill Ranch Master Planned Community began with its purchase of 140 acres of land from Pulte Homes in 2009.[27] SWVP's second property purchase occurred in early 2010 through a bank foreclosure sale in which it acquired approximately 4,500 acres.[28] SWVP did not know that FCI was buying land in the area or that it intended to conduct in-situ leach operations at the site,

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[22] **Record-2**, Schoenberg, March 20 at 27:15-17, (RA002152).
[23] *Id.* at 41:6-42:3; 2014 Decision at 10-11, FOF 40-41, (RA002156).
[24] **Record-2**, Schoenberg, March 20 at 44:3-24, (RA002156).
[25] *Id.* at 29:12-31:9, (RA002153).
[26] *Id.* at 43:17-44:2, (RA002156).
[27] **Record-2**, Merritt, March 19 at 203:18-25, 222:9-11, (RA002099) and (RA002104).
[28] *Id.* at 207:1-9, 222:12-14, (RA002104).

because the bank conducted a sealed bidding process.[29] FCI's property was and remains zoned for residential development.

24. Prior to purchasing both properties, SWVP conducted a thorough due diligence review. This review confirmed that the Town's vision of a master planned community consisting of homes, multi-family residences, and supporting commercial uses was supported by the Town's adopted General Plan. SWVP also confirmed that there were sufficient water resources available to support planned development.[30]

25. Appellee ADEQ is an agency of the State of Arizona and exercises authority over the issuance of APPs. ADEQ issued the Temporary APP at issue in this appeal, Permit No. P-160360, Significant Amendment (Aug. 3, 2016).[31]

26. Appellee Board is an appointed board within the Department of Administration authorized to hear appeals from certain decisions of ADEQ.[32]

27. Appellee FCI is a Nevada corporation that is wholly owned by Taseko Mines Ltd., a Canadian company. FCI owns approximately 1,182 acres within the municipal boundaries of the Town of Florence, near the Town's geographic center.[33]

28. The Significant Amendment at issue here governs the injection and recovery of a sulfuric acid solution by FCI, a process that threatens the Town's drinking water supply.[34]

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[29] **Record-2** 2014 Decision, p. 11, FOF 44 (RA001793).

[30] **Record-2**, Merritt, March 19 at 207:10-214:11, (RA002100-02).

[31] Record-1.

[32] A.R.S. §§ 49-322 and -323.

[33] **Record-2** 2014 Decision, p. 8, FOF 26 (RA001790).

[34] *Id.* p. 1-2, FOF 1 (RA000059-60); *id.* p. 13, FOF 56 (RA001795).

B. Site History

29. The copper deposit at FCI's site was first discovered in 1969 and was evaluated through 1977 by the Continental Oil Company for open pit and shaft mining. Continental abandoned its efforts when neither option proved economical.[35]

30. In 1997, after acquiring an APP for commercial in-situ leach mining, BHP Copper began a pilot test at this same site to test the concept of in-situ leach copper mining and to determine whether it could maintain hydraulic control of injected acid mining solutions to prevent groundwater contamination downgradient. This test lasted only 90 days. BHP shut down site operations and conducted no further tests.[36]

31. BHP Copper subsequently sold the property to a local developer, Harrison Merrill.[37] No further pilot testing or mining activities have been conducted at this site since 1998.

32. The Town of Florence worked with Merrill to annex the property. The Merrill Ranch Master Plan was approved by the Town Council in December 2003 and a 2007 Development Plan was incorporated into the Town's 2010 General Plan. The General Plan, which included FCI's now residentially-zoned property, was approved in May 2010 by 71% of the Town's voting residents. Development has proceeded in compliance with that duly adopted and approved General Plan, as required by law (Figure 2).

33. In 2008, Merrill lost his property in foreclosure during the economic downturn. His property was sold piecemeal over the next few years by the banks

[35] **Record-2** 2014 Decision, p. 7, FOF 16 (RA001789).
[36] *Id.*, pp. 7-8, FOF 18-25 (RA001789-90).
[37] *Id.*, p. 8, FOF 25 (RA001789).

at auction. FCI's predecessor acquired the site through one such auction in 2009.[38]

C. The Pilot Test Facility

34. FCI leases a 160-acre State Land parcel, which is surrounded on three sides by FCI's private property. The State Land parcel is exempt from Town ordinances that prohibit industrial uses and mining on FCI's private property. The pilot test at issue would be conducted on this parcel, which is in the geographic center of the Town and within a master planned community approved by the Town and its residents years before FCI came to town. (Figures 1 and 2).

35. A copper ore body exists below 216 acres that are partly on the state trust land parcel and partly on FCI' private land.[39] FCI's goal is to develop a commercial copper mine on this site, employing a process known as in-situ leach mining.

36. The pilot test well field occupies approximately 2.2 acres on the State Land Parcel leased by FCI. FCI proposes to inject a sulfuric acid mining solution, a hazardous groundwater contaminant, through four Injection Wells to dissolve the ore. The resultant solution, consisting of native groundwater, copper, and other contaminants such as arsenic released into groundwater by the acid, will be pumped back to the surface through nine Recovery Wells located around the Injection Wells (Figure 3). The recovered solution will be piped to a solvent extraction and electrowinning facility to extract copper.[40]

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[38] *Id*., p. 8, FOF 26 (RA001790).

[39] **Record-2**, 2014 Decision at 7, FOF 20. (RA001789)

[40] **Record-1**, at 2, § 2.1 (RA000002).

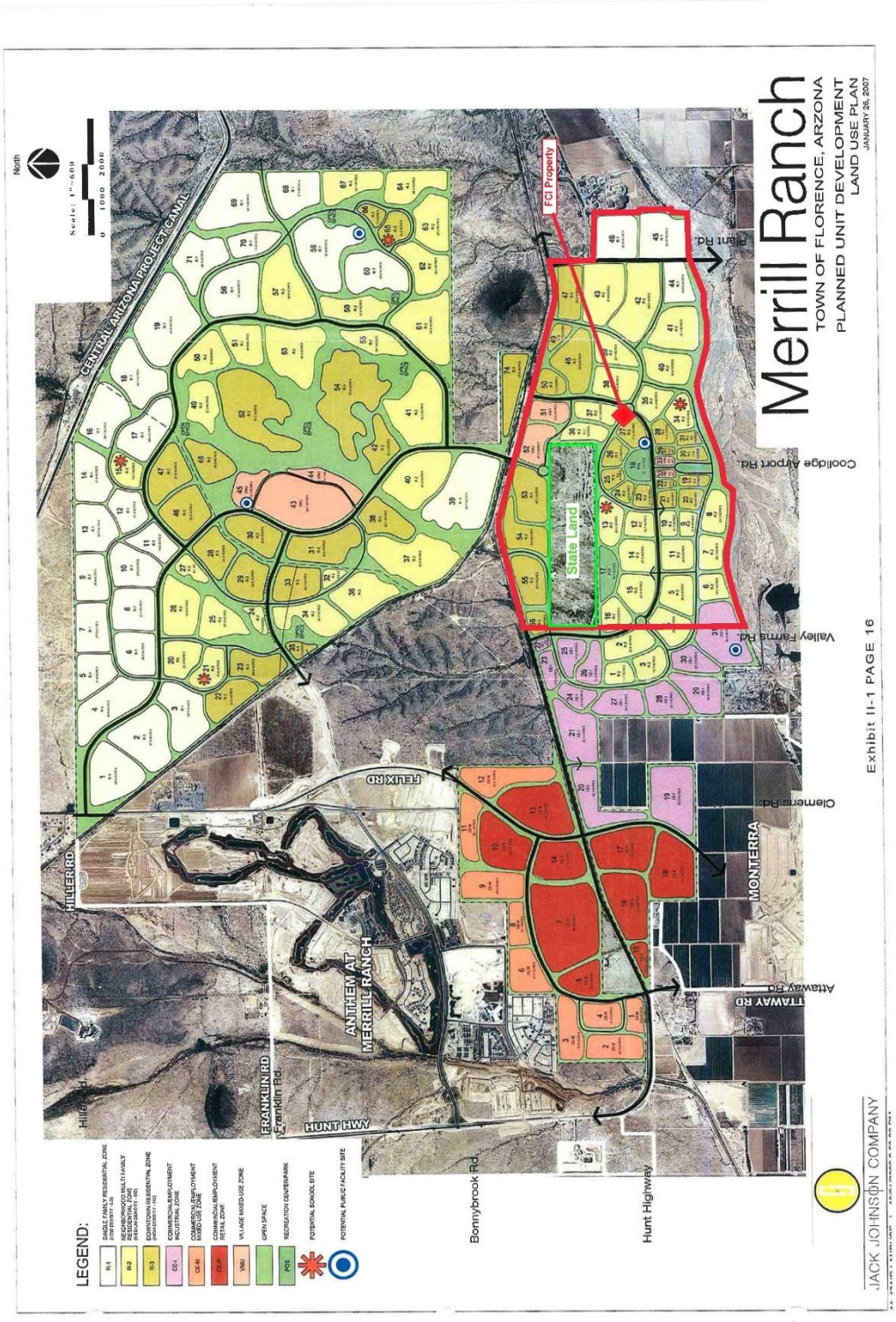

Figure 2: Merrill Ranch Planned Development, Florence, Arizona

37. The injection of FCI's sulfuric acid mining solution is considered a discharge of pollutants that is regulated under Arizona law through ADEQ's Aquifer Protection Permit program.[41]

38. As the Board previously held, "no evidence indicates that ADEQ has ever permitted a deep well ISCR mine involving injection into an aquifer other than BHP's commercial project and FCI's PTF."[42] ADEQ staff have acknowledged that "issuance of the Temporary APP for the PTF was a novel experience for ADEQ."[43]

39. FCI's sulfuric acid solution will dissolve native minerals and heavy metals in the aquifer and bedrock and alter groundwater chemistry, increasing concentrations of many regulated and toxic contaminants (including arsenic, uranium, lead, and mercury, among many others) in the aquifer.[44] Therefore, it is imperative that none of the solution or dissolved minerals is allowed to escape FCI's control and contaminate the local groundwater supply.

40. FCI proposes to control the migration of polluted groundwater from the mined area through hydraulic control of the injected acid mining solutions. In theory, hydraulic control is achieved by pumping more water from the nine Recovery Wells than is injected through the four Injection Wells. Monitoring for hydraulic control will be conducted at seven Observation Wells around the well field (Figure 3). Although the Significant Amendment has certain Alert Levels

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[41] A.R.S. §§ 49-201(12); 49-203(A)(4) ; and Title 49, Chpt. 2, Art. 3; **Record-2** 2014 ALJ Decision, at 121, Conclusion of Law ("COL") 1 (RA001903).

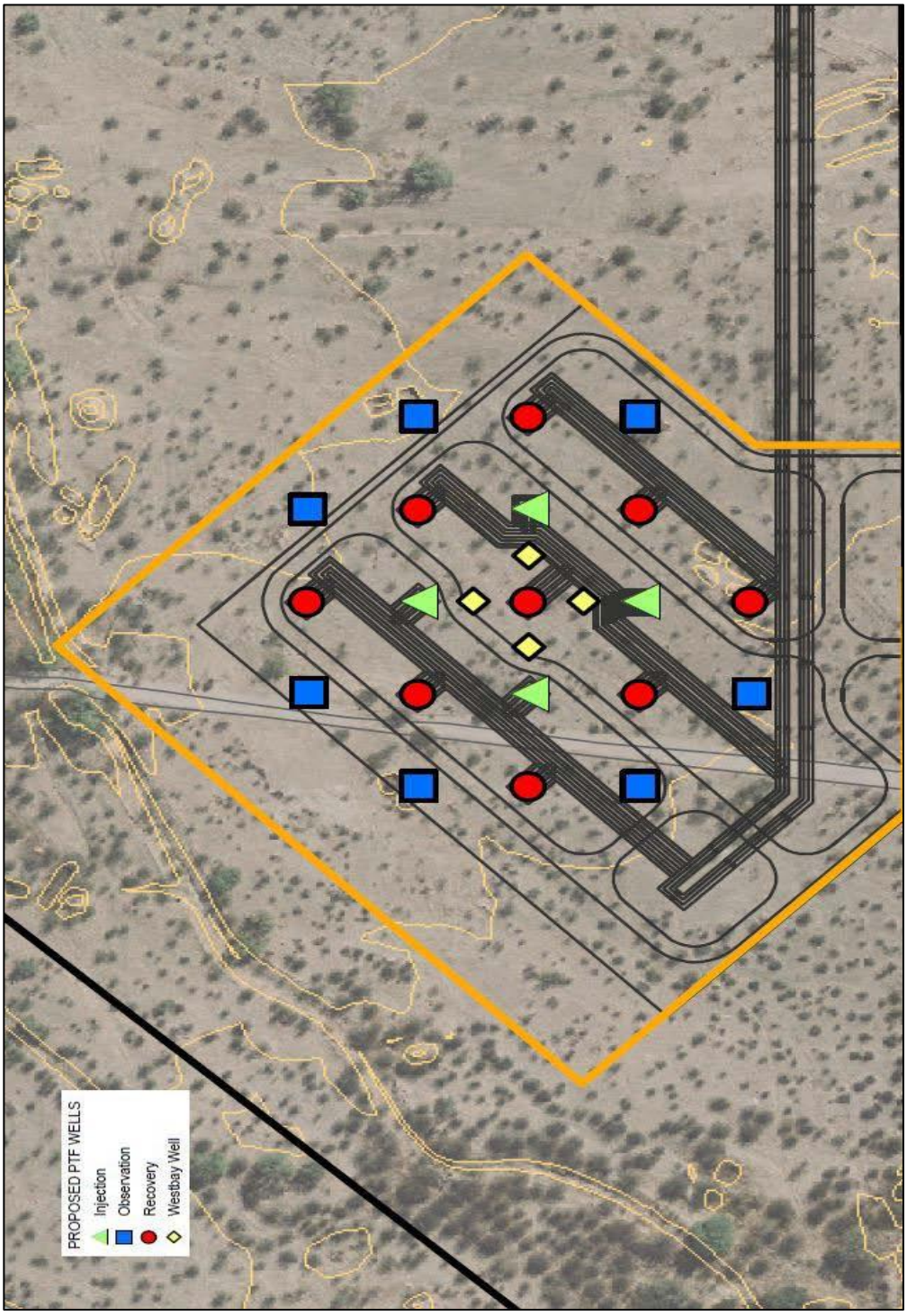
[42] **Record-2** 2014 Decision, p. 134, COL 47 (RA001916).

[43] 2014 Decision, at 14, FOF 62 (RA001796).

[44] *See* **Record-1**, Table 4.1-7 (RA000044) (listing contaminants for which FCI must monitor); **Record-21**, FCI Significant Amendment Application, Attach. 4, Exhibit 4-A (RA006249) (Revised Exhibit 10C), Table 3.1 (listing estimated concentrations of chemicals and minerals in extracted groundwater during in-situ leach operations).

for the Observation Wells, exceedances of Alert Levels are not considered permit violations.

Figure 3: FCI Pilot Test Well Field



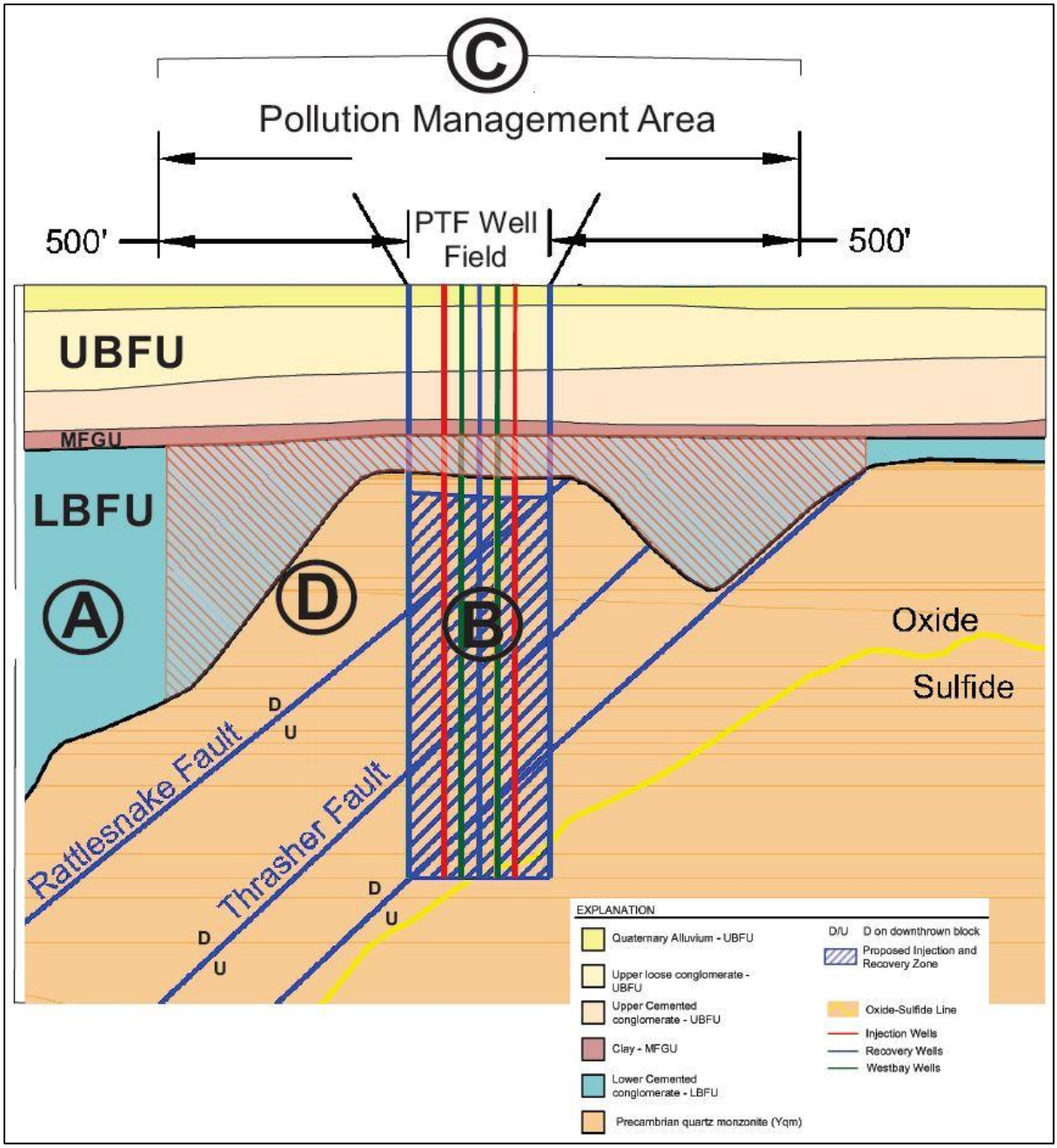


Figure 4: Geologic Cross-Section of Pilot Test Well Field

41. A geologic cross-section of FCI's pilot test site (Figure 4) shows that the Lower Basin Fill Unit (LBFU), which produces good-quality groundwater for the Town's drinking water supply, overlies the copper-ore-bearing oxide unit

bedrock (Figure 4, at A). The LBFU is the primary source of drinking water for the Town of Florence, the Merrill Ranch development, and the surrounding region.

42. The PTF well field (Figure 4, at B), where different wells will inject sulfuric acid and remove copper-bearing leachate, is a 2.2-acre area on the State Land parcel. The Pollution Management Area approved by the current Board and discussed below (Figure 4, at C), is an approximately 500-foot ring around the pilot test well field. Permit compliance is to be measured at POC wells outside of this area. The distance to and location of the compliance points in the Significant Amendment is effectively identical to those that were rejected by the Board in the original Temporary APP as "arbitrary, unreasonable, unlawful or based upon a technical judgment that was clearly invalid."

43. Immediately west of the pilot test well field (Figure 4, at D), the geologic contact between the LBFU and oxide unit "starts to slope downward."[45] Groundwater at this location generally flows to the west (to the left) and there is no hydrologic barrier between the LBFU and oxide unit along this interface. FCI has never provided a cross-section going south to north across the pilot test; such a section would show top of the PTF is not flat but slopes markedly toward the north such that the LBFU is inside the PTF. Thus pollutants that escape from the pilot test well field can flow horizontally into the LBFU, the Town's drinking water supply.

[45] **Record-2**, 2014 Decision, p. 63, FOF 221 (quoting ADEQ's response to public comments) (RA001845); *see also id.*, p. 6, FOF 16 ("Directly to the west of the PTF well field, the bedrock slopes down to a fault") (RA001788).

IV. STATEMENT OF THE ISSUES

A. Did the Board act contrary to the law, arbitrarily and capriciously when approving a temporary permit that violates the Board's prior, unappealed decision?

B. Did the Board act arbitrarily and capriciously, abuse its discretion, and rule contradictory to substantial evidence in upholding a Pollution Management Area upon which key permit terms are based that is unlawful, unreasonable, and technically invalid?

C. Did the Board act arbitrarily and capriciously, abuse its discretion, and rule contradictory to substantial evidence in upholding Point of Compliance Well locations that are unlawful and unreasonable?

D. Did the Board act arbitrarily and capriciously, abuse its discretion, and rule contradictory to substantial evidence in upholding a permit Alert Level[46] for fluid electrical conductivity at FCI's Observation Wells that is unlawful and unreasonable?

E. Did the Board act arbitrarily and capriciously, abuse its discretion, or make a decision unsupported by substantial evidence when it dismissed the following claims without presentation of evidence or a hearing?

- That ADEQ violated A.R.S. § 49-241 and applicable law by failing to provide proper and accurate information in the public notice of the Significant Amendment, by failing to properly record, transcribe, and respond to public comments, and by publishing a fact sheet that contained significant misleading statements.

- That ADEQ' s permit decision was predetermined long before the public comment period was opened and ADEQ acted with a closed mind to public comment, in violation of its due process obligation to provide a meaningful opportunity for the public to comment before a decision is made.

V. LEGAL ARGUMENT

A. Standard of Review

This Court reviews the Board's decision under the following standard: if "the Court concludes that the agency's action is contrary to law, is not supported by substantial evidence, is arbitrary and capricious or is an abuse of discretion,"

[46] An "Alert Level" is "a value or criterion established in an individual [APP] that serves as an early warning indicating a potential violation of a permit condition related to BADCT or the discharge of a pollutant to groundwater." A.A.C. § R18-9-101(2).

the Court must reverse, modify or vacate and remand the agency action.[47] In this action, Appellants request the Court reverse the Board's 2017 Decision and remand to the agency.

The Court reviews questions of statutory interpretation *de novo*.[48] The Court must reverse an administrative decision if it is contrary to law.[49] Even when an agency has discretion, it does not have discretion to incorrectly interpret the law.[50]

When a statute is part of a broader statutory scheme concerning a single subject, the Court must construe it in conjunction with related statutes, giving effect to each provision.[51] In interpreting statutes, the Court must "give meaning to 'each word, phrase, clause, and sentence ... so that no part of the statute will be void, inert, redundant, or trivial.'"[52]

ADEQ and FCI did not appeal from the 2014 Decision remanding the Temporary APP to ADEQ to address several significant flaws. This final, unappealed decision established the law of the case and is entitled to preclusive effect. The "law of the case" doctrine requires appellate decisions from which no further appeal is sought to be "strictly followed."[53] It is designed to avoid

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[47] A.R.S. § 12-910(E).

[48] *J.L.F. v. Ariz. Health Care Cost Containment Sys.*, 208 Ariz. 159, 161, ¶ 10, 91 P.3d 1002 (App. 2004).

[49] A.R.S. § 12–910(E).

[50] *See W. Sun Contractors Co. v. Superior Court In & For County of Maricopa*, 159 Ariz. 223, 229, 766 P.2d 96, 102 (App. 1988) (City's discretion does not permit incorrect legal determination); *Sanderson Lincoln Mercury, Inc. v. Ford Motor Co.*, 205 Ariz. 202, 205 ¶ 8, 68 P.3d 428, 431 (App.2003) ("While we consider the agency's interpretation of the statutes it administers, we review the law *de novo*.").

[51] *Johnson v. Mohave County*, 206 Ariz. 330, 333, ¶ 11, 78 P.3d 1051 (App. 2003).

[52] *Herman v. City of Tucson*, 197 Ariz. 430, 434, ¶ 14, 4 P.3d 973 (App. 1999) (citation omitted).

[53] *Bogard v. Cannon & Wendt Elec. Co., Inc.*, 221 Ariz. 325, 334, ¶ 30, 212 P.3d 17, 26 (App. 2009).

horizontal appeals, encourage an orderly end to litigation and to avoid so-called "judge shopping."[54] An adjudicative determination by an administrative tribunal, such as the 2014 Decision, is entitled to the same collateral estoppel effect as a judgment of a court.[55]

B. Arizona's Aquifer Protection Permit Program

In 1986, the State of Arizona adopted the Environmental Quality Act, created the Arizona Department of Environmental Quality (ADEQ), and recognized the precious and delicate nature of groundwater within this desert state by designating all of its aquifers as drinking water aquifers. Along with that designation, Arizona enacted the Aquifer Protection Permit (APP) program to proactively protect our State's groundwater from contamination.[56]

Under the APP program, all aquifers are protected for drinking water use unless exempted under specific statutory procedures. A key protection under the program is that ADEQ establish POC monitoring well locations around a facility, points at which groundwater standards will be monitored and enforced. The legislature intended that POCs, like all other APP requirements, be located and operated to ensure "that the facility will be so designed, constructed and operated as to ensure the greatest degree of discharge reduction achievable."[57]

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[54] *Powell-Cerkoney v. TCR-Montana Ranch Joint Venture, II*, 176 Ariz. 275, 279, 860 P.2d 1328, 1332 (App. 1993).

[55] *A. Miner Contracting, Inc. v. Toho-Tolani County Imp. Dist.*, 233 Ariz. 249, 254, ¶ 16, 311 P.3d 1062, 1068 (App. 2013) (adjudicative determinations have res judicata effect if they entail the essential elements of adjudication, including adequate notice, the right to present evidence and legal argument, and a rule of finality); *Hawkins v. State*, 183 Ariz. 100, 103, 900 P.2d 1236, 1239 (App. 1995) (res judicata and collateral estoppel may apply to decisions of administrative agencies); *Casillas v. Arizona Dept. of Economic Sec.*, 153 Ariz. 579, 581, 739 P.2d 800, 802 (App. 1986) ("Collateral estoppel can be applied to factual issues decided by an administrative agency acting in its judicial capacity.")

[56] Environmental Quality Act, Laws 1986, Ch. 368 (eff. Aug. 13, 1986); A.R.S. § 49-224(B).

[57] A.R.S. § 49-243(B).

At the POC wells, FCI must demonstrate that its facility will not cause or contribute to a violation of an Aquifer Water Quality Standard or, if a standard for a pollutant is exceeded in an aquifer at the time of permit issuance, no additional degradation of the aquifer relative to that pollutant will occur as a result of the discharge from the proposed facility.[58] To ensure that the POC wells are properly placed to provide meaningful monitoring of facility operations and prevent pollution of drinking water supplies, the legislature required that the POC wells be placed at "the limit of the [PMA]," which it defined as the "limit projected in the horizontal plane of the area on which pollutants are or will be placed."[59]

The legislature did allow for placement of POCs up to 750 feet outside the PMA, but only under two specific exceptions, neither of which is met here. First, alternative locations are allowed if it "technically impracticable or inappropriate" to place them at the PMA. Second, alternative locations are allowed if it would be "substantially less costly." But in no event may the POCs be placed further from the PMA that "is necessary for purposes of this paragraph" or so as to "result in an increased threat to an existing or reasonably foreseeable drinking water source."[60]

Given the complex hydrogeology in the area, the novel nature of FCI's untried copper extraction process, and the Town's heavy dependence on groundwater for its drinking water supply, ADEQ's regulatory role and oversight responsibilities are critical to the people of Florence and their drinking water supply. As discussed below, the Significant Amendment does not satisfy

[58] A.A.C. § R18-9-A202(A)(6).
[59] A.R.S. § 49-244(1).
[60] *Id.* § 49-244(2).

applicable standards of the APP program and does not adequately protect the Town of Florence's drinking water supply.

C. The Board's Approval of an Unlawful, Unreasonable, and Technically Indefensible Pollution Management Area Was Arbitrary and Capricious, an Abuse of Discretion, and Contradictory to Substantial Evidence in this Case.

Of the various forms of monitoring required in the Significant Amendment, the Point of Compliance ("POC") Wells are the key points for monitoring and enforcement of Aquifer Water Quality Standards that protect downgradient drinking water supplies. The Board found that the POC Wells in the original Temporary APP were "too far from 'the limit projected in the horizontal plane of the area on which [lixiviant] will be placed,' or PMA, to comply with A.R.S. § 49-244(2)(b)(iii)."[61] The POC Well locations in the Significant Amendment are the same or substantially the same as those that the Board rejected. This is due, in part, to the improper and unlawful manipulation of the "PMA" standards in ADEQ's review on remand. The Board's approval of the revised PMA ignored its previous binding decision regarding the proper designation of a PMA and was arbitrary, capricious, an abuse of discretion, and contrary to substantial evidence.

1. The Standards Applicable to PMAs.

ADEQ must "designate a point or points of compliance for each facility receiving an [APP]." These compliance locations are determined by reference to the Pollution Management Area ("PMA"), which ADEQ must designate based upon the site-specific discharge activities of the applicant.[62] The Legislature has

[61] **Record-2** 2014 Decision at 140, COL 59 (RA001922).

[62] A.R.S. § 49-244; ADEQ, *Individual APP Hydrology Substantive Review Checklist*, at 6 (November 2014) ("The PMA will be used to determine the number and location of points of compliance for the facilities at the site.") (available at http://www.azdeq.gov/environ/water/permits/download/apphydrocheck.dot).

defined the PMA as "the limit projected in the horizontal plane of the area on which pollutants are or will be placed," and includes the "horizontal space taken up by any liner, dike, or other barrier designed to contain pollutants in the facility."[63] The Board previously concluded that "A.R.S. § 49-244(1) is not ambiguous: the PMA 'is the limit projected in the horizontal plane of the area on which pollutants are or will be placed' or for the PTF, *where the lixiviant will be injected and recovered*."[64] In layman's terms, the PMA is basically the area that FCI will be polluting during injection operations.

Once a proper PMA is selected, the POC wells must be located along that boundary, unless certain statutory exceptions are met. Arizona law requires that Temporary APPs are drafted to ensure "the greatest degree of discharge reduction achievable."[65] In keeping with this requirement, the Board previously held that the PMA should be drawn as small as reasonably possible, both to limit the spread of contaminants and to help ensure that the corresponding POC wells are located where they will provide "meaningful monitoring" during facility operations for contaminant escapes and exceedances.[66]

The PMA also can include "horizontal space taken up by any liner, dike or other barrier designed to contain pollutants in the facility."[67] ADEQ's Best Available Demonstrated Control Technology (BADCT) Mining Guidance Manual provides that a "barrier" for in-situ leach operations can include

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[63] A.R.S. § 49-244(1).

[64] **Record-2**, 2014 Decision at 136, COL 50 (emphasis added) (RA001918).

[65] A.R.S. § 49-243(B)(1).

[66] Record-2, 2014 Decision at 140-41, COL 60 (RA001922-23).

[67] A.R.S. § 49-244(1).

pumping that creates an inward groundwater gradient to "contain, capture and recycle" injected solutions.[68]

2. In 2014, the Board Rejected FCI's Original PMA.

The Board held in 2014 that the PMA in the original Temporary APP had no legal or scientific basis and that FCI had tried to justify it after the fact with arguments.[69] The Board discussed the "area on which pollutants are or will be placed" in the context of the Temporary APP as follows:

> Although courts defer to agencies on technical matters within the scope of the agency's authority and expertise, that deference "is not to be a device that emasculates the significance of . . . review." An agency may not disregard clear statutory directives or legislative intent. A.R.S. § 49-244(1) is not ambiguous: the PMA "is the limit projected in the horizontal plane of the area on which pollutants are or will be placed," or *for the PTF, where the lixiviant will be injected and recovered*. FCI's applications for the Temporary APP and for the UIC permit made clear that lixiviant would be placed in the [injection recovery zone] and was *not expected to migrate more than one or two well spacings to the northwest of the PTF well field*. All of FCI's witnesses agreed with this interpretation of the unequivocal statements in FCI's applications.[70]

Because FCI could not justify an over-sized PMA for a 2.2-acre pilot test well field under the facts or the law applicable to FCI's pilot test, the Board rejected the PMA in the original Temporary APP.[71] In its 2014 Decision, the Board concluded

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[68] BADCT Manual, § 3.4.5.3.1 (2004) (available at http://legacy.azdeq.gov/environ/water/wastewater/download/badctmanual.pdf).

[69] **Record-2**, 2014 Decision at 137, COL 52 (RA001919) ("A barrier consisting of a 1,600-foot cone of depression to justify a 200-acre PMA for a 2.2-acre PTF well field would render superfluous the definition in A.R.S. § 49-244(1) that '[t]he [PMA] is the limit projected in the horizontal plane of the area on which pollutants are or will be placed."); *id*. at 139, COL 55 (RA001921) ("Appellants established through FCI's applications for the Temporary APP and UIC permit that FCI's witnesses' testimony that a 1,600 or 1,000-foot cone of depression justified the PMA was a post hoc rationalization for the PMA that was first asserted at the hearing, not a permitted control mechanism under BADCT.").

[70] **Record-2** 2014 ALJ Decision, at 136, COL 50 (RA001918) (emphasis added).

[71] **Record-2** 2014 ALJ Decision at 137, COL 52 (RA001919); *id*. at 139-141, COL 55 to COL 61 (RA001921-1923).

pollutants would migrate no more than one or two well spacings, which requires the Point of Compliance wells to be no more than 70-140 feet from the recovery wells.[72] No appeal was taken from this determination.

3. The PMA in the Significant Amendment Remains Nothing More than an Arbitrary Line.

On remand, FCI's Significant Amendment application proposed a PMA for the pilot test well field formed by a line drawn at an approximate 500-foot radius around the outermost pilot test wells (Figure 5).[73] This area is approximately 32 acres, and in some places includes land that is *farther* from the pilot test well field than the PMA that was rejected by the Board in 2014. Citing the BADCT Manual, FCI purportedly based its new PMA upon the "centermost" part of the cone of depression created by Recovery Well pumping.[74] But during operations, the 2.2 acre pilot test well field is designed to entirely contain all of the pollutants that FCI intends to inject.[75] The Significant Amendment PMA is thus more than an order of magnitude larger than it would be if it were properly drawn and will allow the contamination of groundwater that the law otherwise requires be protected.

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[72] A well spacing is 50 to 70 feet. *See* **Record-2** 2014 ALJ Decision at 103, FOF 361 (RA001885).

[73] **Record-69**, 2017 Board Order at 4, FOF 16 (RA007565).

[74] **Record-61**, WQAB Hearing Transcript, Testimony of Maribeth Greenslade at 91:3-5 (Mar. 6, 2017), (RA007158).

[75] **Record-2** 2014 ALJ Decision at 84, FOF 296 (RA001866) ("FCI's UIC permit application provided further that FCI anticipated that under normal operational conditions, fluid would be contained within the outermost ring of recovery wells in the PTF well field"); *id.* at 85, FOF 298 (RA001867) (FCI's expert "Mr. Nicholls testified that hydraulic control under FCI's application and the Temporary APP did not require injected solutions to stay within the area of injection and recovery wells, but only to remain generally within the footprint of the PTF well field."); *id.* at 86, FOF 302 (RA001868) (FCI's expert stated that "The area where the water quality could be affected by the operation of the leaching facility extends a few well spacings beyond the physical location of the injection and recovery wells, and is approximated by the outline of the PTF Wellfield boundary…").

FCI has never taken a consistent position on the cone of depression created by its recovery wells, variously characterizing it in the first appeal as extending a few feet beyond the recovery wells, thousands of feet outward, and basin-wide.[76] In the 2014 Decision, the cone of depression excuse for placing the POC

[76] **Record-2**, Exhibit 6, 2014 OAH Hearing Transcript, ADEQ Testimony, April 4 at 161:3-14, (RA003141), (cone of depression extends a "little bit" past the well field boundaries); *id.* at 161:24-162:19, (RA003141), (ADEQ was never told of a 1,000-foot cone of depression during its review and knew of no relationship between the cone of depression and PMA); Adrian Brown Testimony, April 25 at 35:22-36:2, (RA004016), (cone of depression extends 1,600 feet from center of PTF well field); Adrian Brown Testimony, April 29 at 76:12-22, (RA004379), (the commercial cone of depression would extend across the entire groundwater basin).

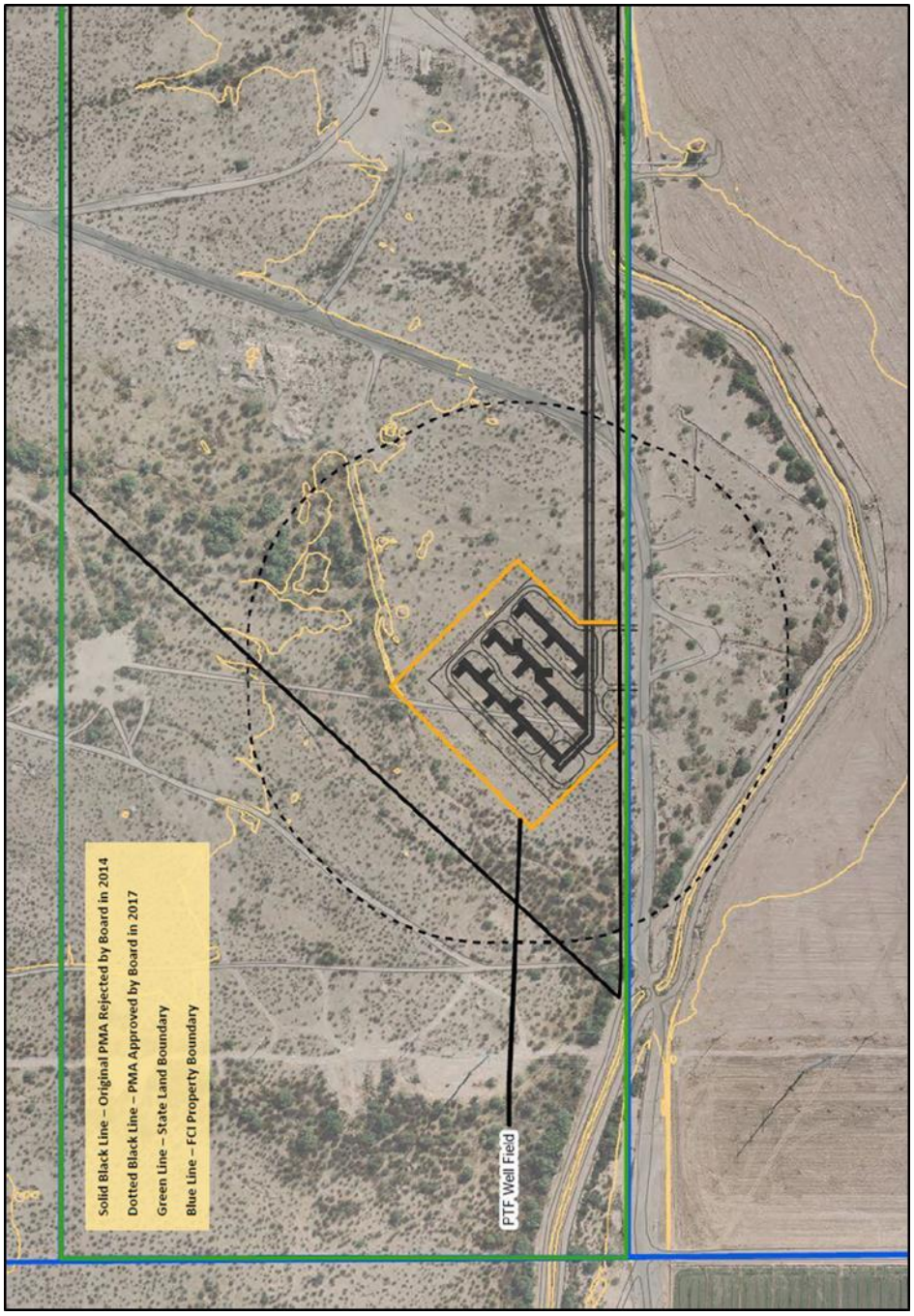

Figure 5: PTF Well Field, Original PMA, Revised PMA

wells so far away they could not trigger a permit violation until years after the project shut down was correctly rejected. For this appeal, FCI's arguments for a PMA drawn at a 500-foot radius around the well field are similarly vague and arbitrary. One of FCI's experts testified at the Board hearing that, although the cone of depression from the pilot test well field "will go out so many thousands of feet," FCI had to locate the PMA somewhere inside FCI's property boundary, so "we had to then say, All right. Well, we've got to pick a distance."[77] ADEQ testified that although the cone of depression "will go out indefinitely . . . this is the centermost part, the 500-foot radius of that cone of depression."[78] FCI's expert echoed that "We want it to be more in the center of the cone of depression, because then there's a larger amount of drawdown, which is a larger pressure difference, which is a stronger inward hydraulic gradient."[79] But FCI's expert also acknowledged that there was no "magic" to the 500-foot radius.[80]

This testimony makes clear that the PMA in the Significant Amendment is as arbitrary as the original PMA. Rather than using the actual barrier to contaminant escape – the capture zone of the recovery wells, which can be readily mapped – FCI used the cone of depression argument to pick a PMA that best suited their desire to keep the point of compliance wells as far from the well field as possible. But "we've got to pick a distance," or "the centermost part" of the cone of depression are not defensible technical justifications, and there is no support in applicable statutes or regulations for such random choices. As one Board member said at the hearing, "There seems to be some arbitrariness in terms

[77] **Record-61**, WQAB Hearing Transcript, Testimony of Phil Lagas at 143:9-144:1, (RA007210-11), (Mar. 6, 2017).

[78] *Id.*, Testimony of Maribeth Greenslade at 91:3-5, (RA007158).

[79] *Id.*, Testimony of Phil Lagas at 144:1-5, (RA007211).

[80] *Id.*, Testimony of Mark Nicholls at 138:9-20, (RA007205).

of that—the 500 foot."[81] Moreover, these justifications ignore the testimony of FCI's experts and ADEQ—testimony relied on by the Board for the 2014 Decision—that contaminants would be contained generally within the boundaries of the pilot test well field during operations and travel no more than one to two well spacings (70-140 feet).

The "cone of depression barrier" argument distracts from the real issue. FCI designed the pilot test to contain contaminants within the well field. FCI has stated repeatedly that, even in a worst case scenario, contaminants would not travel far beyond the well field, even five years after pilot test operations end (Figure 6).[82] Thus, the well field is the area on which pollutants will be placed. Even allowing for a reasonable "barrier" for contaminants to travel past the outer Observation Wells, the correct PMA when drawn pursuant to statutory requirements and the 2014 Decision, is significantly smaller than the line currently approved by the Board.

ADEQ relied on FCI's "barrier" argument to base the PMA on an arbitrary "cone of depression" radius, while ignoring the facts applicable to this project. No matter how large a cone of depression FCI generates with the Recovery Wells, the system is designed so that contaminants should never leave the well field, or travel more than one to two well spacings. Therefore, the well field boundary—not an arbitrary 500-foot line—is the true area on which pollutants will be placed and is the only area that can be designated a PMA under Arizona law, and is what was decided by the 2014 Decision.

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[81] *Id.*, at 96:12-15, (RA007163).

[82] *See, e.g.*, **Record-2** 2014 Decision, at 112, FOF 387; *id.* at 113, FOF 389 RA001894-95) (ADEQ testified that "after five years, FCI's fate and transport model predicted that sulfate would migrate only 150 feet").

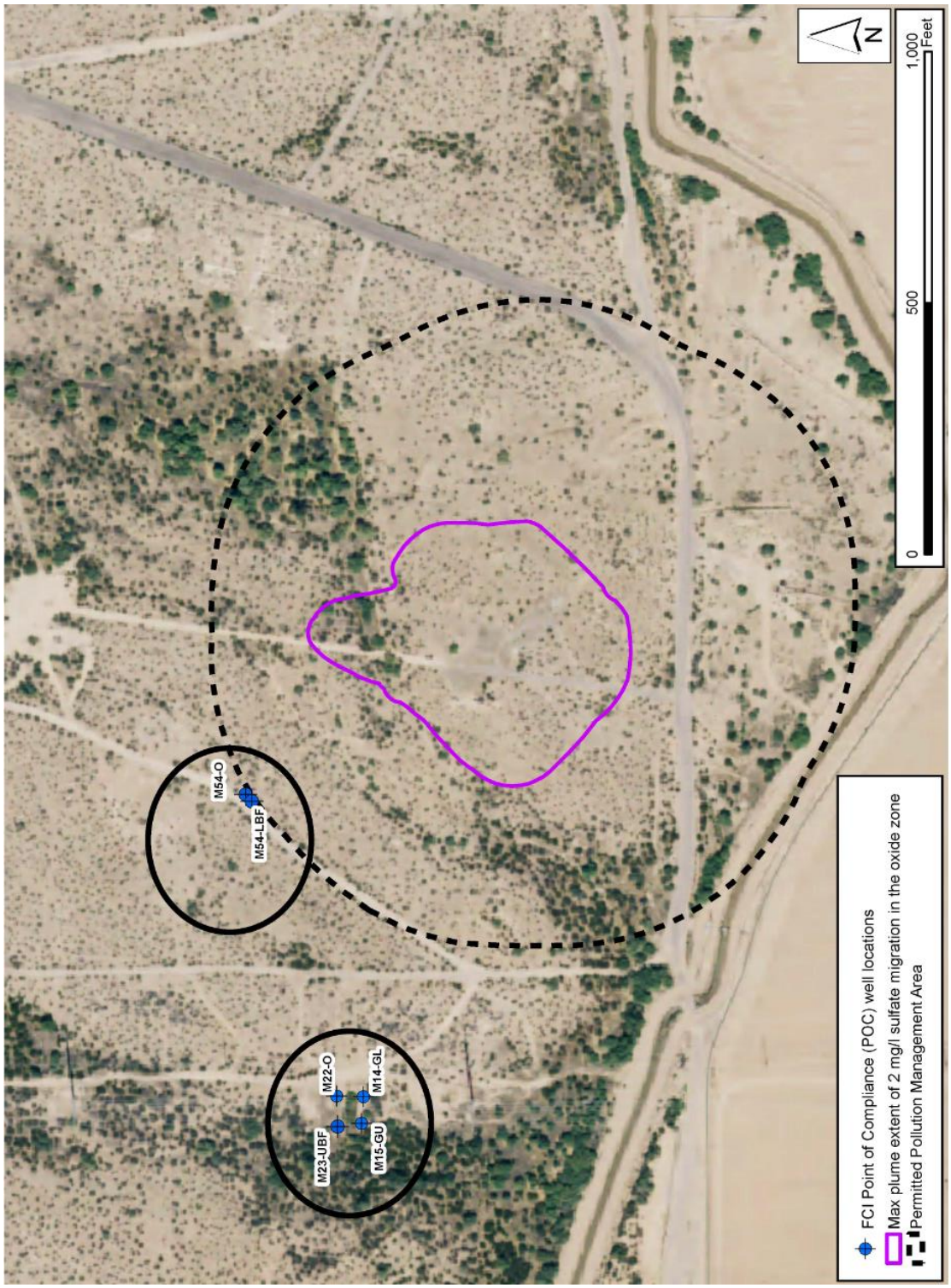

Figure 6: PMA, POC Wells, and Worst-Case Contaminant Plume After Five Years

4. The PMA Prevents Monitoring and Enforcement *Before* Contaminants Reach the Drinking Water Aquifer.

One of the most positive components in both the 2013 and 2016 permits is ADEQ's prohibition against any contamination escaping the bedrock and reaching the Lower Basin Fill Unit ("LBFU"). This provision is set out in Permit Section 2.3.1, which states that "Hydraulic control over the injected solutions shall be maintained during the operating life of the facility. In-situ solutions shall be injected and *contained within the oxide unit*" (emphasis added). Any FCI failure to contain the in situ solution within the oxide unit means solution had escaped to the LBFU, in violation of this provision. To its credit, FCI has proposed and ADEQ has approved extensive monitoring to detect leachate excursions upward into the LBFU. But movement from the oxide unit to the laterally adjoining LBFU is another matter.

The Significant Amendment's Pollution Management Area (PMA) is fatally flawed because it allows pollutants to enter the LBFU, the Town's drinking water supply, years before they could be detected by POC Wells. At a minimum, pollutants must travel 500 feet or more beyond the Observation Wells before reaching the closest POC Wells. As can be seen in Figure 7, which is FCI's own conceptual cross-section of the PTF, the oxide unit drops off precipitously just beyond the Observation Wells, such that within the PMA the LBFU is not only present but is hundreds of feet thick.[83] As a result, contaminants will flow into the LBFU long before reaching the POC Wells, and a large volume of LBFU could be contaminated inside the PMA without reaching a POC and triggering enforcement. Consequently, because the POCs are located so far from the PTF well field, the prohibition against any LBFU contamination in Permit Section

[83] **Record-2**, Exhibit 7, FCI Figure D-11, EW USDW cross-section 746013N Looking North (December 2015) (RA004692).

2.3.1. becomes meaningless. The *only* way FCI can avoid a PMA that extends into the LBFU at this location is to place the PMA line at the pilot test well field

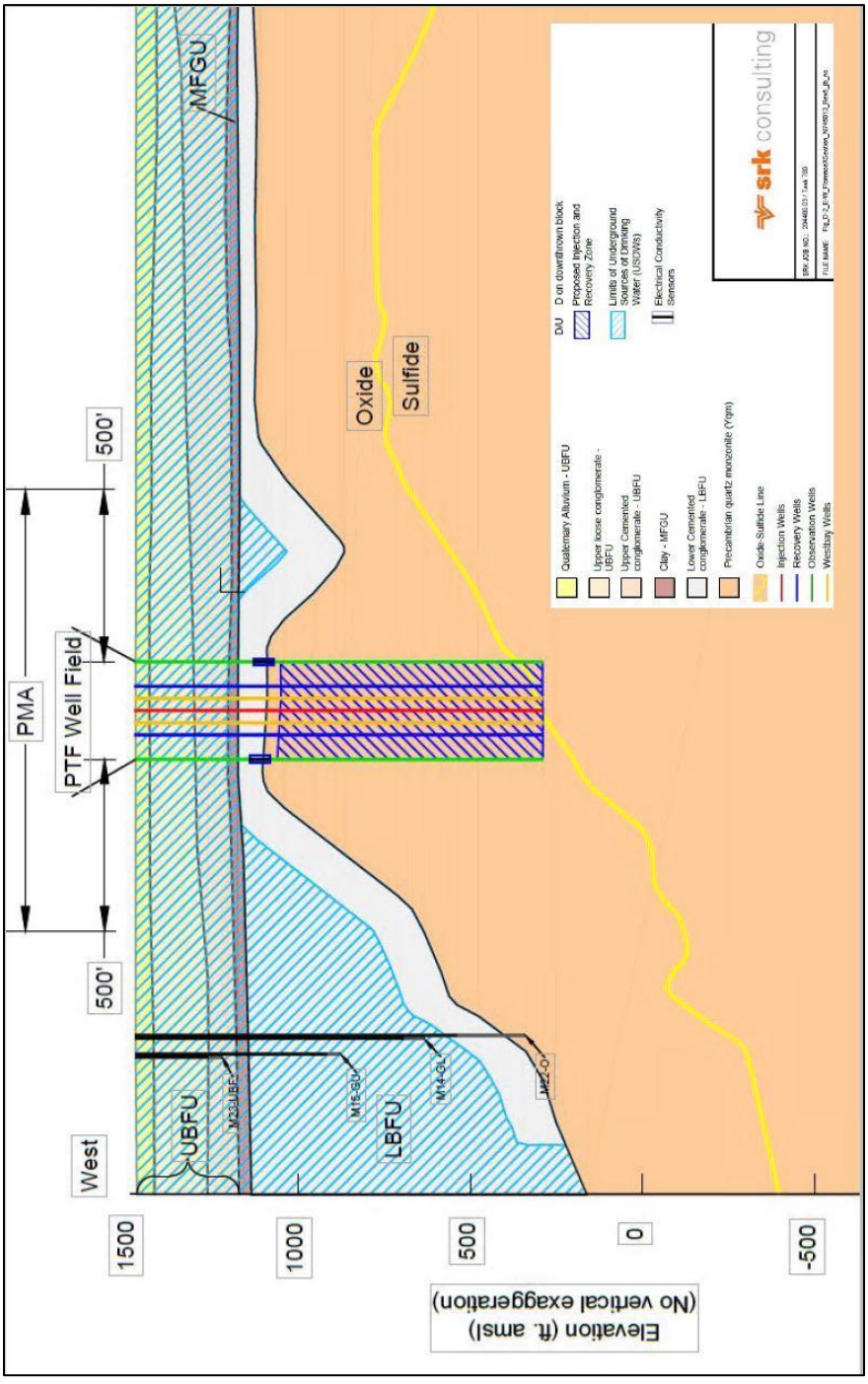

Figure 7: PTF Well Field and POC Wells

boundary and just outside the Observation Wells. Any larger area will allow FCI to pollute the aquifer that provides the Town's drinking water supply without legal consequence. This is why the Board's 2014 Decision described a one to two well spacing limit for the location of the Pollution Management Area and the Point of Compliance wells.

D. The Board Acted Arbitrarily and Capriciously, Abused its Discretion, and Ruled Contradictory to Substantial Evidence in Upholding POC Well Locations that are Unlawful and Unreasonable.

Point of Compliance ("POC") Wells are the key enforcement points in the Significant Amendment.[84] Once a proper PMA is determined, the point or points of compliance are defined by the statute to be "the limit of the pollution management area," unless the applicant can demonstrate that one of two alternative locations should be approved.[85] Arizona Water Quality Standards, designed to protect groundwater for use as a drinking water supply, are enforced only at the points of compliance. If a contaminant exceeds those standards in a POC Well, ADEQ can require amendments to the permit, require corrective actions to address the violation, issue administrative compliance orders, seek injunctive relief to protect the public health, or seek civil or criminal penalties.[86] Exceedances of Alert Levels at other monitoring points in the Significant Amendment do not give rise to similar enforcement authority, potentially leaving significant contamination unchecked until it reaches a POC Well.

With regard to the pilot test well field, the Significant Amendment establishes six POC Wells in the same or nearly the same locations as in the

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[84] A.R.S. § 49-244.

[85] *Id.* § 49-244.

[86] **Record-1**, Significant Amendment at 23-24, § 2.6.4 (RA000023-24); A.R.S. § 49-261, -262, and -263.

original Temporary APP (Figure 8).[87] If contaminants escape FCI's control, it will take them up to almost 12 years to reach these POC locations, which will be nearly a decade after the pilot test ends. This guarantees that FCI will not violate water quality standards at the POC Wells during pilot test operations, regardless of whether its hydraulic control system really works. For this reason, the Board unequivocally rejected those compliance well locations in 2014, finding that they were "arbitrary, unreasonable, and unlawful" and did "not allow any meaningful monitoring of pollutants."[88] But upon review of the Significant Amendment three years later, the Board accepted the same (or nearly same) locations as reasonable and lawful.[89]

On remand after the 2014 Decision, FCI did not move the POC Wells in any significant manner. Groundwater still flows in the same directions at the same rates. And contaminants escaping from FCI's well field still will not reach these compliance wells until many years after the pilot test is complete. Given those unchanged factual circumstances, the compliance points still do "not allow any meaningful monitoring of pollutants" from FCI's pilot test, regardless of any justifications presented to the Board.

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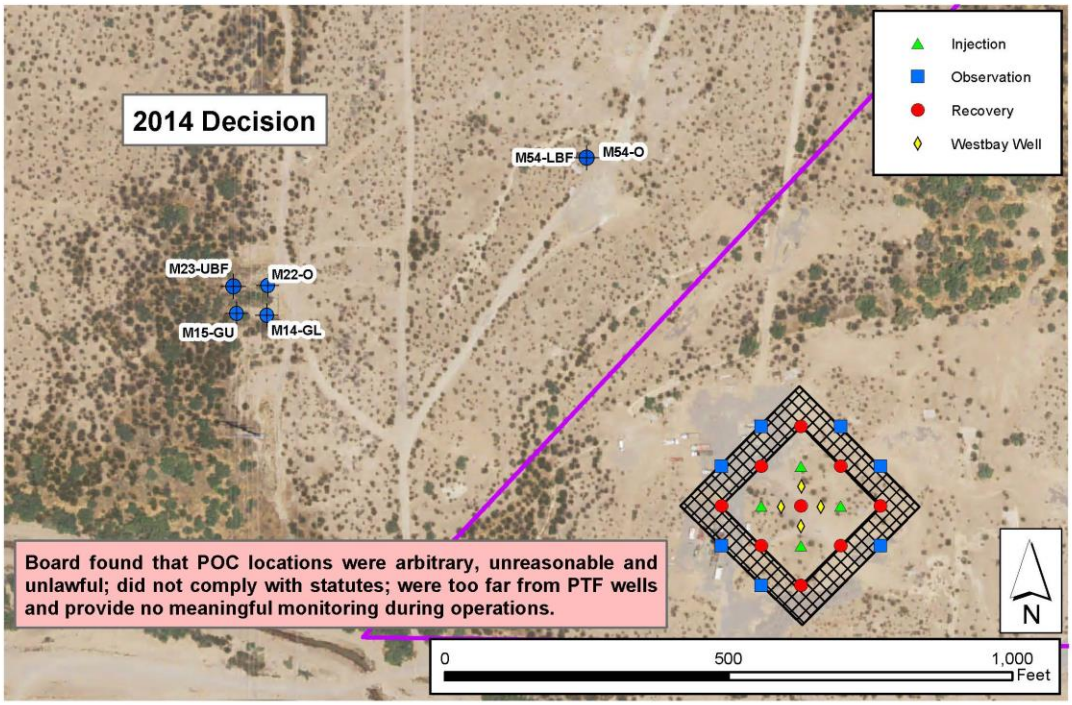
[87] **Record-21**, FCI application at 3-1 (RA006198) ("The proposed point of compliance (POC) wells described in the March 1, 2012 Temporary APP application remain unchanged with the exception of a minor adjustment of the location of one proposed POC well.").

[88] **Record-2**, 2014 Decision at 136-141, COL 50-61 (RA001918).

[89] **Record-69**, 2017 Board Order at 11-12, COL 55-56 (RA007472-73).



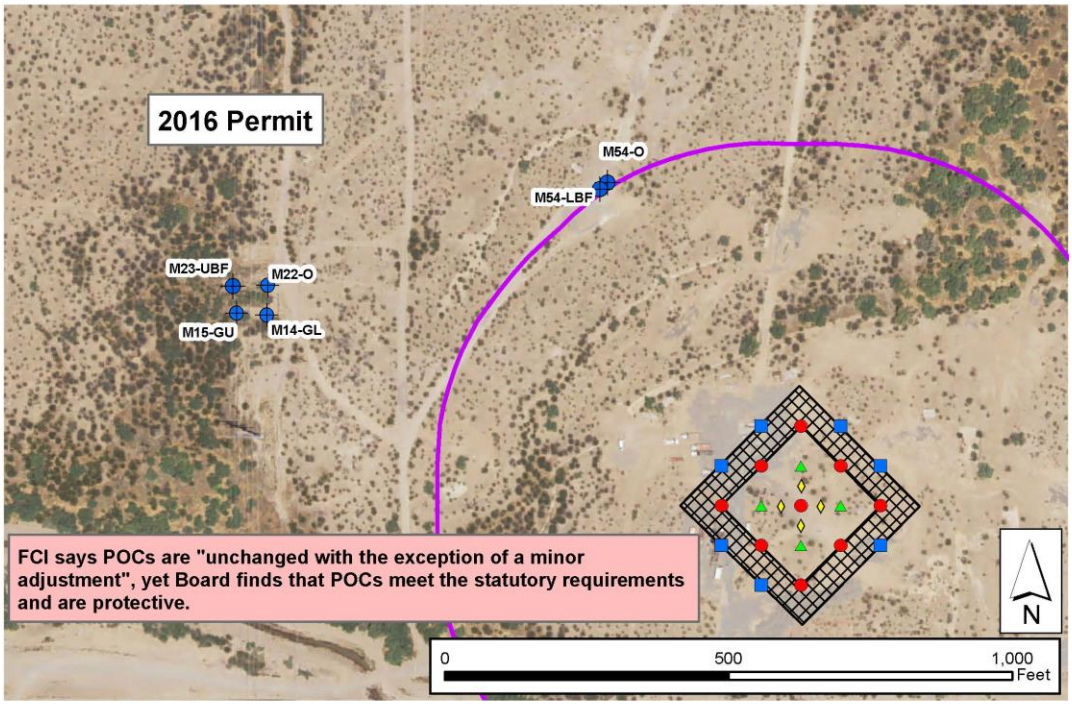


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Figure 8: POC Locations, Original Temporary and Significant Amendment

1. POC Wells M54-O and M54-LBF Are Unlawful, Unreasonable, and Do Not Provide Meaningful Monitoring.

Two of the six POC Wells associated with the well field, M54-O and M54-LBF, are located at the PMA line (Figure 8).[90] But because that PMA is unreasonable and illegal, the locations for these two POC Wells are similarly unreasonable and illegal. These two POC Wells are approximately 730 feet from the nearest injection well in FCI's pilot well field.[91] If contaminants escape FCI's control, it will take many years beyond the two-year life of the PTF for mining pollutants to reach these wells.[92] Moreover, contaminants will already have entered the LBFU long before reaching the closest POC wells, violating the permit before any notice to ADEQ or the public.[93] Therefore, these two wells do not provide "any meaningful monitoring of pollutants that may escape the PMA during PTF operations."[94]

2. Four Other Existing POC Wells Have Not Moved and Remain Unlawful and Unreasonable.

The four other POC wells (M23-UBF, M22-O, M15-GU, and M14-GL) associated with the well field were originally drilled by BHP in the 1990s for a full commercial mining project that has nothing to do with FCI's pilot test 20 years later.[95] The closest of these POC Wells is approximately 800 feet—and 10 to

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[90] **Record-69**, 2017 Board Order at 4, FOF 19 (RA007465).

[91] Record-2, 2014 Decision, p. 92, FOF 323 (RA001874).

[92] *Id.* at 96, FOF 338 (RA001878) (citing testimony of FCI expert Nicholls, who "acknowledged that if contaminants escaped, they could travel for years before being detected by the POC wells, long after the expiration of the Temporary APP.").

[93] *See* Figure 4, *supra*.

[94] **Record-2**, 2014 Decision at 140-41, COL 60 (RA001922).

[95] *Id.* at 136, COL 49 (RA001918) ("Temporary APP No. P-106360 cannot authorize FCI to use the same POC wells as the commercial APP unless standing alone, the wells meet statutory requirements for the PTF."); **Record-69**, 2017 Board Order at 4, FOF 19 (RA007465).

12 years of groundwater travel—from the nearest pilot test well (Figure 8).[96] In the 2014 Decision, the Board rejected these compliance locations, finding that they were too far from the pilot test well field to comply with A.R.S. § 49-244.[97] Directly defying these findings, ADEQ's Significant Amendment authorized the same four POC wells that the Board rejected in 2014. And now the Board itself has approved those same four POC locations. Nothing has changed since 2014 to justify the Board's approval in this appeal of those same compliance points that it previously found were "arbitrary, unreasonable, unlawful or based upon a technical judgment that was clearly invalid."

In 2014 and still today FCI attempted to justify these POC locations under A.R.S. § 49-244(2)(b), which allows alternative POC locations if the applicant demonstrates that selection of an alternative POC will allow installation and operation of monitoring facilities that are "substantially less costly" than placing the POC at the default location at the limit of the PMA.[98] This excuse was not accepted in the 2014 Decision.

It is implicit in the statute that protection of the aquifer will not be compromised by the use of an alternative POC that is substantially less costly. Alternative POC locations may only be approved if they are no further from the default location at the limit of the PMA than is necessary; (2) they will not result in an increased threat to an existing or reasonably foreseeable drinking water

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[96] **Record-2**, 2014 Decision at 94, FOF 333 (RA001876) (ADEQ "estimated that it would take approximately 11.6 years for contaminants form the PTF to reach the POC wells.").

[97] *Id.* at 140, COL 59 (RA001922) ("The substantially less costly POC wells cannot define the PMA under A.R.S. § 49-244(1) and cannot be used as POC wells for the PTF unless they meet the requirements of A.R.S. § 49-244(2)(b). Appellants established that the existing POC wells are too far from "the limit projected in the horizontal plane of the area on which [lixiviant] will be placed," or PMA, to comply with A.R.S. § 49-244(2)(b)(iii).").

[98] **Record-69**, 2017 Board Order at 4, FOF 19 (RA007465).

source; and (3) they are not more than 750 feet downgradient from the edge of the PMA.[99]

The location of these four POC Wells clearly pose an increased threat to the Town's drinking water supply because they are too far away to detect escapes of sulfuric acid mining solution into the drinking water aquifer during the active life of FCI's pilot test—the whole reason for their existence. In 2014, the Board held: (1) "substantially less costly POC wells . . . cannot be used as POC wells unless they meet the requirements of A.R.S. § 49-244(2)(b)"; and (2) the four existing POC wells "are too far from 'the limit projected in the horizontal plane of the area on which [lixiviant] will be placed' . . . to comply with A.R.S. § 49-244(2)(b)(iii)."[100] No appeal was taken from these findings.

The Legislature intended that there be significant justification for alternative compliance points. They established a high bar, not a rote administrative "check box" requirement. Here, FCI's purported cost savings cannot justify these POC Well locations when the POC Wells are so far from the pilot test well field that they are irrelevant to any reasonable monitoring scheme and provide no protection to downgradient drinking water supplies.[101]

In 2014, the Board found "the evidence submitted at the hearing confirmed that the permitted locations of the POC Wells do not allow any meaningful monitoring of pollutants that may escape the PMA during PTF operations." By allowing these four POC Wells to remain in the very locations that the Board previously rejected, ADEQ will not trigger a permit violation if contaminants have escaped FCI's control because those pollutants will not reach these POC

[99] A.R.S. § 49-244.

[100] **Record-2,** 2014 Decision at 140, COL 59 (RA001922).

[101] **Record-69**, 2017 Board Order at 4, ¶ 19 (RA007465).

Wells until many years *after* pilot test operations end. Yet somehow in this appeal the Board found that situation both reasonable and lawful.[102] It is neither, and the Court should reverse the Board's order and remand to ADEQ with direction that the POC locations be selected in accordance with the Arizona law and the Board's 2014 binding decision.

E. The Alert Level for Fluid Electrical Conductivity Is Unlawful and Unreasonable.

Electrical conductivity measures the ability of water to conduct electricity, which in turn is indicative of mineral content. Elevated conductivity resulting from the high dissolved mineral content in FCI's sulfuric acid solution is easily measured and is one of the most effective diagnostic indicators of the solution's presence in groundwater. Frequent and widespread measurement of conductivity levels, including at varied depths in every Observation and monitoring well, is a critical component of environmental protection at an in-situ leach facility.[103]

The Board's review of the original Temporary APP found that ADEQ and FCI had admitted that migration of mining pollutants into the LBFU would violate the permit;[104] that the Temporary APP lacked any monitoring inside the PTF well field for vertical migration of mining pollutants;[105] and that existing monitoring in the Temporary APP would not detect mining pollutants until long after PTF operations had ended.[106] The Board directed ADEQ on remand to require "meaningful monitoring," in part through electrical conductivity

[102] *Id.* at 10-11, COL 52-56 (RA007471).
[103] *See generally* **Record-2**, 2014 Decision at 70-73, FOF ¶¶ 243-252 (RA001852-55).
[104] *Id.* at 130, COL ¶ 31 (RA001912).
[105] *Id.* at 131, COL ¶ 35 (RA001913).
[106] *Id.* at 130, COL ¶ 32 (RA001912).

monitoring for vertical migration of mining pollutants into the LBFU.[107] While ADEQ made several improvements to the permit's monitoring requirements, significant deficiencies remain that render the Board's decision to uphold the Fluid Electrical Conductivity Alert Level arbitrary, capricious, and unsupported by substantial evidence.[108]

1. Background

Electrical conductivity monitoring measures the electrical resistance of groundwater samples. Groundwater containing more minerals, dissolved solid matter, and other contaminants generally has higher electrical conductivity (and lower electrical resistance) than "cleaner" water with fewer such constituents.[109] Some variation in electrical conductivity will be seen in a given well over time due to variations in the chemical content of groundwater passing through the well. But the sulfuric acid solutions injected by FCI will have significantly higher conductivity than background groundwater because the solution contains significantly higher concentrations of contaminants.[110]

The comparison of electrical conductivity in wells before and after injection is one means of monitoring the flow of the acid solutions and dissolved contaminants through groundwater. If conductivity in an Observation Well rises

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[107] *Id.* at 130-31, COL ¶¶ 33 and 35-36 (RA001912-13).

[108] **Record-69**, 2017 Board Order at 10, COL 49-50 (RA007471).

[109] An exception may occur for water in which the dominant ions are carbonate or bicarbonate, minerals whose presence is not well correlated with conductivity. That exception will not occur at FCI's site.

[110] **Record-21**, FCI Brief Outlining Changes ADEQ Made, Attachment 1, FCI Significant Amendment Application, at 1-9 (RA005828) ("The injected solution has a lower electrical resistivity than native groundwater, and as the injected solution moves through the formation it is anticipated that the conductivity signature of the formation will change over time depending on the concentration of injected solution present.").

significantly above background, it triggers concerns that contaminants from FCI's injection have escaped.

2. Permit Requirements

The Significant Amendment contains a Fluid Electrical Conductivity Alert Level for Observation Wells, purportedly to help confirm hydraulic control,[111] but the Alert Level makes no sense. This Alert Level is triggered by "Observation Well Conductivity Equal to or Greater than Injection Well Conductivity."[112] This means the injected solution must reach the Observation Wells essentially undiluted, which mineral concentrations at strengths equal to or greater than when injected. The comparison between Observation and Injection Wells is to be made through "comparison of fluid sample collected from all observation wells and all injection wells."[113] It is not clear whether the outcome depends on any one Observation Well exceeding any one Injection Well, or some other metric. Whatever the case, exceedance of this limit only triggers an Alert Level and certain contingency actions, not a permit violation.[114]

3. The Alert level Is Unreasonable and Arbitrary.

The Fluid Electrical Conductivity Alert Level is nonsensical and unreasonable, because even a massive escape of mining contaminants would not violate the Alert Level or require any FCI response. Consider a release where escaped solution is only diluted 0.1% as it travels through groundwater, so contamination reaches an Observation Well at 99.9% of full strength injectate. That would represent a near-total collapse of FCI's hydraulic control scheme and

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[111] **Record-1**, Significant Amendment, at 4, § 2.2.4 (RA000004).

[112] *Id.* at 54, Table 4.1-8 (RA000054).

[113] *Id*.

[114] *Id.* at 19, § 2.6.2.9 (RA000019).

would pose a significant threat to drinking water resources. But because conductivity in the Observation Well would be lower than the Injection Wells, FCI would not be required to even report the event, much less take action.[115] This is not an appropriate permit standard for ensuring that FCI maintains hydraulic control or for protecting the Town's drinking water supply.

This standard also assumes that an escape of injectate can reach the observation wells at full concentration. FCI's geochemical model in support of this permit did not demonstrate that this was possible.[116] If a full-concentration escape beyond the recovery wells is possible, then FCI's geochemical model is invalid (or a critical modeling result was not disclosed in FCI's application). If such an escape is not possible and FCI's geochemical model is correct, then this standard is unreasonable and technically indefensible.

4. FCI's Justifications for the Alert Level Are Lacking.

ADEQ and FCI, citing natural variations in electrical conductivity at the Observation Wells due to the dynamic nature of groundwater flow, have argued that "any" increase in Fluid Electrical Conductivity at the Observation Wells is

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[115] If FCI's hydraulic control failed completely, at least some of the injected solution will be neutralized, consumed in dissolving minerals in the ore, and diluted by surrounding groundwater flows. **Record-39**, Wilson Affidavit, at 8, ¶ 27, (RA006773), (January 31, 2017); **Record-2**, Exhibit 17 to SWVP comments incorporated by reference, FCI Response to State Land re Mine Operating Plan, at 4 (March 13, 2014) (RA005461) ("During PTF operations, the center well is anticipated to produce 1.80 g/L of recoverable copper, which reflects the full strength solution anticipated during commercial operations. Recovery wells at the edge of the will field are anticipated to produce solution with 1.35 g/L of recoverable copper during PTF operations because of dilution from native groundwater flowing into the well field.").

[116] **Record-21**, FCI Significant Amendment Application, Attach. 4, Exhibit 4-A, *Geochemical Evaluation to Forecast Composition of Process Solutions for In-Situ Copper Recovery Pilot Test Facility at Florence Copper*, Table 3.1 (Estimated Composition of Pilot Test Facility Process Solutions (Daniel Stephens & Assoc., May 13, 2014); *id.* at 1 (RA006245) ("The values shown in Table 3.1 represent solution compositions that may reasonably be expected to occur during pilot test facility operations.").

not an acceptable alternative Alert Level. But FCI is required to conduct background conductivity monitoring before injection begins.[117] With natural background conductivity levels established in the Observation Wells before injection, an Alert Level could be based on a statistically significant increase above background at the Observation Wells, just as ADEQ intends to do for Bulk Electrical Conductivity.[118] While "any" increase may not be the appropriate standard for a threshold trigger value, ADEQ and FCI have yet to explain why a *statistically significant increase* above background levels shouldn't be the default Alert Level included in the Significant Amendment.

FCI also has argued that this Alert Level was intended "to detect the escape of full concentration injectate fluid" or as an indicator of a preferential flow path in the aquifer.[119] But an escape or preferential flow path would be equally in evidence if conductivity spikes significantly above background levels—it does not have to exceed conductivity at the Injection Wells. Moreover, as written the Alert Level appears to be triggered only when all of the samples from all of the depths in all of the wells show excess conductivity. If the concern really were a preferential flow path, which often occur at a distinct depth, the trigger should be based upon any single measurement of excess conductivity. Such a level

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[117] **Record-1**, Significant Amendment, at 12, § 2.5.9 (RA000012). *See also* **Record-21**, FCI Significant Amendment Application, at 2-2 (RA006171) ("Once the conductivity probes are installed, they will be monitored for a period of time to establish the natural fluctuation of background conductivity values . . . conductivity monitoring will be conducted to establish background conductivity values, and those values will be incorporated into a background conductivity model.").

[118] **Record-1**, Significant Amendment, at 12, § 2.5.9 (RA000012) (indicating that the Alert Level for Bulk Electrical Conductivity is "reserved" in the Significant Amendment pending calculation of an Alert Level based on statistically significant variance from background conductivity levels established before injection).

[119] **Record-50**, Responsive Affidavit of Mark Nicholls, R.G., at 4, ¶¶ 10-11 (RA007002) (February 14, 2017).

would be easily determined based on statistical analysis of data on EC values in native water, just as FCI is required to do for Bulk Electrical Conductivity.

The Fluid Electrical Conductivity Alert Level is unreasonable and unjustified. The Court should reverse the Board's decision and remand the Significant Amendment to ADEQ for a revised Alert Level that is legally and technically defensible.

F. The Board Acted Arbitrarily and Capriciously, Abused its Discretion, and Made a Decision Unsupported by Substantial Evidence When It Dismissed Appellants' Procedural Claims Without Presentation of Evidence or a Hearing.

The United States and Arizona Constitutions require due process of law, and procedural due process requires fundamental fairness.[120] In administrative procedures such as this one, procedural due process requires that a party receives adequate notice, an opportunity to be heard, and an impartial judge.[121] A decision-maker that shows bias or partiality, such as through prejudgment of a matter before a proceeding is closed, violates due process.[122] Courts review due process claims *de novo*.[123]

In their Notice of Appeal to the Board, Appellants raised two issues regarding procedural flaws in ADEQ's review of FCI's application for a Significant Amendment:

> T. ADEQ violated A.R.S. § 49-241 and applicable law by failing to provide proper and accurate information in the public notice of the Significant Amendment, by failing to properly record, transcribe, and

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[120] U.S. Const. amend. XIV, Ariz. Const. art. 2, § 4; *State v. Tyszkiewicz*, 209 Ariz. 457, 460, ¶ 13, 104 P.3d 188, 191 (App. 2005).

[121] *Mathews v. Eldridge*, 424 U.S. 319, 333-34 (1976); *Emmett McLoughlin Realty, Inc. v. Pima Co.*, 212 Ariz. 351, 355, ¶ 17, 132 P.3d 290, 294 (App. 2006).

[122] *Havasu Heights Ranch & Dev. Corp. v. Desert Valley Wood Products, Inc.*, 167 Ariz. 383, 387, 807 P.2d 1119, 1123 (Ct. App. 1990).

[123] *Carlson v. Ariz. State Pers. Bd.*, 214 Ariz. 426, 430, ¶ 13, 153 P.3d 1055, 1059 (App.2007).

respond to public comments, and by publishing a fact sheet that contained significant misleading statements.

U. ADEQ's permit decision was predetermined long before the public comment period was opened and ADEQ acted with a closed mind to public comment, in violation of its due process obligation to provide a meaningful opportunity for the public to comment before a decision is made.[124]

The Board, in executive session during its first hearing on this matter, determined that it would limit the hearing to four categories of issues that did not include these procedural issues.[125] These issues were never briefed to the Board and they were not addressed at the hearing on the merits.[126] Nevertheless, the Board found that "Appellants did not establish that the Department's actions were arbitrary, unreasonable, unlawful, or based upon a technical judgment that was clearly invalid."[127]

The Court should disregard the Board's decision, review these issues *de novo*, and find that ADEQ violated Arizona law and due process. ADEQ acted with a closed mind throughout the administrative process, predetermining the outcome of the Significant Amendment decision. The agency developed a defensive plan of action and undertook litigious action against Appellants before public comment on the draft Significant Amendment was even completed. The agency's predetermination is also evidenced in its action denying members of

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[124] **Record-2**, Notice of Appeal, at 11 (RA000069).

[125] **Record-18**, Water Quality Appeals Board Meeting Minutes, at 3 (Oct. 13, 2016) (RA005763).

[126] Some of these issues saw limited discussion at a later hearing intended to address the Board's proposed order in this case. **Record-67**, "WQAB Hearing 4-11-17 Transcript," at 32-49 (RA007333-7350).

[127] **Record-69**, 2017 Board Order at 12, §E (May 17, 2017) (RA007473). The Board seriously misstated the standard for dismissing claims in Arizona, if that is what the Board intended. *See Davidson v. All State Materials Co.*, 101 Ariz. 375, 419 P.2d 732 (1966) (court should not grant a motion to dismiss unless it appears certain the plaintiff is entitled to no relief under any state of facts susceptible of proof under the claim as stated).

the public their procedural due process rights to meaningfully participate in the notice and comment period. The agency's failure to preserve formal oral comments on the record and conduct the hearing as required by law has resulted in an inadequate administrative record and failure of the agency to adequately consider and respond to public comment before making its decision.

1. ADEQ Improperly Discouraged or Denied Public Comment on Portions of its Proposed Agency Action.

ADEQ is required by law to provide for and encourage public participation when taking certain administrative actions such as issuing an agency permit.[128] The agency must also provide truthful information or advice to local, state or federal agencies, private persons, and business enterprises on matters within the scope of the agency.[129] On April 14, 2016, ADEQ published notice of its preliminary decision to issue the Final Agency Permit, triggering the 30-day public participation period of its administrative process. ADEQ's notice did not distinguish or identify the parts of its proposed permit action that it believed were subject to appeal. A copy of the ALJ or WQAB decision was not attached, the notice did not even identify the administrative body that had issued the remand, and there was no explanation or summary of the decision or the process that resulted in the permit's remand. Moreover, the notice gave the impression that the permit decision had already been made.

Those errors were magnified by ADEQ's mischaracterization of the scope of issues on appeal. Review of ADEQ's decision on remand includes any issues that were remanded *and* any issues arising out of modifications that ADEQ made to the permit, the collateral impacts of such modifications, and issues arising

[128] A.R.S. § 49-208.

[129] *Id.* § 49-104(A)(4).

from new facts or from ADEQ's failure to make required modifications.[130] By claiming that the issues subject to public comment were limited to undefined permit "sections that were remanded to the department for additional development," ADEQ unreasonably and illegally suppressed public comment.

Appellants raised these and related matters in their public comments on the draft Significant Amendment.[131] In its response to comments, ADEQ addressed the unlawful limits it placed on the scope of public participation by simply stating that it had "followed all public participation requirements for this Temporary APP under A.A.C. R18-9-219."[132] But this rule does not authorize ADEQ to limit or exclude public participation in a significant permit revision, as was done here. The agency acknowledged that the problems existed but brushed them off as inconsequential.[133] ADEQ's obligations regarding public participation are not optional.[134] Because ADEQ failed to fulfill its public participation requirements, the Court should invalidate the Significant Amendment and require a new public notice and comment period.

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[130] *See In re Shell Offshore, Inc.,* 13 E.A.D. 357, 2007 EPA App. LEXIS 37, 2007 WL 3138040, 1 (E.P.A. 2007); *In the Matter of Brooklyn Navy Yard Res. Recovery Facility*, 3 E.A.D. 867, 1992 EPA App. LEXIS 39, 1992 WL 80946 (E.P.A. 1992).

[131] **Record-2**, SWVP Comments on Draft Permit, at 33-36 (May 19, 2016) (RA000105-108).

[132] **Record-24,** ADEQ, Summary and Response to Public Comments; Temporary Aquifer Protection Permit P-106360, LFT 61845, 45 (Aug. 4, 2016) (RA006589).

[133] *Id*. at 33-34 (RA006577-78)

[134] State law only authorizes ADEQ to deny public participation when it renews a temporary aquifer protection permit without change or the agency's action falls under the "other permit amendment" subsection of the applicable rules, neither of which apply here. A.A.C. § R18-9-A211(D). The rules for this permit action specifically require ADEQ to comply with public participation requirements when issuing any significant amendment. A.A.C. § R18-9-A210(D)(5).

2. ADEQ's Failure to Record All Oral Comments at the Public Hearing and Its Reliance on an Inadequate Transcript Unlawfully And Unreasonably Undermined Public Participation in the Permit Process.

ADEQ is required by law to create a record, either by an agency recording device or stenographically, of its public hearings on agency actions. This requirement is intended to accurately preserve all oral comments and include them in the administrative record.[135] The agency must maintain that record and make it available to the public for inspection.[136] Moreover, ADEQ is required by law to respond in writing to every comment submitted during the public participation period of the administrative action.[137] If an agency elects to offer the public a formal opportunity to provide oral comments into the record, then the agency must accurately preserve complete copies of each written and oral comment submitted into the administrative record in order to meet its duty to respond.

In this matter, ADEQ began the May 2016 public hearing on the draft Significant Amendment by notifying the attendees that the agency's court reporter was not there, but the oral proceeding would move forward regardless.[138] The agency later prepared a partial and inaccurate transcript for the administrative record that was pieced together from a third-party video recorded by party-in-interest FCI.

ADEQ's reliance on that flawed transcript created an incomplete and inaccurate administrative record of the public participation process that was replete with egregious omissions and errors. For instance, the transcript

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[135] A.A.C. § R18-1-402(F).

[136] *Id.*, at 402(G).

[137] *Id.* § R18-9-109(C).

[138] **Record-24** ADEQ Response to Appellants' Brief re Issues on Appeal, attachment C, ADEQ Hearing Transcript, at 3, (RA006486).

misidentifies many of the individuals speaking (e.g., Mason Bolitho as Jason Blythe,[139] Brad Cole as Brad Pullen,[140] Barbara Sylvester as Marge Sylvester,[141] and Rick Grinnell as Man).[142] The transcript references well over 500 words, sentences, or complete statements as "unintelligible,"[143] and the word "unintelligible" appears in the transcript of comments over 40 of the individuals who spoke. It is apparent that several instances of "unintelligible" comments encompass multiple phrases or sentences. Several of the oral comments submitted during the hearing appear in the transcript in their entirety as "unintelligible."[144] In its formal response to comments published with the final agency action, ADEQ makes no note of these errors and omissions.

ADEQ is tasked with safeguarding the public's rights by constructing an accurate and complete record during the administrative process. It is improper, unfair, and self-serving for ADEQ to rely on a substantially flawed third-party recording when the court recorder "did not show up."[145] ADEQ cannot just ignore or short-cut its administrative duties, especially when such actions limit the public's rights in the administrative process.[146]

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[139] **Record-24** at 30, (RA006513).

[140] *Id*. at 31-32, (RA006514-15).

[141] *Id*. at 33-34, (RA006516-17).

[142] *Id*. at 45-46, (RA006528-29).

[143] *Id*.

[144] Those commenters included: (1) Someone identified only as "Man," whose testified is transcribed as "Let's (unintelligible)," **Record-24** ADEQ Hearing Transcript, at 31, (RA006514); John Anderson, *id*. at 37, (RA006520); (2) Rick Grinnell, identified as "Man," *id*. at 45, (RA006528); and (3) Norma Henderson, *id*. at 55, (RA006538).

[145] **Record-24** ADEQ Response to Appellants' Brief re Issues on Appeal, attachment C - ADEQ Hearing Transcript, at 3, (RA006486).

[146] A representative of the Attorney General's Office told the Board that ADEQ representatives had taken notes at the public hearing that supported the agency's response to unintelligible comments. **Record-67**, "WQAB Hearing 4-11-17 transcript,"

3. The State's Litigation Hold Demands Demonstrate That the State Viewed Appellants as Adversaries before a Permit Decision Had Been Made.

On May 3, 2016, during the public comment period on the draft Significant Amendment and before Appellants had submitted any public comments on the draft, SWVP and the Town received identical, official letters from the Attorney General's Office on behalf of ADEQ instituting a litigation hold demand. Those letters purported to require the preservation of 23 different types of documents in 5 different forms related to ADEQ's issuance of "Florence Copper, Inc. Aquifer Protection Permit P-106360, Significant Amendment."[147]

To the extent that members of the public like Appellants have relevant information before a permit decision is made, they are required to submit it during the public comment period. If not submitted, information possessed by the public cannot be considered by the agency and cannot form the basis for an appeal. A member of the public has no legal obligation to disclose evidence into the administrative record unless and until it chooses to do so through public comments or during the appeals process.[148] Therefore, the State had no basis to send the letters to Appellants.

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at 42, (RA007343). He withdrew that statement in a later hearing, so there is no evidence that anyone from ADEQ took notes at the public hearing.

[147] Letter from ADEQ (represented by its attorneys Jeffrey Cantrell and Rick Zeise) to Russell Yurk and Ronnie Hawks, Jennings, Haug & Cunningham representing SWVP, Sending notice of a legal hold for matter of Florence Copper, Inc. Aquifer Protection Permit P-106360, Significant Amendment (May 3, 2016); Letter from ADEQ (represented by its attorneys Jeffrey Cantrell and Rick Zeise) to Barbara Pashkowski, Gust Rosenfeld representing the Town of Florence, Sending notice of a legal hold for matter of Florence Copper, Inc. Aquifer Protection Permit P-106360, Significant Amendment (May 3, 2016) Copies of ADEQ's legal hold letters are attached as Appendix 1 and 2 to this Opening Brief. The court may take judicial notice of the records of a state agency. See *Jarvis v. State Land Dept*, 104 Ariz. 527, 530, 456 P.2d 385, 388 (1969), modified on other grounds by 106 Ariz. 506, 479 P.2d 169 (1970) and by 113 Ariz. 230, 550 P.2d 227 (1976).

[148] A.A.C. § R2-17-110.

The letters sent to SWVP and the Town were copied to two attorneys representing FCI, but no litigation hold demand was sent to FCI or its counsel. This despite the fact that FCI previously withheld relevant information regarding in-situ leach mining at this site that Appellants had to obtain through subpoena.[149]

From these facts, Appellants can only infer that ADEQ saw Appellants as adversaries even before public comments had been filed on the draft Significant Amendment, which leads naturally to the inference that ADEQ had already made up its mind to issue the final permit before the public comment period ended. There is no other reason for ADEQ to instruct its lawyers to send such a demand to the Town and SWVP, but not to the permit applicant.

In combination, ADEQ's flawed notice of the draft Significant Amendment; its failure to properly record and respond to public comment given at the public hearing; and its treatment of Appellants as adversaries even before public comments were submitted are indicative of a decision-maker that had already made up its mind to issue this permit as quickly as possible. The Court should not countenance the State's disregard of statutory requirements and procedural rights. The Court should reverse the Board's decision and remand the permit with direction that ADEQ provide for real and meaningful public participation.

VI. ATTORNEY FEES

Appellants request the Court award costs, expenses and attorney fees pursuant to A.R.S. §§ 12-341 and 12-348.

[149] **Record-2**, 2014 Decision at 3, FOF 7; *id.* at 127, COL 24 (RA001785) (subpoenaed documents were "the kind of evidence upon which reasonable persons would rely in serious matters.").

VII. CONCLUSION

In 2014, the Board remanded FCI's original Temporary APP back to ADEQ to fix fatal flaws identified in Appellants' previous appeal. But with regard to two of the most vital terms in the permit, the PMA and the location of the Point of Compliance (POC) Wells, ADEQ ignored the Board's finding that the wells were too far from FCI's well field to provide meaningful monitoring during the life of FCI's 2-year pilot test, issuing the Significant Amendment with the POC Wells in the exact same, or nearly the same locations. ADEQ cannot just ignore decisions it does not agree with. It chose not to appeal from the 2014 Decision and so is bound by the Board's finding that the placement of these wells was "arbitrary, unreasonable, unlawful or based upon a technical judgment that was clearly invalid." The Significant Amendment also contains a monitoring Alert Level for Fluid Electrical Conductivity that is nonsensical and fails to protect the Town's drinking water supply.

Despite significant public comments on these and other issues in the draft permit, ADEQ chose to issue the final Significant Amendment largely unchanged. From ADEQ's handling of the public comment process and its attitude toward Appellants, one could infer that ADEQ had made up its mind to issue the permit regardless of what was said during the comment period, thereby undermining the whole purpose of public participation in the permit process.

In light of the foregoing facts and arguments, the Board's dismissal of Appellants' appeal was arbitrary, capricious, an abuse of discretion, and contradictory to substantial evidence. Appellants respectfully request that the Court

- reverse the Board's 2017 Decision or remand the Significant Amendment to ADEQ with direction that it reopen the permit to

address these issues in compliance with Arizona law and the final, unappealed 2014 Decision;

- award Appellants their attorneys' fees and costs; and
- grant such other relief as is justified.

DATED this 16th day of July, 2018.

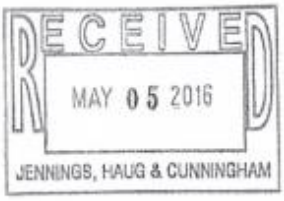
/s/ Barbara U. Rodriguez-Pashkowski
Barbara U. Rodriguez-Pashkowski
Gust Rosenfeld, P.L.C.
Attorneys for the Town of Florence

s/s D Christopher Ward
D. Christopher Ward
Attorney for Pulte Home Company, L.L.C.

/s/ James L. Csontos
Ronnie P. Hawks
James L. Csontos
Jennings, Haug & Cunningham, L.L.P.
Attorneys for Appellant SWVP-GTIS MR, LLC

APPENDIX

A



MARK BRNOVICH
ATTORNEY GENERAL

OFFICE OF THE ARIZONA ATTORNEY GENERAL
CIVIL LITIGATION DIVISION
ENVIRONMENTAL ENFORCEMENT SECTION

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May 3, 2016

Russell R. Yurk
Ronnie P Hawkes
Jennings, Haug, & Cunningham, LLP
2800 N. Central Avenue
Suite 1800
Phoenix, Arizona 85004-7800

Re: PRESERVATION NOTICE: Florence Copper, Inc. Aquifer Protection Permit P-106360, Significant Amendment, Place ID 1579

Dear Messrs. Yurk and Hawkes:

As you are aware, this Office represents the Arizona Department of Environmental Quality ("ADEQ") in the above-referenced matter. This matter was previously litigated and ADEQ believes that additional litigation for this significant amendment is reasonably anticipated.

This letter serves to provide notice that you and your client take the immediate and necessary steps to institute a *legal hold*[1] and identify, preserve, and not destroy any documents, tangible things, information, data (collectively "Documents") and electronically stored information (ESI) on whatever storage media, device or location, in your clients possession or control (including third parties) that is relevant or potentially relevant to the above referenced matter.

Please instruct your client to retain and not destroy, alter or delete any ESI or Documents in any form, including but not limited to: paper documents, email, electronic documents in all formats, including word processing, spreadsheet, database, presentation graphics, scientific or technical programs, instant messenger, printouts, correspondence, charts, maps, materials, messages, calendars, presentations, meeting notes, other notes, status reports, voicemail messages, texts, and any other electronic or hard copy data wherever stored or located. Locations may include electronic, magnetic, and optical storage media reasonably or not reasonably accessible to your client. Relevant locations include not only those within your client's actual physical possession, but also those within its control including such locations as those located at suppliers, consultants, subsidiaries,

[1] A legal hold is a directive to your client and others to preserve ESI or other information pertaining to the litigation. *Zubulake v. UBS Warburg LLC*, 220 F.R.D. 212, 218 (S.D.N.Y.2003).

successors, assigns, agents, and law firms. Your client is obligated to preserve potentially relevant evidence from these sources, even if your client does not anticipate producing such ESI. This request also encompasses the metadata associated with ESI, including substantive, system and embedded metadata.[2]

This request includes a request to your client to suspend all document retention or destruction policies, including but not limited to backup, restoration, deletion, destruction, and tape recycling. It is also important that your clients do not pack, compress, purge, or otherwise dispose of ESI files and parts of files unless a true and correct copy of such files is made. This request also encompasses residual or ambient data[3] on storage media and devices such as hard drives, thumb drives, and so on used in your client's or client's agent's computers, which may not be readily available to an ordinary computer user, such as deleted files and file fragments. As you may know, although a user may erase or delete a file, it remains intact on the storage media or device. However, reformatting, defragmenting, or any other use of the storage media can cause the deleted or other ESI to be destroyed. It is imperative that all such activity be stopped because of the critical importance of this ESI to this case.

The types of ESI and Documents that must be preserved, and the potential locations of such data, is outlined in Exhibit 1 attached to this letter. Exhibit 1 is suggestive in scope, not comprehensive. *See Kleiner v. Burns*, No. 00-2160, 2000 WL 1909470 at *4, (D. Kan. Dec. 22, 2000):

This request encompasses all potentially relevant ESI and Documents maintained at your client's office as well as all ESI and Documents maintained in the homes, shared drives, computers, websites, PDA's, and any other location of your client and its current and former agents, employees, representatives, contractors, and family members. Your client must notify any current or former agent, representative, contractor, attorney, family member, employee, or custodian in possession of

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[2] Metadata, frequently referred to as data about data, is electronically-stored evidence that describes the history, tracking, or management of an electronic document. The Court in *Aguilar v. Immigration & Customs Enforcement Div.*, 255 F.R.D. 350, 353-355 (S.D.N.Y. 2008) defined and identified three different types of metadata. 1) Substantive Metadata (application metadata that is created as a function of the application software used to create the document or file and reflects substantive changes made by the user); 2) System Metadata (information created by the user or by the organizations information management system such as author, date, and time of creation or last edit); and, 3) Embedded Metadata (text, numbers, content, data, or other information that is directly or indirectly inputted into a [n]ative [f]ile by a user and which is not typically visible to the user viewing the output display of the native file.). Embedded metadata includes spreadsheet formulas, hidden columns, externally or internally linked files (such as sound files), hyperlinks, references and fields, and database information.

[3] This residual or ambient data generally refers to data that is not generally available to the computer user. It has been defined as follows: Residual data includes (1) data found on media free space; (2) data found in the file slack space; and (3) data within files that have functionally been deleted in that it is not visible using the application with which the file was created, without use of undelete or special data recovery techniques. *Discovery of Digital Information*, American Law Institute, SJ035 ALI-ABA 113, 18 February 2004.

potentially relevant information to preserve such information to the full extent of your client's obligation to do so, and it must take reasonable steps to secure their compliance.

As you may know, a legal hold is a directive to your client and others to preserve ESI or other information pertaining to the litigation. *Zubulake*, 220 F.R.D. at 218 ("[o]nce a party reasonably anticipates litigation, it must suspend its routine document retention/destruction policy and put in place a litigation hold to ensure the preservation of relevant documents."); *Wiginton v. CB Richard Ellis*, No. 02-6832, 2003 U.S. Dist. LEXIS 19128, at *23-24 (D. Ill. Oct. 27, 2003) ("[o]nce a party is on notice that files or documents in their possession are relevant to pending litigation, the failure to prevent the destruction of relevant documents crosses the line between negligence and bad faith, even where the documents are destroyed according to a routine document retention policy."); *Phillips v. Netblue, Inc.*, No. 05-4401, 2007 WL 174459, at *2 (N.D. Cal. Jan. 22, 2007) ("to preserve means to keep safe from injury, harm, or destruction." Websters Third New International Dictionary (Unabridged), at 1794 (1976)); *Columbia Pictures, Inc. v. Bunnell*, 245 F.R.D. 443, 449 (C.D. Cal. 2007) ("organizations have a duty, without being so ordered by a court, to preserve documents that they reasonably anticipate may be discoverable in anticipated litigation.").

Courts have unequivocally made it clear that all ESI available on storage media and devices, wherever located, is discoverable. The law is clear that data in computerized form is discoverable even if paper hard copies of the information have been produced." *Anti-Monopoly, Inc. v. Hasbro, Inc.*, No. 94-2120, 1995 WL 649934 at *1, (S.D.N.Y. Nov. 3, 1995). That court continued "[T]oday it is black letter law that computerized data is discoverable if relevant. *Id* at *1; *see also McPeek v. Ashcroft*, 202 F.R.D. 31 (D.D.C. 2001); *Linnen v. A.H. Robins Co.*, No. 97-2307, 1999 Mass. Super. LEXIS 240 (Mass. Super. Jun. 16, 1999); *Crown Life Ins. Co. v. Craig*, 995 F.2d. 1376 (7th Cir. 1993).

Time is of the Essence. It is essential that your client act immediately to preserve this ESI since electronic information on hard drives and other storage media can be changed, overwritten, or obliterated by normal everyday computer use. The simple acts of booting up a computer, opening a file, adding new data onto a hard disk, or running a routine maintenance program on a network can alter or destroy existing data without the user's knowledge. Should your client's failure to preserve potentially relevant evidence result in the corruption, destruction, alteration, loss, or delay in the production of evidence to which ADEQ is entitled, such failure would constitute spoliation of evidence and ADEQ will not hesitate to seek appropriate sanctions as this matter proceeds. Please confirm by no later than 16 May 2016 that your client has taken the steps necessary to preserve the evidence outlined in this letter, as well as all other potentially relevant evidence to this matter.

Continuing obligation. Please consider your client under a continuing obligation to preserve ESI relating to the above referenced matter that may come into existence after the date of this letter, or that may exist now or in the future but of which you have no current knowledge.

Finally, the Courts in several recent cases have urged parties to cooperate in the exchange of ESI or face possible sanctions. *William A. Gross Constr. Assocs. v. Am. Mfrs. Mut. Ins. Co.*, 256 F.R.D. 134 (S.D.N.Y. 2009); *Mancia v. Mayflower Textile Servs. Co.*, 253 F.R.D. 354 (D. Md. 2008). If you have any questions regarding the above, or if you or your client needs clarification regarding what is

being requested by ADEQ by way of this letter, please contact me. We look forward to working with you.

Sincerely,

Jeffrey D. Cantrell
Assistant Attorney General

Rick Zeise
Assistant Attorney General

JDC/cg
cc: ADEQ
Brad Glass Gallagher & Kennedy
Lee Decker, Gallagher & Kennedy
#5039639.1

Attachment A

Locations of ESI

The following non-exhaustive list of locations where ESI is commonly located is provided as an initial guide to identifying and preserving ESI. It is up to your client to accurately and comprehensively locate and preserve all of its ESI.

- Network servers (including email, web, and other servers)
- Desktop, laptop, tablets and smartphones
- Portable electronic storage devices or media (including, but not limited to, CDs, DVDs, diskettes, thumb drives, external hard drives, etc.)
- Remote computers with network connections
- Cloud and application Internet service providers (such as Salesforce.com, Box.com, etc.)
- Phone systems, and phone and Internet service provider records
- Backup storage media (magnetic tapes, USB sticks, etc.)
- Network devices (such as attached hard drives)
- Security systems
- Vehicle computer devices
- Biometric devices
- Printers and copiers
- Fax machines
- Other handheld devices
- Other lawsuits (where responsive ESI and/or paper may be located)
- Archived and legacy data
- Offsite electronic data storage such as cloud providers (including, but not limited to Dropbox.com, Box.com, iCloud, Google Drive, and Microsoft OneDrive)
- Outside consultants and/or contractors
- Outside service providers
- Social media sites such as Facebook, Linkedin, as well as private and professional discussion fora

With respect to electronic information not under the control of your client, additional locations may include, but are not limited to:

- Home computers or other personal electronic devices, including smartphones and tablets
- Personal portable electronic storage devices or media (including, but not limited to, CDs, DVDs, diskettes, thumb drives, and external hard drives)
- Personal "Cloud" storage services (including, but not limited to, Dropbox, iCloud, Google Drive, and Microsoft OneDrive)

With respect to paper documents, additional locations may include, but are not limited to:

- Official files
- Informal files that may be maintained by individual employees
- Files maintained in home offices or by third-party contractors under the custody, control or contract of your agency
- Files stored with off-site providers of storage services, (e.g., Bekins, Iron Mountain, etc.)
- Archived files

Precautions to preserve ESI

Due to its format, electronically stored information can easily be deleted, modified or corrupted. Consequently, please immediately identify and modify or suspend features, policies, and practices in your client's information systems and devises that, in routine operation, operate to cause the loss of potentially relevant ESI and Documents, including:

- Purging the contents of email repositories by age, capacity, or other criteria;
- Using data or media wiping, disposal, or erasure or encryption utilities or devices;
- Overwriting, erasing, destroying or discarding backup media;
- Reassigning, reimaging, or disposing of systems, servers, devices, or media;
- Running antivirus or other programs affecting wholesale metadata alteration;
- Releasing or pursing online storage repositories;
- Using metadata stripper utilities;
- Disabling server of instant messenger logging;
- Executing drive or file defragmentation or compression programs;
- Data destruction and deletion policies and practices, and backup or replacement tape recycling policies that may cause the loss of potentially relevant ESI and Documents;
- Disposing of relevant hardware (including printers, copiers, and laptops), unless an exact replica of the file (a mirror image) is made; and
- Maintaining all other pertinent information and tools needed to access, review, and reconstruct relevant electronic data.

B

MARK BRNOVICH
ATTORNEY GENERAL

OFFICE OF THE ARIZONA ATTORNEY GENERAL
CIVIL LITIGATION DIVISION
ENVIRONMENTAL ENFORCEMENT SECTION

JEFFREY D. CANTRELL
ASSISTANT ATTORNEY GENERAL
DIRECT PHONE NO. (602) 542-7912
JEFFREY.CANTRELL@AZAG.GOV

May 3, 2016

Barbara Pashkowski
Gust Rosenfeld PLC
One E. Washington St, Ste. 1600
Phoenix, AZ 85004-2553

Re: PRESERVATION NOTICE: Florence Copper, Inc. Aquifer Protection Permit P-106360, Significant Amendment, Place ID 1579

Dear Ms. Pashkowski:

As you are aware, this Office represents the Arizona Department of Environmental Quality ("ADEQ") in the above-referenced matter. This matter was previously litigated and ADEQ believes that additional litigation for this significant amendment is reasonably anticipated.

This letter serves to provide notice that you and your client take the immediate and necessary steps to institute a *legal hold*[1] and identify, preserve, and not destroy any documents, tangible things, information, data (collectively "Documents") and electronically stored information (ESI) on whatever storage media, device or location, in your clients possession or control (including third parties) that is relevant or potentially relevant to the above referenced matter.

Please instruct your client to retain and not destroy, alter or delete any ESI or Documents in any form, including but not limited to: paper documents, email, electronic documents in all formats, including word processing, spreadsheet, database, presentation graphics, scientific or technical programs, instant messenger, printouts, correspondence, charts, maps, materials, messages, calendars, presentations, meeting notes, other notes, status reports, voicemail messages, texts, and any other electronic or hard copy data wherever stored or located. Locations may include electronic, magnetic, and optical storage media reasonably or not reasonably accessible to your client. Relevant locations include not only those within your client's actual physical possession, but also those within its control including such locations as those located at suppliers, consultants, subsidiaries, successors, assigns, agents, and law firms. Your client is obligated to preserve potentially relevant evidence from these sources, even if your client does not anticipate producing such ESI. This

[1] A legal hold is a directive to your client and others to preserve ESI or other information pertaining to the litigation. *Zubulake v. UBS Warburg LLC*, 220 F.R.D. 212, 218 (S.D.N.Y.2003).

request also encompasses the metadata associated with ESI, including substantive, system and embedded metadata.[2]

This request includes a request to your client to suspend all document retention or destruction policies, including but not limited to backup, restoration, deletion, destruction, and tape recycling. It is also important that your clients do not pack, compress, purge, or otherwise dispose of ESI files and parts of files unless a true and correct copy of such files is made. This request also encompasses residual or ambient data[3] on storage media and devices such as hard drives, thumb drives, and so on used in your client's or client's agent's computers, which may not be readily available to an ordinary computer user, such as deleted files and file fragments. As you may know, although a user may erase or delete a file, it remains intact on the storage media or device. However, reformatting, defragmenting, or any other use of the storage media can cause the deleted or other ESI to be destroyed. It is imperative that all such activity be stopped because of the critical importance of this ESI to this case.

The types of ESI and Documents that must be preserved, and the potential locations of such data, is outlined in Exhibit 1 attached to this letter. Exhibit 1 is suggestive in scope, not comprehensive. *See Kleiner v. Burns*, No. 00-2160, 2000 WL 1909470 at *4, (D. Kan. Dec. 22, 2000):

This request encompasses all potentially relevant ESI and Documents maintained at your client's office as well as all ESI and Documents maintained in the homes, shared drives, computers, websites, PDA's, and any other location of your client and its current and former agents, employees, representatives, contractors, and family members. Your client must notify any current or former agent, representative, contractor, attorney, family member, employee, or custodian in possession of

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[2] Metadata, frequently referred to as data about data, is electronically-stored evidence that describes the history, tracking, or management of an electronic document. The Court in *Aguilar v. Immigration & Customs Enforcement Div.*, 255 F.R.D. 350, 353-355 (S.D.N.Y. 2008) defined and identified three different types of metadata. 1) Substantive Metadata (application metadata that is created as a function of the application software used to create the document or file and reflects substantive changes made by the user); 2) System Metadata (information created by the user or by the organizations information management system such as author, date, and time of creation or last edit); and, 3) Embedded Metadata (text, numbers, content, data, or other information that is directly or indirectly inputted into a [n]ative [f]ile by a user and which is not typically visible to the user viewing the output display of the native file.). Embedded metadata includes spreadsheet formulas, hidden columns, externally or internally linked files (such as sound files), hyperlinks, references and fields, and database information.

[3] This residual or ambient data generally refers to data that is not generally available to the computer user. It has been defined as follows: Residual data includes (1) data found on media free space; (2) data found in the file slack space; and (3) data within files that have functionally been deleted in that it is not visible using the application with which the file was created, without use of undelete or special data recovery techniques. *Discovery of Digital Information*, American Law Institute, SJ035 ALI-ABA 113, 18 February 2004.

potentially relevant information to preserve such information to the full extent of your client's obligation to do so, and it must take reasonable steps to secure their compliance.

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