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

In re:	
Florence Copper, Inc.	
UIC Permit No. R9UIC-AZ3-FY11-1	UIC Appeal No. 17-02

PETITIONER'S CONSOLIDATED REPLY IN SUPPORT OF ITS PETITION FOR REVIEW OF UIC PERMIT NO. R9UIC-AZ3-FY11-1

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INTRODUCTION

The Gila River Indian Community ("Community") submits this Consolidated Reply to EPA Region 9's and Florence Copper, Incorporated's ("FCI") responses to the Community's Petition for Review of In-Situ Production of Copper Permit No. R9UIC-AZ3-FY11-1.

It is undisputed that FCI lacks any experience with the form of in-situ mining authorized by the Permit. The Region has failed to respond to the Community's objection, raised during the public comment period and again in the Petition, that the Permit would authorize FCI to conduct "in-situ copper recovery from undisturbed, buried ore" ("ISCR-UBO") in a sensitive area utilizing a team that has no demonstrated experience with this untested form of mining and unspecified exotic organic compounds. The decision to approve license conditions in the abstract without considering whether the license is sufficiently protective of water resources in light of the proposed permittee's lack of experience and the experimental nature of the operation warrants review, reversal, and remand by the Board. The Region's failure to fully address the Community's comments and to consider FCI's lack of experience constitutes a clear error, and effectively allows experimental forms of underground injection control mining by permittees that have not demonstrated the technical capacity to perform the work safely. If FCI wishes to establish a track record with this technology, it should be required to do so in a less sensitive area where the risks of failure to water resources are not so great. The Board should grant the Petition and remand the matter back to the Region.

I. THE REGION ERRED BY FAILING TO EXAMINE AND RESPOND TO WRITTEN COMMENTS CHALLENGING FCI'S LACK OF EXPERIENCE AND QUALIFICATIONS AS AN ISCR-UBO OPERATOR

Permit conditions II.B.2., II.B.3., II.E., II.E.6.d., II.F., and II.H. are inadequate to protect water resources in light of FCI's lack of record experience or capability with ISCR-UBO. This has been a critical and persistent concern of the Community's with respect to the Permit. The

Community raised this concern during the public comment period and in the Petition, but neither the Region nor FCI has pointed to any evidence in the administrative record showing that the Region considered FCI's qualifications and capability to do this kind of experimental work prior to issuance of the Permit.

The absence of any such information in the Administrative Record, which must contain all materials relied upon by the Region to justify issuance of the Permit, demonstrates that the Region did not consider FCI's capacity to safely conduct ISCR-UBO in the vicinity of vulnerable sources of drinking water and groundwater. This is an error that warrants remand of the Permit.

A. The Community Has Repeatedly Raised Concerns with FCI's Lack of Experience With ISCR-UBO.

The Community first raised its concerns regarding the mining industry's and FCI's lack of experience with ISCR-UBO during the public comment period. The Community's written comments opposed issuance of the Permit due to a "lack of sustained, accumulated experience in the application of this technology from which to demonstrate that protection of nearby developments [] can be expected from typical operations." *See* Letter and Enclosures from Ian Shavitz, Akin Gump Strauss Hauer & Feld LLP, to Nancy Rumrill, Region IX, U.S. Environmental Protection Agency, at 2 (Apr. 13, 2015) ("Community Comments"). Further, the Community raised "significant doubts that Florence Copper can perform in-situ mining with the requisite safety and precautions and place." *Id*. These concerns were grounded in and supported by a technical analysis of FCI's proposal that was prepared by Dr. Peter Mock, the Community's hydrologist, which accompanied the Community's comments.

In Dr. Mock's report, the Community distinguished ISCR-UBO from more conventional forms of mining with which FCI's team presumably has experience. "Open pits, underground

shafts and heaps and dumps of copper ore are familiar sights in rural Arizona," but FCI's proposed ISCR-UBO mining "is conduct[ed] not by digging, blasting and hauling but by circulating a dilute acid solution through the undisturbed ore below the water table using wells."

Id. at Appendix A, p. 2. "FCI's technical ability to recognize and react to loss of hydraulic control [over injection operations] has not been demonstrated" with respect to ISCR-UBO.

Specifically, the Community noted that "FCI failed to show through basic technical analysis-particle capture analysis- that it understood how to simulate and recognize both success and failure in hydraulic containment when this technology was applied to this ore body." Id. at Appendix A, p. 10-11. After receiving the Community's comments and before issuing the Permit, the Region could have required FCI to supplement its Permit application with evidence of its ISCR-UBO experience or its ability to safely implement all contemplated permit conditions. The Region failed to do so. It is now apparent that FCI could not make such a showing.

B. The Administrative Record Does Not Reflect Consideration of FCI's Technical Ability and Experience Maintaining Hydraulic Control with the Proposed Technology

All UIC permit decisions should further the EPA's mission under the Safe Drinking Water Act ("SDWA"), Pub. L. 93-523, as amended, 42 U.S.C. 300j *et seq.*, to prohibit the maintenance of any injection activity "that allows the movement of fluid containing any contaminant into underground sources of drinking water." 40 C.F.R. § 144.12(a). In furtherance of this objective, EPA regulations require a permitting entity, like the Region, to "respond to all significant comments on the draft permit or the permit application [] raised during the public comment period." 40 C.F.R. § 124.17(a)(2). The Board is not required to defer to a region's determination if a region failed to give "due consideration to comments." *In re NE Hub Partners*, 7 E.A.D. 561, 568 (EAB 1998) (citing *In re Austin Powder Co.*, 6 E.A.D. 713, 719-20 (EAB 1997)).

Moreover, the Board may order a remand where a region's decision "is illogical or inadequately supported by the record." *Id.* In addition, the Region must ensure that a UIC can meet the goals of the SDWA through a demonstration that "final permit decisions . . . [are based] on the administrative record." 40 C.F.R. § 124.18(a). Here, the Permit is not based on record facts regarding FCI's ability to conduct ISCR-UBO activities in a manner that will prevent the contamination of nearby drinking water.

1. The Region did not respond to the Community's comments regarding FCI's inexperience in ISCR-UBO activities.

Despite the Community's comments, the Region failed to respond to or otherwise acknowledge the Community's specific concerns about FCI's lack of experience with this unproven technology. Indeed, the Region's response to the Petition recognizes the Community's concern "that FCI has not demonstrated the ability" to administer the Permit, Doc. 10 at 18, but the Region cannot point to any response to this concern in the Administrative Record. The Region instead focuses on an assessment of prior, unsuccessful attempts to commercially conduct ISCR-UBO near the site and on the Permit conditions in the abstract without regard to FCI's experience or demonstrated ability to implement this experimental technology safely.

The Community's written comments expressed "significant doubts" with FCI's ISCR-UBO inexperience. Community Comments at 2. These were significant comments to which the Region was required to respond but never did. *See* 40 C.F.R. § 124.17(a)(2). In its Response to the Petition, the Region now states that it addressed the Community's concerns with FCI's capacity to effectively monitor and respond to operational problems by detailing various Permit conditions associated with monitoring. Doc. 10 at 17 (citing Response to Comments at 8, 10-11, 20-22). While the monitoring requirements are welcome additions to the Permit, they will not protect water resources unless FCI has the expertise and experience to implement them, interpret

monitoring results, and respond appropriately. The Region's response to this comment is insufficient because the monitoring conditions do not endow FCI with the experience, judgment, or technical skill needed to safely implement the mining activities or those conditions.

The same is true with respect to the Community's argument that FCI has not demonstrated an ability to avoid the operational problems that plagued prior ISCR-UBO attempts in central Arizona. The Community's written comments state that FCI's discussion in the permit application of prior ISCR-UBO attempts in the region demonstrates FCI's inexperience and inability to safely administer the Permit. See Community Comments at Appendix A, pp. 10-11. The Region responded by defending the success of previous ISCR-UBO attempts. EPA Region 9 Response to Comments at 45, AR #581. The Region restates this defense in its response to the Petition. Doc 10 at 18. The Region's responses fail to recognize that the Community's concerns are not limited to past operational failings in the application of ISCR-UBO, but rather extend to FCI's capacity to avoid these failings in the future. Past ISCR-UBO failures are themselves cause for concern, but of greatest concern is that FCI has done nothing to demonstrate, and the Region did not require FCI to demonstrate, an ability to conduct ISCR-UBO any more effectively. The Region not only declined to require a demonstration of this ability but also declined to respond to specific concerns with FCI's capacity and lack of experience in any meaningful way. Instead of addressing concerns with FCI's ISCR-UBO inexperience, the Region responded by merely providing historical accounts and an explanation of Permit conditions. Such responses fail to satisfy the Region's obligation to respond to all significant comments raised during the public comment period. See 40 C.F.R. § 124.17(a)(2).

The Region's response to the Petition further demonstrates that the Region failed to respond to or to otherwise consider the Community's concern in issuing the Permit. The Petition

states that "the Permit is not supported by record-based facts that would demonstrate Florence Copper's ability to conduct the complex ISCR-UBO activities proposed here while preventing contaminants from entering nearby drinking water." *Id.* at 2. Neither the Region nor FCI, in their responses to the Petition, were able to cite to any place in the record where this was considered or addressed because no such record-based evidence exists. As a result, the Region erred by issuing the Permit without vetting FCI's ability to administer the Permit and protect drinking water in accordance with the law.

Indeed, the Region makes clear that it believes that FCI must be assumed to be sufficiently experienced and capable of safely implementing experimental mining technology unless proven otherwise—shifting this burden onto anyone who would oppose FCI's plans. It reasons that "Petitioner has failed to show that FCI is incapable of compliance [with] the permit conditions," as though it were the Community's burden to show incapacity. Doc. #10 at 17. The Community adequately raised its concern with FCI's lack of demonstrated ability to maintain hydraulic control with this experimental technology in its comments and supported it with Dr. Mock's analysis. It was then incumbent on the Region to evaluate and reasonably ensure FCI's capability to protect groundwater. It failed to do so.

2. The Administrative Record does not support a conclusion that FCI has the technical capacity to conduct ISCR-UBO and protect sources of drinking water.

The EPA's Part 124 regulations "do not contain any provisions specifying when and if" an administrative record can be declared inadequate by the Board but the Board undoubtedly has discretion to do so. *In re Dominion Energy Brayton Point, L.L.C*, 2006 EPA App. LEXIS 9, 60-62 (EAB 2006) (citing decisions where the Board questioned the validity of an administrative record created in a permitting process). The exercise of that discretion and a remand of the Permit would be proper here where the Region authorized a permittee to undertake a novel type

of mining without evidence of the permittee's capability to safely administer the permit and to uphold the SDWA's goal of protecting sources of drinking water.

Here, as the Administrative Record reflects, FCI has never claimed to have operational experience in ISCR-UBO. EPA Form 7520-6, which FCI submitted with UIC permit application, requires a "Description of Business". *See* EPA Form 7520-6 at 6, AR #1. FCI's "Description of Business" includes zero discussion of any ISCR-UBO experience. *See* Florence Copper, Inc., UIC Permit Application, Attachment U at 2, AR #2r. A "description of business" would not necessarily have to include a discussion of experience with the proposed type of mining but the omission is cause for concern when viewed in context. FCI's "Description of Business" specifically discusses the operational experience and the global footprint of FCI's parent company, Curis Resources, Ltd. ("Curis"), and even references prior ISCR-UBO attempts at the site. However, this discussion omits any discussion of ISCR-UBO undertaken by Curis or FCI and does not include any suggestion that FCI's team has participated in any ISCR-UBO operations. Thus, the Administrative Record only reinforces the fact that FCI is inexperienced with ISCR-UBO operations.

C. The FCI CV Does Not Cure the Region's Failure to Consider FCI's ISCR-UBO Experience in the Permitting Process

FCI has sought to remedy the inadequate record by introducing, for the first time in this proceeding, a "Project Team Curricula Vitae." FCI's submission does nothing to cure the Region's error because the fact remains that Administrative Record does not include any reference to or otherwise demonstrate FCI's ISCR-UBO experience. Doc. #11 at 11. It was necessary for the Region to consider this information before issuing a permit; this Board should not be reviewing such matters in the first instance. Nor does FCI's belated effort to bolster its experience by submitting a CV in this appeal proceeding demonstrate that it is capable of

performing ISCR-UBO mining. Indeed, all FCI could say, in introducing the CV, is that "the skill sets and experience of FCI's project team speak for themselves." *Id.* No more could be said because the CV lacks any indication of previous operational ISCR-UBO experience. *Id.*

The CV illustrates that FCI's team has general mining experience, but none of this experience is with the application of ISCR-UBO technology. Although the CV lists ISCR-UBO experience in connection with the development of the project at issue, that experience does not demonstrate prior experience with safely conducting ISCR-UBO where mining under the Permit has not yet begun. The CV includes resumes for four individuals, three of which appear to lack any prior ISCR experience at all. The remaining individual, Dan Johnson, lists prior experience with in-situ mining only in passing, *see* Doc. #11, Attachment 4 at p. 1, and indicates that Mr. Johnson's in-situ experience does not include any prior work with ISCR-UBO. *Id*.

FCI's self-interested conclusion that its team possesses the "skill sets and experience" to safely implement the Permit, *id.* at 11, does nothing to cure the Region's failure to evaluate this before issuing the Permit. The Region's failure to seek evidence that FCI was capable of safely administering the Permit and to respond to the Community's comments on this point constitutes an error that warrants remand.

II. THE REGION RELIED ON A UNSOUND POLICY THAT ALLOWS UIC PERMITTING WITHOUT CONSIDERATION OF A PROJECT OPERATOR'S TECHNICAL CAPACITY

The Board has discretion to review and to take actions on a permit decision based upon important policy considerations associated with the permit decision-making process. *See* 40 C.F.R. § 124.19(a)(4)(B). The exercise of the Board's discretion is proper in situations where, as here, a Region's failure to consider a permit applicant's relevant experience "poses risks" to "federally protected resources." Petition at 4. Even if it were not otherwise required to do so, the EPA should—as a matter of sound policy to protect water resources, and to provide the

rationality required by basic administrative law—assess an applicant's experience and capacity (1) in determining whether to issue a permit for experimental technology and (2) in tailoring the permit conditions.

Based upon the FCI permitting process and the Region's response to the Petition, it appears that the Region's policy is to treat an applicant's capabilities and track record as irrelevant and to instead rely upon permit conditions to act as a safeguard against risks posed by applicants who lack experience and expertise in experimental forms of mining. Indeed, the Region suggests that the capacity to implement the proposed technology safely is "not relevant to the Region's permit decision." Doc. #10. at 16-17. FCI likewise responded to the Community's concern by stating in effect that prospective UIC permittees are not required to demonstrate capacity to safely implement a permit. Doc. #10 at 11. This is an alarming proposition for those who could be affected by a loss of hydraulic control. The Region's approach conflates permit conditions with operational skills and experience. The result here is to prioritize experimental mining over the protection of sources of drinking water.

This sensitive area is not the place for experimentation with unproven ISCR-UBO technology by an operator doing it for the very first time. In these circumstances, the Region should have required FCI to prove its operational capacity before the Permit was issued.

CONCLUSION

A UIC permit will not protect water resources if a permittee lacks the experience and expertise to safely implement those controls. The Region has failed to address this issue and to otherwise ensure FCI's capacity to protect the Community's water resources. For these reasons, the Board should grant the Petition and remand the matter to the Region.

Respectfully Submitted,

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Statement of Compliance with the Word Limitation

In accordance with 40 C.F.R. § 124.19(d)(1)(iv) & (d)(3), the Community hereby certifies that its Petition does not exceed 7,000 words.

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CERTIFICATE OF SERVICE

Undersigned hereby certifies that on this date, April 24, 2017, copies of the foregoing Consolidated Reply in Support of Petition for Review were served electronically on the following:

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