Mark R. Ruppert, P.C. (Wyo. Bar No. 6-3593)
Jere C. (Trey) Overdyke, III (Wyo. Bar No. 6-4248)
HOLLAND & HART LLP
2515 Warren Ave., Suite 450
P. O. Box 1347
Cheyenne, WY 82003-1347
Telephone: (307) 778-4200
Facsimile: (307) 778-8175

Attorneys for Pennaco Energy, Inc.

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

In the Matter of the Appeal of JOHN D. KOLTISKA, AC RANCH, INC., a Wyoming Corporation, PRAIRIE DOG RANCH, INC., a Wyoming Statutory Close Corporation, and PRAIRIE DOG WATER SUPPLY COMPANY from WYPDES Permit No. WY0054364	)	Docket No. 09-3805

PENNACO'S MEMORANDUM IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT AND TO STRIKE EXPERT TESTIMONY

Pennaco Energy, Inc. (Pennaco), by and through its attorneys Holland & Hart LLP, respectfully submits its Memorandum in Support of Motion for Summary Judgment and to strike expert testimony.

I. Why Summary Judgment is Appropriate Now

The Petitioners challenge Wyoming DEQ's issuance of WYPDES Permit No. WY0054364 ("Permit") that they ask the Council to reverse. The Permit authorizes discharge of treated coalbed methane ("CBM") water from a treatment plant into Prairie Dog Creek from an Outfall 003 and into an on-channel containment reservoir on Wildcat Creek from an Outfall 002. The treatment process will result in discharge of treated water with very low EC limits: EC of

1215 mmhos/cm for Outfall 003 and 1330 for Outfall 002. Petitioners have the burden of proving that the Permit must be reversed and why. In their Amended Petition filed May 14, 2009 ("Petition"), Petitioners identify two reasons for the Council to take this drastic action of reversing DEQ. First, the Petition (paragraph 3n) alleges that the Permit effluent limits will cause a measurable decrease in agricultural production in violation of Ch. 1, Section 20 of the WWQRRs. Second, the Petition (paragraph 3p) alleges that DEQ failed to derive the effluent limits imposed by the Permit through appropriate scientific method in violation of Ch. 2, Section 5(c)(iii)(IV).

Having identified those reasons, Petitioners bear the burden of proving that the treated effluent limits will lead to a measurable decrease of irrigated alfalfa and were not derived using appropriate scientific methods. Petitioners, however, have failed to put forward relevant or reliable evidence to support their allegations, and discovery is closed.

II. Summary Judgment Standard

When there are no genuine questions of disputed material facts, summary judgment should be granted. Wyoming Rule of Civil Procedure 56(c) states that summary judgment "shall be rendered forthwith if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Further, summary judgment procedures defined in Rule 56 apply to administrative cases. *Rollins v. Wyo. Tribune-Eagle*, 152 P.3d 367, 369 (Wyo. 2007).

III. Petitioners' Evidence Must Meet Certain Minimum Legal Requirement to Move Forward to the Hearing

A. Petitioners have the burden and legal obligation to prove their Petition allegations

When a petitioner challenges a permit issued pursuant to the Wyoming Environmental Quality Act ("EQA"), that petitioner must carry the burden of proving their contentions that a permit should not have been issued by DEQ. To the extent the Council has jurisdiction over this appeal, the EQA imposes the burden of proof on the party challenging a permit decision:

> If the director refuses to grant any permit under this act, the applicant may petition for a hearing before the council to contest the decision. The council shall give a public notice of such hearing. At such hearing, the director and appropriate administrator shall appear as respondent and the rules of practice and procedure adopted by the council pursuant to this act and the Wyoming Administrative Procedure Act shall apply. **The burden of proof shall be upon the petitioner.**

WYO. STAT. § 35-11-802 (emphasis added); *see also Casper Iron & Metal, Inc. v. Unemp. Ins. Comm'n of Dep't of Employment of Wyo.*, 845 P.2d 387, 392 (Wyo. 1993) (finding that the burden of proof lies with the party appealing the agency's decision). In an administrative hearing, the proponent of an order (here, Petitioners seeking reversal of DEQ's permit) must satisfy a preponderance-of-the-evidence standard. *JM v. Dep't of Family Servs.*, 922 P.2d 219, 221, 223 (Wyo. 1996). "To prove by a preponderance of the evidence, the claimant must bring forth 'proof which leads the trier of fact to find that the existence of the contested fact is more probable than its non-existence.'" *Sherwin-Williams Co. v. Borchert*, 994 P.2d 959, 963 (Wyo. 2000). The mandates of the EQA and the Wyoming Supreme Court are clear: when a party

challenges a DEQ decision regarding the issuance of a permit, the appealing party must demonstrate by a preponderance of evidence that the decision was in error.

To be upheld on judicial review, the Council must base its decisions on "substantial evidence." *Grams v. Envtl. Quality Council*, 730 P.2d 784, 786 (Wyo. 1986). The Wyoming Supreme Court defines substantial evidence as "such **relevant** evidence as a reasonable mind might accept as **adequate** to support a conclusion. . . ." *Cody Gas Co. v. Pub. Serv. Comm'n of Wyo.*, 748 P.2d 1144, 1146 (Wyo. 1988)(emphasis added); *see also* WYO. STAT. § 16-3-108(a)(an order in a contested case shall not be issued "unless supported by the type of evidence commonly relied upon by reasonably prudent men in the conduct of their serious affairs."). In administrative proceedings such as this permit appeal involving matters not within the general knowledge of the courts, the Wyoming Supreme Court requires expert evidence supporting the administrative ruling. Without the necessary expert evidence, the administrative record will lack the substantial evidence from which an agency decision may be affirmed. *Devous v. Wyo. State Bd. of Med. Exam'rs,* 845 P.2d 408,418 (Wyo. 1993); *Billings v. Wyo. Bd. of Outfitters & Guides (In re Billings),* 30 P.3d 557, 566-67 (Wyo. 2001).

B. Petitioners must offer qualified, reliable expert testimony in this case

This hearing is governed by DEQ Rules of Practice and Procedure Applicable to Hearings in Contested Cases. Chapter 2, Section 8(b) states, "Every person testifying shall, at the Council's discretion, be qualified prior to testifying. Such qualification will include ascertaining the residency, occupation, background, education, and expertise of said person." Thus, the rules prohibit an unqualified witness from testifying as an expert.

Under Wyoming law, it is the Council's responsibility to "make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the [hearing] the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Hoy v. DRM, Inc.*, 114 P.3d 1268, 1276-77 (Wyo. 2005). The primary goal of this "gatekeeping" function [to keep evidence out] is to ensure the reliability and relevancy of expert testimony before admitting it as evidence in a hearing. *Id.* at 1278. In order to fulfill this role, the Council must employ a two-part test: first, the Council "is to determine whether the methodology or technique used by the expert is reliable, and second, the [Council] must determine whether the proposed testimony 'fits' the particular case." *Id.* at 1277.

To ensure reliability, an expert's opinion must be based on a reliable methodology. In addition to reliable methodology, an expert opinion must be based on sufficient facts or data. "[W]hen proffering an opinion based on experience and knowledge, an expert must explain how that opinion was reliably derived from the application of that experience **and knowledge to the facts**." *Hoy*, 114 P.3d at 1283 (emphasis added). An expert's opinion is admissible only if "**based on actual knowledge, not 'subjective belief or unsupported speculation**.'" *Dodge v. Cotter Corp.*, 328 F.3d 1212, 1222 (10th Cir. 2003)(emphasis added).

Thus, having the burden of proof in this case and needing expert testimony to meet that burden of proof, Petitioners have nonetheless failed on both counts – warranting both summary judgment and striking of Petitioners' two proposed experts. Petitioners' designated experts admit they are not qualified to give expert testimony that Petitioners rely on, they admit they do not have knowledge of the facts, and they fail to provide reliable evidence to demonstrate Petitioners' claims. Discovery is closed, and Petitioners' evidence does nothing more than state

that one irrigator has unfounded concerns over potential harms of treated CBM water. Because Petitioners have failed to satisfy their burden of proof and have failed to offer reliable expert testimony, the Council should grant summary judgment in favor of Pennaco, precluding a needless hearing in this case and/or legal error should the Council reverse the permit based on Petitioners' inadequate expert evidence. At a minimum, the Council should strike Petitioners' expert testimony as unreliable and not based on sufficient facts and knowledge.

IV. Petitioners Fail to Provide Any Reliable, Qualified Evidence to Challenge the Protectiveness of the Permit Limits

Petitioners acknowledge what they must prove as to Outfall 003 in Prairie Dog Creek to show the Permit limits are not protective of irrigation:

> The Permit authorizes discharges that will not maintain the water supply in Prairie Dog Creek...**at a quality which** allows continued use of these waters for agricultural purposes **without a measurable decrease in production** in violation of Water Quality Rules and Regulations, Chapter 1, Sec. 20.

Amended Petition, paragraph 3n (emphasis added). The Chapter 1, Section 20 standard thus becomes the crux of this appeal. However, Petitioners have failed to show how the Permit limits would not meet this standard. They offer conjecture and speculation, through Dr. Vance, that treated waters **may** negatively impact alfalfa crops, but Dr. Vance stops short – as he must given his lack of on-site knowledge – of saying the permit limits will not be protective. Moreover, Dr. Vance "proposes" that the **water quality of any discharge must meet background water quality** with no degradation – this personal opinion not only fails to provide evidence that Section 20 will be violated but also unilaterally transforms the Section 20 standard itself.

Pennaco respectfully urges the Council not to be misled by this opinion that Petitioners attempt to substitute for a lack of evidence that the Permit limits are not protective of irrigation.

A. Dr. Vance's opinions are based on speculation and not grounded on any site-specific facts that would make such opinions reliable

Dr. Vance never comes right out and says that Outfall 003's permit limits for EC and sodium will degrade the irrigation waters in Prairie Dog Creek to such an extent as to cause a measurable decrease in alfalfa production along Prairie Dog Creek or Wildcat Creek. Nor could he. First, Dr. Vance is not an irrigation expert, as he admitted in his September 25, 2009, deposition:

> Q. **Are you an irrigation expert?**
> A. **No.**

(Deposition of George Vance (Vance Dep.) at 77 (emphasis added)).[1] Second, Dr. Vance did not perform any site-specific analysis that would enable him to go beyond general opinions of potential impact to specific opinions of actual impact based on knowledge that would support Petitioners' allegations.

He did not visit the Prairie Dog Creek area until after his report was filed in this matter, and even then did not take any samples on Prairie Dog Creek. (Vance Dep. at 70-71). He did not talk to any landowners or irrigators along Prairie Dog Creek. (Vance Dep. at 66). As he himself acknowledges, "[t]he proportion of Prairie Dog Creek water to effluent discharge will determine overall water quality at any particular time. . . ." (Vance Report at 5, Vance Dep. Ex. 26, attached as Exhibit A).[2] However, Dr. Vance has no idea of the actual flow data for Prairie Dog Creek and – inexplicably – was not even familiar during his deposition with the amount of discharge authorized by the permit he says he reviewed:

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[1] Excerpts of deposition testimony attached at tabs identified by deponent's last name.

[2] To minimize volume of exhibits, expert reports/excerpts are attached without exhibits/attachments.

Q. Well, in your report on the section on Prairie Dog Creek under Water Quality, and it is over on page 5, you say, "The proportion of Prairie Dog Creek water to effluent discharge will determine overall water quality at any particular time." So I was wondering, do you know – I mean, **do you know what the amount of Prairie Dog Creek water is? Do you know what the proportions are at any given time?** I mean, I understand the concept here, but do you –
A. Do I know?
Q. Yeah.
A. At a particular time?
Q. Yeah.
A. **No, I do not. And plus, I don't know what the amount of outfall is out of Outfall 3 as well.**

(Vance Dep. at 48-49 (emphasis added)). Not knowing either the water flow data for Prairie Dog Creek or the amount of discharge authorized by the Permit, he performed no mixing analyses or calculations to try to determine the quality of mixed discharge and various natural flows before it is applied for irrigation (Vance Dep. at 30-31). Although USGS flow data is available and was used by Dr. Schafer and Mr. O'Neill (Deposition of James O'Neill II (O'Neill Dep.) at 141-42; Deposition of William Schafer at 7), Dr. Vance did not use it and was not familiar with any actual flows in Prairie Dog Creek during either irrigation or non-irrigation season. (Vance Dep. at 50, 99-100). Describing non-irrigation season flows as "low" (Vance Report, 5), he made this assumption without having any idea that the actual USGS flow data showed that non-irrigation flows exceeded the maximum permitted discharge 99% of the time. (Vance Dep. at 156-157; Schafer Report at 21, Fig. 8, O'Neill Dep. Ex. 7, excerpts attached as Exhibit B).

Dr. Vance also knew virtually nothing about the irrigation occurring in and from Prairie Dog Creek. He did not know the flow required in Prairie Dog Creek for any irrigator to irrigate. (Vance Dep. at 134). He did not know how the irrigators were using the water, although he conceded that it is important to know how an irrigator uses water to know if adding sodium to irrigation water would actually affect an irrigator:

Q. Well, I mean, I think I'm hearing you say that changing the quality of the water by adding these discharges could affect how irrigators are able to use the water that they've been using.
A. Correct.
Q. And you don't assume that all irrigators use water in a uniform, identical way, are you?
A. No.
Q. **So in terms of how any irrigator would be affected, you would have to know how that irrigator is using the water to know either how or whether they're even being affected, wouldn't you?**
A. **To a certain degree.**

(Vance Dep. at 25-26 (emphasis added)). He further admitted that he did not know the leaching fraction the irrigators in Prairie Dog and Wildcat Creeks were attaining in their irrigation operations (Vance Dep. at 60, 178), although he recognized it is important to know that information to determine discharge impacts on an irrigator:

Q. Okay. And you just mentioned, I think -- what may be my last question -- an issue of this morning, you indicated you didn't know the leaching fraction that certain irrigators are attaining, correct?
A. Correct.
Q. **Wouldn't you want to know that to be able to determine specific impact on specific -- on a specific irrigator?**
A. **I think it would be important to know how much water is being moved through their system, yes.** So water quantity is going to be important as well as water quality.

(Vance Dep. at 178 (emphasis added)).

Aside from using water sampling data provided by Pennaco, Dr. Vance's only attempt to understand the actual conditions of Prairie Dog Creek irrigation stemmed from a report mapping general soil types in the Prairie Dog Creek and Wildcat Creek drainages. (Exhibit A, Vance Report, 2-3). However, even Dr. Vance acknowledged the problems and weaknesses in using this general information as anything more than a starting point to form conclusions on soil quality assessments, and conceded that he would need to do additional soil sampling:

Q. Right. Okay. The soil survey information that you portray in your report at the back of the report in several color maps, **are there limitations to using this soil survey information?**
A. **Yes**, there are.
Q. What are those?
A. The limitations are there could be very site-specific conditions that obviate the direct connection between what is in the survey and what's actually there.
Q. All right. And I think I read something similar in your report, actually one of the appendices of your report, page 2 of the custom soil resource report that you downloaded as a preface. Do you see that? In the beginning of the third paragraph it says, "Although soil survey information can be used for general farm, local and wider area planning, **onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments**." Do you agree with that?
A. Yes, I do.
Q. All right. And were you attempting to do a soil quality assessment here?
A. Yes. I didn't have any -- I didn't sample the area, and so the information that I obtained from the soil survey which has quantitative information associated with it but it is, again, a soil survey that provides you with some direction.
Q. **Kind of a starting point?**
A. **Yes**.
Q. And had you had the time or opportunity, then, what I hear you saying is you agree it would have been appropriate to do some onsite investigation to do a soil quality assessment for these drainages; is that correct?
A. That could be quite expensive if I was going to go out there and conduct something --
Q. Do you agree with -- I'm sorry. Go ahead. Do you agree with that?
A. **If I had the time that I would go out there and do a soil sampling.**
Q. **Do the onsite investigation?**
A. To get more information, **yes**.

(Vance Dep. at 136-138 (emphasis added)).

It is difficult to imagine more unreliable "expert" evidence than Dr. Vance's opinions on the Permit limit's impacts on irrigation. He is neither an irrigation expert nor minimally versed in the specific facts that would give him the knowledge required to offer opinions on these impacts even if he were qualified. His testimony on the impact of permit limits should be stricken as unreliable.

B. Dr. Vance's opinions – at odds with his previous opinions to the Council – do not address the Ch. 1, Sec. 20 standard that Petitioners have to prove is not met by the Permit limits

Attempting to mask the fact that his generalized opinions without site-specific knowledge could not support an opinion that any measurable decrease will result from Permit discharges, Dr. Vance provides another opinion – an opinion that relies on a new standard that does not address the actual Section 20 standard at all.

Essentially, Dr. Vance "proposes" that **any** addition of salts to Prairie Dog Creek that changes background water quality violates Section 20 because it will impact the use of irrigation water by downstream irrigators. According to Dr. Vance, a discharger would have to "mimic" background water quality to achieve a "no change in water quality standard." (Vance Dep. at 19-20). That is not what Section 20 says; it plainly allows degradation of background water quality to the point that no measurable decrease in livestock or crop production occurs. Even Petitioners admit that "Section 20 ... does not require effluent limitations imposed by a WYPDES permit to preserve the ambient water quality." (Petitioners' Resp. to Pennaco's First Discovery Reqs., Resp. to Req. for Admis. #7, excerpt attached as Exhibit C).

Dr. Vance appears to know very well the obvious difference between protectiveness required by the actual Section 20 and his theory of absolutely no degradation, since he repeatedly fails to say that the Permit limits are not protective. Instead, Dr. Vance relies on his newly developed standard that any addition of salt above background places a burden on an irrigator:

> Q. I want to retread on a few things you testified about this morning and make sure I fully understand, so let me look at my notes of your testimony. I thought I understood you to say, and I just want to get confirmation or not so that I understand it, **adding any salts to an irrigation water will not be protective. Am I understanding your opinion correctly?**
> A. **No, I didn't say it specifically that way.**

Q. Okay. How would you say it?
A. **I would suggest that there's a burden put on the landowner if additional salts are added to the irrigation water**.

(Vance Dep. at 81-82 (emphasis added)).

Q. So I'm asking now what were the limits on those that you were concerned about. Those are the parameters and the limits -- and you just identified the EC limits you're concerned about, so I'm asking about the SAR and sodium, what the permit limits are that you think are not -- I guess **is it your opinion in your report that the limits in the permit are not protective of irrigation?**
A. I -- **my opinion is that if you're going to be adding salts to the system that you are impinging upon somebody's use of that water in their traditional manner.** So increasing salts, either as higher EC or higher sodium -- and sodium is my specific concern because of the potential problems that can be associated with sodium -- it is my contention that an increase in those salts are going to impact the irrigators downstream.

(Vance Dep. at 18 (emphasis added)).

Q. So you're saying that there would be no -- did you -- so you're saying that coalbed discharges meeting these limits and the irrigation would be below the discharges, that mixing with whatever surface flows there, **the water still would not be protective for irrigation?**
A. **It would impact the operations as they have been done in the past.**

(Vance Dep. at 30 (emphasis added)).

Dr. Vance's Report itself illustrates that Dr. Vance knows there is a clear difference between the actual Section 20 standard of limited degradation and his proposed zero degradation standard:

Pennaco's Permit WY0054364 will result in **local area water conditions impacting operations immediately downstream** from the effluent discharge points, which is a violation of WDEQ's Agricultural Use Protection Policy, Chapter 1, Section 20. **At the very least**, as the permit is written the higher salt loads and sodium concentrations will place an undue burden on irrigators by **requiring additional management** of the waters.

(Exhibit A, Vance Report, 6 (emphasis added)). Aside from the implicit recognition that the existing Section 20 standard and the new Vance undue burden standard are different, such an

opinion is offered with no knowledge of specific irrigation needs, no knowledge of specific irrigation management practices, no awareness of amounts of natural irrigation water available, and no knowledge about the actual leaching fractions being achieved by local irrigators.

It is curious that Dr. Vance now articulates an absolute non-degradation standard when he unabashedly and without reservation told the Council that Tier 1 limits would be protective:

> Q. And at the bottom of page 226 Mr. Morris -- who was a council member, I believe; is that correct?
> A. Yes.
> Q. -- asked, "What would be your recommendation for standards?" And your answer was, "**My recommendation would be Tier 1. I feel it is of significant protection." And the follow-up question was, "And those numbers are what?" And you said, "The SAR maximum of 10 with ECs that are protective of the plant**."

(Vance Dep. at 113 (emphasis added); Oct. 24, 2008 Vance Testimony, Vance Dep. Ex. 32, attached as Exhibit D). Obviously, those Tier 1 limits, now abandoned by Dr. Vance in support of Petitioners' appeal, vary considerably from his currently proposed "you can add no salt" zero degradation standard. One has to wonder: if a discharger can add no salts to the system as Vance proposes, why would a Permit be needed for EC and SAR? Under the Vance standard, DEQ could just tell permit applicants they have to always meet background for EC, SAR and sodium. Unlike the Permit limits here, that inflexible position **would** violate Section 20.

The new standard proposed by Dr. Vance simply fails to provide evidence that the Permit limits will cause a measurable decrease in alfalfa. How can Dr. Vance's new zero degradation standard possibly stand up as a reliable methodology when it abandons and refutes Section 20's actual limited degradation standard approved by this Council. Again, the Council should strike this opinion from an admitted non-expert on irrigation.

C. Mr. O'Neill offers no opinions that the permit limits are not protective

Like Dr. Vance, Mr. James O'Neill, II, another witness for the Petitioners who is **also not an expert in irrigation** (O'Neill Dep. at 116), provides no opinion on the protectiveness of the Permit limits:

> Q. Do you know what a protective EC level is for alfalfa?
> A. No.
> Q. No idea?
> A. Nope. Didn't look at that, so...

(O'Neill Dep. at 35).

> Q. Okay. Just so I understand, at the end of the day, you're not here, I don't think anyway, in your report or today in your deposition giving an opinion on whether or not the limits in this permit for EC or SAR are protective of alfalfa, are you?
> A. No.

(O'Neill Dep. at 124). As to SAR, it is important to note that Dr. Vance also offered no opinion on Petitioners' allegation that DEQ erred in not setting an SAR permit limit for either Outfall.

> Q. I didn't see in your report a recommendation or an opinion that DEQ should have set an SAR limit for the permit. Did I miss that, or did you not give that opinion?
> A. I did not give that opinion.

(Vance Dep. at 89). Petitioners consequently have no reliable expert evidence that the Permit limits are not protective and will violate Chapter 1, Section 20.

V. Petitioners Fail to Provide Any Reliable, Qualified Evidence to Challenge DEQ's Methodology Used to Derive the Effluent Limits

Petitioners allege that DEQ failed to use "appropriate scientific methods" to derive the effluent limitations contained in the Permit. (Petition, paragraph 3p). Chapter 1, Section 20 does not impose numeric effluent limitations for the challenged effluents—EC, SAR and sodium.

Rather, it provides a narrative standard: "All Wyoming surface waters which have the natural water quality potential for use as an agricultural water supply shall be maintained at a quality which allows continued use of such waters for agricultural purposes. Degradation of such waters shall not be of such an extent to cause a measurable decrease in crop or livestock production." WWQRR Ch. 1, § 20. When the regulations do not impose numeric limits, DEQ is authorized to "establish a numeric effluent limitation based on values derived from appropriate scientific methods." WWQRR Ch. 2, § 5(c)(iii)(C)(IV). The standard for "appropriate scientific methods" is not defined by statute or regulation and has not been defined by a Wyoming court or the Council. Petitioners' designated "expert," Mr. O'Neill, is simply not qualified to give expert opinions on whether DEQ used an appropriate scientific method to set limits for Outfall 003 - the primary focus of his expert report.

A. Petitioners' only evidence that Permit limits were not derived from appropriate scientific methods is unreliable non-expert opinion

Though Petitioners disagree with the Permit limits derived by DEQ, Petitioners fail to provide any reliable evidence to demonstrate that the limits were derived from an inappropriate scientific method. Petitioners designated Mr. O'Neill as an expert, and he offered an "expert" opinion that the permit limits were derived in error. Mr. O'Neill, however, is not qualified to testify as an expert to interpret the meaning of "appropriate scientific methods" in Chapter 2, Section 5, a regulation with which he previously had no familiarity.

Mr. O'Neill testified that he has no experience with CBM projects or CBM-produced water. (O'Neill Dep. at 17). He has only limited experience in water chemistry, but not involving EC or SAR. (O'Neill Dep. at 19-20). He has absolutely no experience or background in soils or agronomy. (O'Neill Dep. at 20). Stunningly, before he was retained by the Petitioners

in this case, Mr. O'Neill had never read either the Wyoming Water Quality Rules and Regulations nor the Agricultural Use Policy which he is now trying to interpret for the Council:

> Q. [On] page 1 you cite Chapter 1, Section 20 of the WDEQ water quality rules and regulation. Before this case have you ever seen that rule before?
> A. Not Chapter 1, Section 20. No, I had not.
> Q. **So you've never given an opinion on Chapter 1, Section 20 before?**
> A. **No.**
> Q. Down lower on page 1, you recite **Chapter 2, Section 5(c)(iii)(C)(IV)**. Do you see that?
> A. Uh-huh, yes, I do.
> Q. **Had you ever seen that regulation before?**
> A. **No.**
> Q. **So you had never given an opinion on that regulation before either?**
> A. **No.**
> Q. And then going over to page 2, you recite the Agricultural Use Protection Policy which I'm going to shorten to **ag use policy**, so we're on the same page. **Before this case had you ever reviewed that before?**
> A. **No.**
> Q. So you had not ever given an opinion on that before?
> A. No.

(O'Neill Dep. at 20-21 (emphasis added). Mr. O'Neill also admitted he did not have a scientific basis for his opinions on what the Ag. Use Policy did or did not require:

> Q: [Do] your expert opinions in this case include an opinion that it is not scientifically appropriate to set an SAR at end of pipe?
> A. So is it my expert opinion whether or not it is appropriate to set an SAR limit at the end of the pipe? Is that what you're asking?
> Q. No. DEQ did not set end of pipe SAR limits for either Paul 3 or Prairie Dog Creek.
> A. Correct.
> Q. Okay. And as I understood your previous testimony, you -- you thought that might be an error because of your reading of the ag use policy, correct?
> A. Correct.
> Q. And I don't think you had any other basis for your statement, correct?
> A. No, that's correct.
> Q. That's correct. So all I'm asking you is pretty much a restatement of what we just went over. And it may not be the greatest question

in the world, but I'm really trying to just nail down the fact that you're not saying --
A. Yeah, I am not saying -- **I'm not making an opinion, I guess, on whether or not it is appropriate except for the fact that their ag use policy asked me to do so**.
Q. **In other words, you don't have a scientific basis for that**?
A. **Correct**.

(O'Neill Dep. at 59-60 (emphasis added)). As already noted, Mr. O'Neill conceded that he is not an irrigation expert. (O'Neill Dep. at 116-17).

O'Neill's "expertise" on methodology is based entirely on his initial reading of the Agricultural Use Protection Policy and Chapter 2, Section 5 – for the first time ever. He had no experience with CBM water or irrigation practices prior to this appeal. He simply has no unique expertise in interpreting DEQ regulations or policies, particularly those he has never read or used before. O'Neill certainly is in no position to interpret them for the Council or identify how DEQ failed to comply with requirements he is seeing for the first time. By any stretch, that is not reliable or expert. To make matters worse, Mr. O'Neill inexplicably equates the term "appropriate scientific methods" in Chapter 2, Section 5 with the term "best scientific practice" used in his Report, although he never thought about it before:

Q. You used the term "best scientific practice," and I'm wondering if in your mind that equates to appropriate scientific method or if best scientific practice is, perhaps, a more stringent or a higher standard than the term "appropriate scientific method."
A. That's an interesting question. **Never really thought about it.**
Q. That's why we're here.
A. I think that in -- my feeling was they didn't use appropriate method to -- for this, and so scientific practice or scientific method in this case would be interchangeable in my vernacular.
Q. So you would equate the two?
A. That's correct.
Q. Did you find the term "best scientific practice" anywhere in the DEQ water regulations that you reviewed?
A. I don't recall.

* * *

Q. And I think Mr. Ruppert asked you this, but I'm going to do it as well. In your report where you talk about **best scientific practice**, I want to be absolutely clear that I believe you said that that is in your mind and **you're using that synonymously with appropriate scientific method?**
A. **Correct**.
Q. They mean the same thing in your report?
A. Yes.

(O'Neill Dep. at 28-29, 144 (emphasis added)). So, to this non-expert who just read DEQ water quality rules for the first time in his life with no particular expertise in interpreting them, an "appropriate methodology" has now become a "best practice." This conclusion should make no sense to anyone except to a novice in this area who never thought about it before like Mr. O'Neill.

Mr. O'Neill may be qualified to give expert testimony as a civil engineer, but his opinions in this case regarding the regulatory measuring of "appropriate scientific methods" should be disregarded as inherently unhelpful and highly unreliable. Besides Mr. O'Neill's unfounded opinion in an area where he possesses no experience or expertise, Petitioners offer no other expert evidence on this allegation (Vance Dep. at 67-68). Thus, in addition to striking O'Neill's opinions and testimony on appropriate methodology, this allegation by Petitioners should be disposed of now by summary judgment given the failure of reliable evidence.

B. The methodology used by DEQ to derive the Permit limits should not decide this case.

Not only is Petitioners' expert testimony unreliable and unjustified, but Petitioners' challenge to DEQ's methodology used to derive the permit limits should not distract the Council from the core issue in this case—whether the limits are protective. Even if DEQ did commit an error in methodology, the error must be prejudicial and affect the substantial rights of the

Petitioners to constitute grounds for reversal. *Nelson v. Sheridan Manor*, 939 P.2d 252, 256 (Wyo. 1997); *Pfeil v. Amax Coal West, Inc.*, 908 P.2d 956, 960 (Wyo. 1995). So long as the Permit limits do not allow for a measurable decrease in alfalfa production (which Petitioners' evidence fails to show), Petitioners' challenge of the methods DEQ used to derive the Permit limits, if allowed despite the absence of reliable expert opinion, should be set aside.

VI. Petitioners' Allegations About Wildcat Creek and Outfall 002 are Irrelevant and Their "Expert" Opinions are Unreliable Here Too

Petitioners also challenge the Permit by alleging that it will authorize discharge of treated CBM water into Wildcat Creek, based on a theory that a reservoir ("the Paul3") is leaking into Wildcat Creek. The Petition at paragraph 3r alleges that "[t]he Permit allows discharges of treated water to alter the SAR of Wildcat Creek to levels that the DEQ has determined are likely to result in measurable decreases in production of irrigated crops . . . ." As an initial matter, the Permit does not allow for direct discharge into Wildcat Creek. Rather, the Permit authorizes Pennaco to discharge treated CBM water into an on-channel storage reservoir: "Below Outfall 002, the permittee is required to contain all produced water within the reservoir during 'dry' operating conditions, and discharge of effluent from the reservoir, except during periods of time in which natural precipitation caused the reservoir to overtop and spill, is prohibited." (Permit, Statement of Basis at 2, Thomas Dep. Ex. 3, excerpt attached as Exhibit E).

Petitioners have offered no evidence whatsoever on the protectiveness of the permit limits for Outfall 002 into the Paul3 reservoir – either in a containment or overtopping scenario. That is not their concern. Instead they have focused their case against Outfall 002 on a previous DEQ finding that the Paul3 leaks into Wildcat Creek but no further than a pumpback station located near the Paul3. (Nov. 21, 2007 DEQ Letter, Thomas Dep. Ex. 9, letter only attached as Exhibit

F). Petitioners' allegations regarding Wildcat Creek have no bearing on the protectiveness of the Permit's effluent limits as the Permit is written. Petitioners' "expert" reports offer the opinion that the Paul3 reservoir into which Outfall 002 discharges is leaking into upper Wildcat Creek. (Exhibit A, Vance Report, 5; O'Neill Report at 5, O'Neill Dep. Ex. 4, attached as Exhibit G). Dr. Vance and Mr. O'Neill, however, admit that any CBM water in Wildcat Creek may not be coming from the Paul3 reservoir, and in any event, CBM water is not reaching irrigated lands of Mr. Koltiska (the only Petitioner who irrigates on Wildcat Creek downstream of the Paul3 reservoir). (O'Neill Dep. at 106-07, 113, 115; Vance Dep. at 170).

There are two fundamental problems with Petitioners' approach to the Paul3 and this appeal which is limited to protectiveness of the Permit limits. First, if the Paul3 is leaking beyond the pumpback station and further downstream into Wildcat Creek as Mr. Koltiska seems to believe (but no reliable evidence supports), DEQ has made a separate decision on how to handle that issue. (Deposition of Bill DiRienzo at 10-14). That is a **separate DEQ action** from the Permit limits, and Petitioners never requested and thus already waived Council review of that separate decision. DEQ R. Ch. 1 § 16(a). That issue is also distinct and separate from the protectiveness of Outfall 002 Permit limits, such that evidence of what happens if **unpermitted** leaking from the Paul3 occurs is irrelevant to this appeal of permit limits. WYO. STAT. § 16-3-108(a) ("In contested cases irrelevant . . . evidence shall be excluded . . . .").

Second, Petitioners' effort to support this claim with their "experts" falls apart with these experts once again conceding they are not experts in the areas in which they give opinions. Specifically, Pennaco had water samples taken throughout Wildcat Creek in June 2009, and part of the testing of those samples included Carbon 13 isotopic testing. Pennaco conducted this and

other isotopic sampling to trace potential CBM water in Wildcat Creek. Mr. O'Neill and Dr. Vance both opine that CBM water is escaping from the Paul3 reservoir based on the Carbon13 isotope water sampling. Mr. O'Neill testified that his opinion is based on his carbon isotope analysis—an analysis he had never performed before. (O'Neill Dep. at 100). Mr. O'Neill testified that he is not an expert in isotope chemistry:

> Q: **Do you consider yourself an expert in stable isotope chemistry?**
> A: **No.**

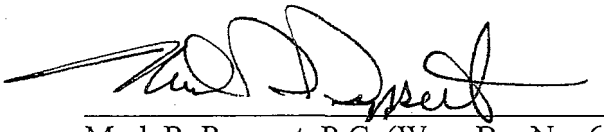
(O'Neill Dep. at 106 (emphasis added)). Similarly, Dr. Vance also testified that he is not an expert in isotopic analysis: "**It is not my specific area of expertise** . . . ." (Vance Dep. at 165-66 (emphasis added)). Dr. Schafer, Pennaco's designated expert, conducted the sampling and determined that CBM water was not contributing to upper Wildcat Creek. (Exhibit B, Schafer Report, 32-40). Accordingly, Petitioners' admitted non-experts cannot reliably refute Dr. Schafer's isotopic study that demonstrates CBM water is not impacting or leaking into upper Wildcat Creek. Again, the non-expert opinions should be stricken on this already irrelevant claim having nothing to do with Permit limit protectiveness anyway.

VII. Conclusion and Relief Requested

Petitioners have not developed any reliable expert evidence on their claims – claims that do require such evidence. The Vance and O'Neill reports are dressed up nicely with resumes and conclusions, but their depositions reveal fatal flaws and inadequacies in their relevant expertise, methodology used, and knowledge. Their opinions do not meet Wyoming's reliability requirement for expert evidence. Considering the limitations on these experts' opinions based on their lack of knowledge and expertise, no reasonably prudent person would ever commonly rely on this type of evidence in the conduct of their serious affairs, as required by WYO. STAT. § 16-3-

108(a). At the very least, the Council should strike Petitioners' expert opinions. Without proper expert evidence, however, Petitioners can never meet their burden of proof and can never amass the "substantial evidence" required by law to sustain a reversal of the Permit. The purpose of summary judgment is to dispose of cases before trial that present no genuine issue of material fact. *Rollins*, 152 P.3d at 370. That is the case here. Pennaco respectfully asks the Council to grant summary judgment, a decision fully justified by Petitioners' lack of reliable evidence.

DATED October 16, 2009.



Mark R. Ruppert, P.C. (Wyo. Bar No. 6-3593)
Jere C. (Trey) Overdyke, III (Wyo. Bar No. 6-4248)
HOLLAND & HART LLP
P. O. Box 1347
Cheyenne, WY 82003-1347
Telephone: (307) 778-4200
Facsimile: (307) 778-8175

ATTORNEYS FOR PENNACO ENERGY, INC.

CERTIFICATE OF SERVICE

I hereby certify that on October 16, 2009, I served the foregoing document to the following by:

Mike Barrash
Wyoming Attorney General's Office
123 Capitol Building
Cheyenne, WY 82002
jburb1@state.wy.us
mbarra@state.wy.us

- [x] U.S. Mail, postage prepaid
- [ ] UPS – overnight delivery
- [ ] Hand Delivery
- [ ] Fax
- [ ] E-mail

Kate M. Fox
J. Mark Stewart
DAVIS & CANNON, LLP
P. O. Box 43
Cheyenne, WY 82003
kate@davisandcannonchey.com
mark@davisandcannonchey.com

- [x] U.S. Mail, postage prepaid
- [ ] UPS – overnight delivery
- [ ] Hand Delivery
- [ ] Fax
- [ ] E-mail

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