

### PETROLEUM ASSOCIATION OF WYOMING

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February 9, 2006

Mr. Mark Gordon Chairman Environmental Quality Council Herschler Building 1W Cheyenne, Wyoming 82002

Dear Mr. Gordon:

The Petroleum Association of Wyoming (PAW) welcomes this opportunity to present to the Environmental Quality Council (Council) information regarding the Petition to Amend Wyoming Water Quality Rule, Chapter 2, Appendix H (Petition) filed on December 7, 2005 by the Powder River Basin Resource Council (PRBRC) and several of its members.

PAW is Wyoming's largest oil and gas trade association, members of which account for over 90% of the natural gas and 80% of the crude oil produced in the state.

The Environmental Quality Council should deny PRBRC's Petition for Rulemaking (the Petition) for several reasons. First, PRBRC focuses only on agricultural use of produced water and not on wildlife propagation and other beneficial uses. Second, PRBRC's assertion, based on federal and out-of-state law, that WDEQ has the authority to regulate water quantity is erroneous. Third, PRBRC's proposed rulemaking would have many unintended consequences for all agricultural users if implemented. We have briefly outlined these issues below. Finally, PRBRC's assertion that produced water is not of good enough quality to be used for agricultural purposes is not supported by the best available scientific evidence.

### PRBRC's Quantification Demand Fails to Take into Account All Beneficial Uses

The PRBRC's petition asks the Council to adopt rules requiring that, essentially, all oil and gas production facilities quantify exactly the amount of produced water that will be beneficially used, as allegedly required under Appendix H. This requirement is based on one very significant erroneous assumption – that the only viable beneficial use for produced water is for livestock watering. As can be seen from even a superficial reading of the PRBRC Petition, PRBRC focuses exclusively on livestock watering when seeking a quantification of produced water that can be beneficially used. The federal regulation on which WDEQ's beneficial use policy is based (40 C.F.R. Part 435) contemplates water "that has a use in agriculture or wildlife propagation." This phrase, in turn, is defined to mean, "the produced water is of good enough quality to be used for *wildlife or livestock watering or other agricultural uses.*" Given the regulation, it is clear that not only does beneficial use include livestock watering, but also

wildlife propagation and other agricultural uses. Certified soil scientists Kevin C. Harvey and Dina E. Brown have published information entitled "Managed Irrigation for the Beneficial Use of Coalbed Natural Gas Produced Water: The Fidelity Experience". The publication details data collected from a successful managed irrigation operation on behalf of Fidelity Exploration and Production Company of Sheridan, Wyoming. A copy of the publication is attached for your convenience.

As you know, produced water has been used successfully for both wildlife propagation as well as agricultural irrigation. PRBRC's Petition ignores this fact. While PRBRC may have some method for calculating how much water one animal unit may drink (although it has not set forth that method in its Petition), it has not explained how to calculate how much water is used for wildlife propagation or irrigation. For example, PRBRC has in no way addressed how a producer can estimate how much water is used by a flock of geese or by a single alfalfa plant.

The petitioners are suggesting that by allowing the rule to be promulgated, the use of the water will be maximized. This is not the case. Wildlife and livestock clearly use produced water whenever it is available. The burden should lie with the petitioners to demonstrate that wildlife and livestock do not utilize the water that is available to them. In fact, the water is creating aquatic habitat that was not available prior to the discharge. The Wyoming Game and Fish Department (WGFD) has issued statements that the water discharged by oil and gas operations is beneficial to wildlife. If the proposed rulemaking is put into effect, many oil and gas producers will be forced to shut-in current water production and industry as a whole will have to rethink how produced water is handled in the future. As a result, a source of water that livestock, irrigators and wildlife have come to depend on will be eliminated and any future beneficial uses of produced water will never be realized.

Finally, the Department has already answered the question raised by the petitioners as to the use of "beneficial use". In the Department's document entitled Wyoming Water Quality Rules and Regulations, Chapter 2, Permit Regulations for Discharges to Wyoming Surface Waters, EQC Version 1, Response to Comments, June 2004, the Department responds to the petitioners' related questions:

Commenter writes: "A quantity parameter must be included in the quality/beneficial use standard in order to have it serve any useful purpose. (Appendix H(d)(i) suffers from the same infirmities). The issue of implying all the CBM water being discharged is of beneficial use for livestock and wildlife is mostly false. While it is true that a very, very small total percentage of the CBM water is being put to beneficial use, the majority is running downstream causing damages to soil, vegetation, fisheries and downstream irrigators. The volumes of water are so great it cannot possibly all be beneficially used by cattle, wildlife or people in all of Wyoming. Allowing a paid industry consultant to make this claim of beneficial use, when the landowner will not, goes even further down the road of false claims regarding the beneficial use of water. The beneficial

use of this CBM water should be supported by the volume of water that can actually be used for livestock and wildlife by the landowner and not more should be allowed to be wasted by dumping it on the surface and allowing it to cause damage downstream."

WDEQ responds: "40 CFR 435 allows for the discharge of produced water if the water is used by wildlife or agriculture during periods of discharge. This was a provision that was supported by the Wyoming DEQ, Wyoming Game and Fish, and many landowners within Wyoming to allow for the continued use of produced water rather than re-injecting the water. It is the DEQ's opinion that there should not be a quantity limitation related to the agricultural and wildlife use determination. The federal regulations did not contemplate a maximum allowable flow rate but rather that the water being discharged was actually used by wildlife or agriculture during periods of discharge. It was not the intent of the federal regulations that all the water be consumed."

After careful consideration of all comments received during the recent rulemaking effort, the Department determined, and was supported by EPA and the Governor, that no changes to the proposed regulation were necessary. Counsel for the PRBRC has made the same argument in the past. In a letter dated April 22, 2004, PRBRC's counsel made very similar comments to the EQC that were reviewed, considered and rejected by the Council and WDEQ. On December 3, 2004 the Governor responded to a letter sent by the Petitioners' counsel, dated September 10, 2004, regarding the same comments. In the response letter, the Governor stated, "As you know, I have signed the rules. However, based on your interest and scrutiny of certain aspects of the rule, I have reviewed the issues with DEQ and find that the rule is appropriate." The Governor goes on to address the specific provisions of Appendix H stating, "... I understand that those provisions are designed to be consistent with the provisions of 40 CFR Part 435 "Oil and Gas Extraction Point Source Category" which allows for the discharge of produced water if the water is used by wildlife or agriculture during periods of discharge."

In addition, the WGFD has issued several awards for Natural Resource Stewardship for the use of these waters.

In an attached 2003 press release, the WGFD states:

### Oil and Gas Reclamation and Wildlife Stewardship Award

Howell Petroleum, Midwest

Using extra water from their oil recovery operations in the Salt Creek Oil Field, Howell Petroleum has turned Petro Reservoir into a viable put-and-take trout fishery near Midwest. The water that is released into the drainage above the reservoir also benefits waterfowl and creates a valuable riparian area and reliable water source for terrestrial wildlife.

"This work provides an obvious example that oil development and environmental interests can coexist," said Bill Wichers, Game and Fish Department deputy director of external operations.

The Bureau of Land Management and Department of Environmental Quality also contributed to the Petro Reservoir project.

In addition the same press release states:

### **Coalbed Methane Natural Resource Stewardship Award**

J.M. Huber Corporation, Sheridan

The J.M. Huber Corporation was honored for their diligence in using discharge water from their coalbed methane wells to benefit wildlife in their Lower Prairie Dog Field. Surface application of the water has enhanced forage for deer and antelope while creating cover for sage grouse, doves, pheasants, turkeys and raptors. "The land stewardship the Huber Corporation demonstrates is beyond the scope of traditional business practices," Wichers said.

Further a 2004 WGFD press release (attached) states:

## WYOMING ENERGY COMPANIES AND ORGANIZATIONS AWARDED FOR RESOURCE STEWARDSHIP

Devon Energy, Wright

Using the water discharged from their Pine Tree coal-bed methane area near Wright, Devon Energy has created two stock ponds and upgraded six others. The planned use of water has also provided about a dozen water discharge sites and another dozen stock tanks in downstream areas.

"This judicial use of discharge water has resulted in several miles of improved riparian vegetation along normally dry draws," Wichers said. "Watering sites have been created benefiting a great variety of wildlife, and the ponds are used as nesting habitat for waterfowl and other water birds."

The discharge is also benefiting hunters as a large portion of the improved habitat is within an area enrolled as a public walk-in hunting area.

### WDEQ Does Not Have the Authority to Regulate Water Quantity

Second, PRBRC asserts that WDEQ has the authority to regulate water quantity and, in so doing, can impose quantity limits on produced water. This assertion disregards the authority

granted to WDEQ by the Wyoming Constitution and WDEQ's enabling statutes. The Environmental Quality Act states that nothing in the Act "limits or interferes with the jurisdiction, duties or authority of the state engineer [or] the state board of control..." W.S. 35-11-1104 (a)(iii). The Wyoming Constitution, in turn, provides that the State Engineer and the Board of Control "shall, under such regulations as may be prescribed by law, have the supervision of the waters of the state and of their appropriation, distribution and diversion." Wyoming Constitution, § 97-8-002. Furthermore, the State Engineer has "general supervision of the waters of the state." Wyoming Constitution § 97-8-005.

PRBRC has cited several cases in which a court has determined that an agency can regulate water quantity in an effort to regulate water quality. However, these cases are not based on Wyoming law and do not represent the legal and regulatory framework of Wyoming. In this case, Wyoming's Constitution gives primary authority to govern water quantity to the State Engineer, and *specifically* prevents WDEQ from impinging on that authority.

### The Proposed Rule Change Will Adversely Affect All Agricultural Use

Third, PRBRC's petition will have the potential to affect all discharge water from any oil or gas operation. Water that has been put to use, water that was requested by landowners for use, water that has benefited wildlife, or water that has been appropriated through the State Engineer's Office will be at risk if the petition is allowed to go to rulemaking. In several basins around Wyoming, water that has been historically discharged from oil or gas operations has been appropriated by landowners for use to water stock and to irrigate crops. These landowners have come to depend on the water that is being produced by the operations and livestock watering practices depend on the continuous presence of produced water at a specific location. PRBRC's petition has the potential to eliminate those uses which agriculture has come to depend on. Finally, the petition also has the potential to put restraints on all agricultural users who use water for livestock watering and agriculture. It is unlikely that agricultural users would be willing to meter out groundwater on a per-head or per-plant basis and that is exactly what the proposed rule change would require.

# PRBRC's Assertions that Produced Water is Not Suitable for Agricultural Use is Unfounded

WDEQ, under the authorization of the Clean Water Act and the federal regulations (40 CFR 435), has set effluent limits for discharged produced water at 5000 mg/l total dissolved solids and 3,000 mg/l for sulfates. These standards apply if the water is used by wildlife or agriculture during periods of discharge. Hence, any discharged water must meet these standards in order to gain authorization and approval of WDEQ. WDEQ has issued effluent limits in coordination with the United States Environmental Protection Agency (EPA) in Chapter 2 of the Wyoming Water Quality Rules and Regulations. These limits are set to protect various uses, including livestock watering and other agricultural uses. If the water released from discharges does not meet the standards for a particular use, discharges are prohibited and the Department will not allow the water to be used in that fashion. Finally, water quality data for a

majority of produced water indicates that solids and sulfates levels in produced water are well below the limits set by the standards.

The limits requested by the Petition are clearly not substantiated by science. For example, producers have conducted water quality sampling of the background water (i.e., water quality from precipitation runoff events uninfluenced by produced water) and have found that the background water quality is in most cases of poorer quality than produced water. Ample data supporting this conclusion has been submitted to WDEQ during the WYDES discharge permit application process. The Department and the EPA are required to use sound science and other credible evidence when it comes to setting effluent limits for the various classes of use. As such, the protections afforded by the Department are sufficient to protect all beneficial uses. The PRBRC should also be held to the same standard when suggesting effluent limits and not, as they have done here, merely proposing unsubstantiated numbers out of the blue.

### Conclusion

If the Council decides to allow the petition, and the Department begins a rulemaking at the request of the Council, it is our belief the Council will be requiring the Department to ignore W.S. 35-11-302 (a) (vi). The statute clearly states the administrator and the advisory board shall consider facts concerning interference with health and well being of people, animals, wildlife, aquatic life and plant life affected; the social and economic value of the source of pollution; the priority of location in the area involved; the technical practicability and economic reasonableness of reducing or eliminating the source of pollution; and the effect upon the environment. Clearly, given all discussed above, the Department would be in conflict with their governing statutes should the petition be accepted and the rules get amended.

Furthermore, PRBRC has failed to take into account other beneficial uses, such as wildlife, which the federal regulation and the Wyoming Statutes clearly contemplate. Also, PRBRC is asking WDEQ to regulate water quantity for the sake of quality in contravention of WDEQ's enabling statute. PRBRC has failed to provide any new credible evidence in support of the requested changes to the recently promulgated Water Quality Division Chapter 2 rules and regulations. Finally, the WDEQ has already responded to similar objections in the past and has not found any basis for the objections. The PRBRC has produced no new credible evidence that WDEQ and the Council have not already heard and rejected in the triennial review process and the revisions to Chapter 2 of the Wyoming Water Quality Rules & Regulations. Therefore, given the extensive review and consideration these issues have already received during the rulemaking efforts, PAW respectfully requests the EQC deny the proposed petition to amend the Chapter 2 regulations.

PAW appreciates this opportunity to comment and respectfully requests that the PRBRC's petition be denied. Thank you for your consideration of these comments and suggestions.

Sincerely,

John Robitaille Vice President

Cc: John Corra John Wagner Todd Parfitt