WYOMING MINING ASSOCIATION

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Jim Ruby, Executive Secretary
Environmental Quality Council

Environmental Quality Council
122 W. 25th Street
Herschler Building, Rm. 1714
Cheyenne, WY 82002

RE: Docket 08-3101; Expert Scientific Opinion on the Tier-2 Methodology

To Whom It May Concern:

WMA would like to offer the following comments regarding the Tier 2 Methodology Report to the Wyoming Environmental Quality Council (WY EQC). This methodology is currently under consideration by the WY EQC for adoption as an Appendix to the Chapter 1, Water Quality Rules and Regulations (WQ R&R), and is, at this time, a provision of the Agricultural Use Protection Policy (AUPP) that was finalized August 2006 in conjunction with the Triennial Review of the Chapter 1, Surface Water Standards and is contained in Chapter 1, Section 20 of the AUPP.

The proposed methodology is intended to regulate the quality of discharged water that cannot meet the effluent standards of Tier 1 but still has the potential to be used as an agricultural water supply. The Experts state that they believe "The Tier 2 Methodology as set forth in Appendix H, Section c(vi)(B) is not reasonable nor scientifically valid for determining the electrical conductivity (EC) and sodium adsorption ratio (SAR) of water." The report goes further and states that the methodology "for determining EC and SAR for permitting the discharge of produced water is not reasonable nor sufficiently defined nor scientifically defensible for the conditions in Wyoming." The WMA agrees with the Experts' evaluation of this methodology.

Based on the report, WMA believes that the Tier 2 Methodology must be removed from the proposed Water Quality Chapter 1 revisions as it is neither reasonable nor scientifically valid. Steps must be taken to develop a reasonable methodology to allow water to be discharged that cannot meet Tier 1 effluent limits. The Experts' report suggests the possible development of an irrigation management plan strategy. WMA believes this rule package should be returned to the Water Quality Advisory Board (WQAD). The Board must develop a valid and defensible strategy to regulate these waters. To do otherwise would place an undue burden on dischargers to meet excessive effluent limitations that may not be necessary to protect crop or livestock production from a measurable decrease due to the water quality. Therefore, WMA does not support the adoption of this rule package as written.

If the EQC decides to move forward with the adoption of this methodology as drafted, it must be done as a guideline and not a rule. A guideline would allow for further development and adjustments to the methodology as needed and as more practical experience is gained through the implementation of the guideline.

The WMA and its members have previously submitted comments to the EQC and Board regarding these rules. These comments were dated August 26, 2008, and October 28, 2008. WMA still feels strongly about these comments and would like to reiterate these comments which should be given further consideration if the EQC moves forward with these draft rules.

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Comment 1. Water has been discharged from Powder River Basin mines for many years, and we are not aware of the Water Quality Division (WQD) receiving any complaints about the quality of the discharges. WMA is very concerned that the rules must be passed with a grandfather clause (paragraph 5 of Appendix H). The grandfather clause is an essential part of the rule as written.

Comment 2. That being said, WMA believes the grandfather clause needs to be slightly revised to correctly work as intended. Paragraph 5 of Appendix H should be revised so that the word "discharges" is revised to reflect the words "discharge permits".

Comment 3. The rule should be modified to make allowances for upset conditions, in order to exempt all operators who might be inadvertently discharging while their treatment systems were unknowingly out of service.

Comment 4. How far downstream from the discharge will these rules apply? (Page H-3 Section ii and iii): The statement that WYPDES effluent limits for EC and SAR will be "applied in all instances where the produced water discharge may reach any artificially irrigated lands" should be changed to state "where produced water discharge may compose a significant portion of the irrigation water supply for naturally or artificially irrigated lands". To do otherwise would place unnecessary limits on dischargers when the discharge water would only reach irrigated areas in combination with runoff water or natural stream flow.

Comment 5. There are historic but unused or non-maintained irrigation structures that exist in WY. If a discharge is sent to this historic irrigation feature, must the waters meet the requirement of this standard at this non-maintained structure?

Comment 6. Has the Division conducted an analysis of the economic feasibility of the proposed rules? Such an analysis is required by the WY Environmental Quality Act, 35-11-302(a)(vi)(D).

Comment 7. To be compliant with Appendix H, many industrial facilities may opt not to discharge. This may deny water to downstream agricultural users in need of water. The purpose of the Western Alkaline Rules that were promulgated into WY Department of Environmental Quality Rules and Regulations was to ensure that water was not unnecessarily retained by facilities, but rather was more readily discharged so that the water could be put to beneficial use downstream. Because of this initial objective set forth by DEQ and the subsequent AUPP, we are concerned that the State is inconsistent with the intent of the Western Alkaline Rules.

Comment 8. Irrigation in WY can vary significantly. The use of the 100 percent yield threshold value and a goal of no measurable decrease in crop or livestock production (Page H-4, Section II) may place an unreasonable demand on dischargers to show that their discharge did not cause problems occurring on a particular agricultural operation. Many water quality problems that have been attributed to facility discharges are more probably attributed to drought conditions. In general, irrigators in our area pull water from the stream during periods of high flow. During much of the year, the baseline water quality is not of irrigation quality. Although there is allowance for EC and SAR limits (which only apply during the irrigation season), there should be some consideration of use of irrigation water; flow volume and quality during irrigation periods; and during the rest of the year. Appendix H needs to include a provision for mixing studies to determine the actual impact on irrigation potential or livestock watering from the discharge water. The appendix should also allow for water to be stored and discharged during periods of high flow when the water quality would not impact irrigation or during periods when irrigation is not taking place.

In summary, WMA agrees that the Tier 2 Methodology is not scientifically defensible. Further, WMA believes that it is unacceptable to incorporate an unscientific methodology into the WQ R&R. Incorporation as a rule

may require discharge water to be treated even if there is no added benefit or protection to crop or livestock production. The rule must be returned to the WQAB for further review. Consideration should be given to the use of this methodology as a guideline or the development of a valid option to replace the Tier 2 Methodology. A guideline would allow for flexibility with implementation, and revisions made to the methodology could be made as practical experience is gained. WMA thanks the EQC for this opportunity to comment on the Tier 2 Methodology Report.

Respectfully submitted,
WYOMING MINING ASSOCIATION

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