

**Categorical Use Attainability Analysis (UAA)  
for Isolated, Effluent Dominated Waters  
Response to Public Comments**

April 22, 2002

On December 7, 2001, the Wyoming Department of Environmental Quality, Water Quality Division (DEQ/WQD) solicited public comments on a “Categorical Use Attainability Analysis” (UAA) for constructed, isolated ponds (attached). The purpose of the analysis was to comply with the intent of the Chapter 1 surface water rules, specifically Section 4(d)(iii) which creates a class 4C category for effluent-dominated waters and Appendix A(b)(ii)(3) which provides that such designations shall be based upon an approved Use Attainability Analysis.

The types of waters addressed by this UAA are all man-made impoundments that are not connected to any other surface water body. Except for precipitation that falls directly into the impoundment, all of the source water is derived from effluent discharges permitted by the Department through the NPDES permitting program. The Use Attainability Analysis concluded that these types of waters should be classified as 4C and protected for contact recreation, wildlife, industry, agriculture and scenic value uses.

The WQD received 4 sets of comments from various individuals and organizations. A summary of the comments received and the agency responses (*in italics*) follows below.

**The United States Environmental Protection Agency (EPA)**

The draft Categorical UAA is limited to artificially created ponds that are constructed in uplands and receive all of their water from permitted effluent discharges (e.g., produced coal bed methane water). As a result, a question has been raised about whether or not such isolated, discharge-created ponds are waters of the U.S. The Water Quality Unit's comments, here, will not address that question. Instead, our comments are focused on the more general issue concerning application of the use removal criteria to effluent-dominated waters. In that regard, it is the Water Quality Unit's preliminary position that the draft Categorical UAA does not support a conclusion that effluent-dominated waters, as a general matter, satisfy the federal use removal criteria at 40 CFR 131.10(g). Our determination is based on the following key points:

- 1) 40 CFR 131.10(g)(2) anticipates that, where a discharge to a low flow waterbody is sufficient to establish or sustain an aquatic life use, that use is to be protected;
- 2) for effluent-dominated waters, 40 CFR 131.10(g)(3) may allow for removal of such a created use (or uses), but only where it is demonstrated that removing the discharge would cause more environmental harm than leaving it in place;
- 3) the draft categorical UAA does not reconcile 40 CFR 131.10(g)(2) and (3) and concludes, without documentation, that removal of the discharge would cause more harm than leaving it in place;

4) the Water Quality Unit cannot accept that conclusion without a demonstration that the discharge results in a net environmental benefit and that removal of the discharge would, in fact, cause more harm than leaving it in place; and

5) the Water Quality Unit suggests that the effluent-dominated waters issue is more appropriately addressed as a site-specific "level of protection" issue rather than one involving removal of "created" uses.

Conclusion: It is the Water Quality Unit's (*EPA*) preliminary position that the draft Categorical UAA does not support a conclusion that a demonstration that waters are effluent-dominated, alone, satisfies the federal use removal criteria at 40 CFR 131.10(g). 40 CFR 131.10(g)(2) anticipates that, where a discharge to a low flow waterbody is sufficient to establish or sustain an aquatic life use, that use is to be protected. Although 40 CFR 131.10(g)(3) may allow for removal of such a created use (or uses), there must be a demonstration that removing the discharge would, in fact, cause more environmental harm than leaving it in place. The draft categorical UAA does not reconcile 40 CFR 131.10(g)(2) and (3) and concludes, without documentation, that removal of the discharge would cause more harm than leaving it in place.

The Water Quality Unit suggests that the effluent-dominated waters issue is more appropriately addressed as a site-specific "level of protection" issue rather than one involving removal of "created" uses.

**Response:** *All of the regulatory citations mentioned above to provide the rationale for EPA's conclusion only apply to jurisdictional "waters of the U.S." and in their opening statement, EPA acknowledges that they cannot conclude that the waters covered by this UAA are in fact jurisdictional under the Clean Water Act. In January, 2001, a United States Supreme Court decision, "Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers" (SWANCC) had the effect of removing federal Clean Water Act jurisdiction from most isolated, intrastate waters. Therefore, EPA's comments are an expression of their opinion on how the State should choose to classify and regulate these waters rather than an exercise of any federal requirement.*

*The arguments of whether or not aquatic life uses should be designated on effluent-dominated waters was carefully considered and debated when the water quality standards were adopted. EPA concedes in their comments that artificially created aquatic life uses may be removed upon a demonstration that removing the discharge would cause more environmental harm than leaving it in place. Because these waters are isolated and artificial, only those species of aquatic life that are tolerant to the quality of the discharge could possibly colonize the impoundment. Wildlife and livestock watering uses are designated and protected on 4C waters and will accrue wherever these impoundments are built. These uses clearly provide environmental benefits which otherwise would not exist. Therefore, we have concluded, that for the types of waters and circumstances covered by the UAA, and in light of the intent of the state standards, that the demonstration required in Chapter 1, Section 33(b)(iii) has been met for all waters in this category. Developing site-specific criteria or modified use designations in each instance as suggested by EPA would be extraordinarily burdensome and would not provide a higher level of environmental benefit.*

## **Wyoming Outdoor Council (WOC)**

The Wyoming Outdoor Council objects to the issuance of your proposed categorical use attainability analysis (CUAA) for waters of the state found in off channel complete containment ponds. This permit has far-reaching ramifications for the watersheds and groundwater in all of northeast Wyoming. Our objections to this CUAA are many and varied. DEQ should not make this categorical determination, for the following reasons:

### **Off channel Total Containment Ponds are Treatment Works. They are not Waters of the State.**

1. Off channel Total Containment Ponds are Treatment Works. They are not Waters of the State. Chapter 1, Section 2 b. (xlv) states that surface waters of the state are waters which are not man made retention ponds for the treatment of municipal, agricultural or industrial waste. Off channel total containment ponds are man-made retention ponds. They cannot be classified as any waters of the state, since they do not meet the definition. These off channel total containment ponds do meet the definition of treatment works, as defined by W. S. 35-11-301(a)(iii).
2. DEQ will not allow a discharge from these ponds and they are built to hold and stabilize produced water from CBM reservoirs. That makes them treatment works. See W. S. 35-11-301(a)(iii).

***Response:** We agree that some off-channel constructed ponds are in fact “treatment facilities” and are not subject to classification and regulation under the surface water standards. This is clearly the case for municipal wastewater lagoons and oil field heater-treater units and skim ponds. There are, however, many ponds that are created to contain NPDES discharges simply to prevent the discharge from degrading naturally occurring higher quality waters and also to provide livestock watering and wildlife benefits. It is these waters that are the target of the categorical UAA. Classifying the waters as 4C ensures that they will all have a basic water quality sufficient to support stock and wildlife uses.*

### **Issuance of this General Permit Does not Meet the Requirements of Chapter 1, Water Quality Rules and Regulations (WWQR&R).**

3. Chapter 1, Sections 33 and 34, WWQR&R, clearly contemplate that a Use Attainability Analysis (UAA) only be applied on an individual basis. There is no provision in Chapter 1 for categorical UAAs. DEQ is thus violating its own rules when it proposes to adopt a CUAA. DEQ cannot act without regulatory or statutory authorization. Therefore this proposed CUAA is void ab initio.

***Response:** There is nothing in Chapter 1, Sections 33 or 34 which precludes the development of a single UAA for a category of similar waters.*

4. It is the purpose of UAAs to allow for an examination of the water body in question on an individual basis to determine if it can support aquatic life, cold and warm water game fish, and cold and warm water non-game fish. The approach DEQ is taking with regard to the proposed

CUAA stands the logic and purpose of UAAs on its head. No individual determinations can be made under this proposal that DEQ is making. It is absurd to declare a change in classification en masse for a type of pond that is really a wastewater treatment pond and should not be classified as any water of the state at all.

***Response:** The classification of a water as 4C under this UAA does not constitute a “change in classification”. All of the associated impoundments are essentially new waters that are constructed in upland areas. They are disconnected from any other surface water feature and are comprised of 100% effluent. One of the primary purposes for the 4C classification is to provide a reasonable category for the management and regulation of effluent-dominated waters. We believe on its face, that a waterbody of sufficient quality to support wildlife and stock watering at a minimum is a greater overall environmental benefit than no water at all. There is nothing that would be gained from the exercise of processing an individual UAA in each circumstance since they would all necessarily come to the same conclusion.*

### **Issuance of the CUAA Deprives the Public of the Opportunity to Comment on Individual UAAs**

5. Issuance of the CUAA will effectively remove the ability of the public to comment on individual UAAs that could otherwise come before the Administrator or the Environmental Quality Council.

***Response:** As stated above, there is no need for an individual review on each impoundment. The requirements for applying the 4C designation under this categorical action are specific, well defined and predictable.*

### **A CUAA is not Appropriate for Off Channel Total Containment Ponds. DEQ Should Issue Permits to Construct for all Ponds Covered by the CUAA.**

6. The Wyoming Environmental Quality Act, (see W. S. 35-11-301(a)(iii)) requires that any person who constructs, installs, modifies or operates any sewerage system, treatment works, disposal system, or other facility capable of causing or contributing to pollution must first get a permit to construct such a facility. A treatment works is defined as a facility used for treating, holding or stabilizing wastes. Clearly, these ponds are treatment works under that statutory definition since they are being used to treat, stabilize or hold the produced coal bed methane water. That water is definitely pollution, as defined by the Act, since they may contain high levels of all kinds of heavy metals, as well as being high in salt content.

7. DEQ/WQD has ignored the requirements of the Wyoming Environmental Quality Act by allowing the construction of these "ponds" without permits to construct, as required by W. S. 35-11-301(a)(iii).

8. An indication that DEQ is aware that these ponds are actually treatment facilities can be found in its proposed general permit for off channel total containment ponds, at p.11. Part II, Paragraph 5. The paragraph is entitled Bypass of Treatment Facilities. The only treatment facilities that DEQ/WQD could be referring to are the ponds themselves. There is nothing else that could be

bypassed. Clearly, despite its protestations to the contrary, DEQ/WQD regards the ponds as treatment facilities.

9. While issuance of a CUA for these ponds is inappropriate, issuance of a permit to construct is not. All of these ponds should be permitted as treatment works, pursuant to W. S. 35-11-301(a)(iii).

For all of the foregoing reasons, WOC requests that DEQ not issue the proposed CUA. This is not a matter that is curable by adjusting the language of the CUA. These ponds should not be classified as any type of surface waters of the state. They are treatment works and as such do not qualify as waters of the state. Furthermore the whole idea of a categorical determination as proposed here violates the concept of a UAA. A UAA is meant to be conducted on an individual basis.

*Response: See our response to comments 1 and 2 above.*

### **Coalbed Methane Coordination Coalition (CBMCC) - Joint Powers Board**

The beneficial use of state water for extraction of coalbed methane should not, in the view of the JPB, preclude or diminish the opportunities for other use. As one example, the need for dust control in the Powder River Basin is critical. Equally critical in the future may be the need for fire control. Water must not be wasted if it can be put to use to serve these interests. In terms of other interests, the potential for maximum effective use of precious water for commerce, agriculture, recreation and wildlife habitat must be maintained.

With respect to the use attainability analysis, the JPB wishes to state that no “determination” has actually been provided by WDEQ-WQD to support the contention that the waters to be classified as Class 4C lack the potential to normally support and sustain aquatic life pursuant to the provisions of Chapter 1, Sections 33(b) (i), (iii), (iv), (v) and (vi). Such a contention should be supported by a verifiable determination as required under Section 4(d)(iii). Further, it is unclear how “more environmental damage” might ensue by removing a source of pollution to achieve full attainment of aquatic life uses. It is requested that the WQD more fully elaborate on these points prior to finalizing this use attainability analysis.

*Response: We agree with the viewpoint of the JPB that the maximum effective use of water for agriculture, recreation and wildlife habitat must be maintained and believe that the purpose for the establishment of the 4C classification in Chapter 1, Section 4(d)(iii) is to help accommodate that perspective. To begin with, though coalbed methane development is the focus of the CBMCC, this UAA does not apply only to CBM development activities but rather to all off-channel, non discharging containment ponds that are constructed with the intent of providing some beneficial uses other than water quality treatment. We do recognize, however, that CBM development will be affected by this UAA more than any other industry because of the scale and nature of those activities. Therefore, we will address the comments of the CBMCC in terms of coalbed methane discharges.*

*Some of the water produced by coalbed methane operations may exceed the adopted aquatic life criteria for some constituents. This does not mean that the water is unsuitable for other uses such as livestock watering or wildlife habitat. In the circumstances covered by this UAA, aquatic life will not be adversely affected even if the water exceeds some aquatic life criteria because the ponds must be built in upland areas where there is no aquatic life prior to construction. Once constructed, aquatic life may colonize the ponds, but only those species that are tolerant to the quality of the discharge. That represents the first environmental value, the establishment of new wetlands and aquatic habitat which may be of a lower quality than natural systems but certainly more beneficial than none at all.*

*More important than the aquatic life use are the benefits associated with use of the produced water for livestock watering and wildlife habitat. Because the high cost of treating the water to levels that meet all of the aquatic life criteria many times eliminates surface discharge as an option, the ability to use the produced water for stock and wildlife purposes would be lost. It is important to note that Class 4 waters are designated for agriculture, wildlife, industry, recreation and scenic value uses and that the water discharged to these ponds would have to be of sufficient quality to sustain those uses. Therefore, if full aquatic life protections are required on these constructed ponds, the discharges would not be allowed and all potential uses of the water would be lost. For these reasons, we believe it is clear that 4C is the appropriate classification for these types of waters and that the requirements of Chapter 1, Section 33(b) have been met for the entire category.*

## **Niobrara Conservation District**

The Niobrara Conservation District concurs that this category is necessary for such situations in the oil and gas development, including coal bed methane. We have several sites from oil wells that will fit within this category. Hanson Draw #1 and #2 fit these criteria. We would request based on the information already provided and this document in review that Hanson Draws #1 and #2 be designated as 4C.

***Response:*** *Hanson Draws #1 and #2 may be eligible for a 4C designation, however, they could not be covered under this categorical UAA. This UAA applies only to off-channel impoundments that are isolated from natural drainages. It cannot apply to any drainage, nor to any impoundment constructed within the drainage. A site-specific UAA would have to be developed for the Draws mentioned.*