

EXHIBIT F

RESPONSE TO
JULY 7, 2004
EQC QUESTIONS

Section 2 - General Applicability

Page 2-3, paragraph (d) "Interpretation of "waters of the United States". All references to the CWA where there is reference to the phrase "water(s) of the United States" shall be interpreted as "surface waters of the state" for purposes of this rule. This interpretation does not expand the CWA implementation authorities of federal agencies."

1. Provide a narrative clarification of this section.

In the CWA reference is made to "Waters of the United States". Corresponding federal regulations, are written with specific reference to protecting "Waters of the United States". In 2001, the U.S. Supreme Court ruled that Clean Water Act jurisdiction did not extend to intra state isolated waters and that the regulation of such water was appropriately the responsibility of state and local authorities.

The Wyoming Environmental Quality Act (WQA) 35-11-103(c)(vi) defines "waters of the state" as all surface and groundwater, including waters associated with wetlands, within Wyoming. Consequently, the definition of "waters of the state" includes more surface waters and is much broader than what is covered by the federal definition of "waters of the United States".

Under the provisions of W.S. 35-11-301 no person shall cause, threaten or allow the discharge of any pollution or wastes into the waters of the state or alter the physical, chemical, radiological, biological or bacteriological properties of any waters of the state except when authorized by a permit issued pursuant to the provisions of the Environmental Quality Act.

The federal regulations, including effluent limitations, only apply to "waters of the United States". Because the state definition of "waters of the state" is much broader it is necessary to interpret the federal regulations to be applicable to all waters of the state not just those waters that are also "Waters of the United States". Otherwise all "waters of the state" which are not "Waters of the United States" would not be provided the same level of environmental protection.

It is the WQD's opinion that it is critical to the health of the state's surface water's to provide the same level of protection to all surface waters within the state of Wyoming. Therefore it is necessary to interpret the federal use of "waters of the United States" as "surface waters of the state" for the purposes of protecting Wyoming's surface waters under these regulations.

2. Does groundwater apply? If not, why not?

The federal definition of "waters of the United States" under 40 CFR 122.2 does not include groundwater. The federal NPDES rules and the intent of the State WYPDES rules are specifically designed to address discharges to surface waters and protection of surface water quality standards. Groundwater protection is addressed in separate water quality rules and regulations, specifically Chapters 3 and 8.



Section 3 - Definitions

1. Do we need definitions contained in the statute or should they be left out?

Including relevant definitions from the statute is done to make the rule package more user friendly. This practice is consistent with the approach used in Wyoming Water Quality Rules and Regulations Chapter 1, Wyoming Surface Water Quality Standards adopted by the EQC in 2001.

2. Is the definition of "Affected lands" contained in Appendix J? How does it apply to storm water?

The term is not used in Section 6 - Storm water. The term "affected lands" is used in paragraph (c) lines 19 and 21 on page J-5 of Appendix J. The provision in Appendix J is a carryover from Chapter 10 and is included to provide a mechanism to allow draining of sedimentation ponds under certain conditions in order to maintain the 10 year 25 year storage capacity. Although the drainage from affected lands consists of only storm water, the storm water provisions in Section 6 are much broader and industrial storm water permitting requirements are still applicable.

3. In the definition of BMPs on page 2-6, line 34 should be "and/or".

The proposed rule has been modified to reflect this change.

4. In the definition of CFR on page 2-7, line 2 should reference July 1, 2004.

The proposed rule has been modified to reflect this change.

5. The definition of "process wastewater" should exclude "pit pumpage" from mines. Consider going back to the original definition in Chapter 10.

"Pit pumpage" from mining activities is appropriately included in the definition of "process wastewater" for the following reasons:

1. *The pit pumpage clearly falls within the definition of "pollution" that would be regulated under the Wyoming Environmental Quality Act.*
2. *The definition is consistent with the federal regulations. Excluding "pit pumpage" from the definition would arguably lead to rules that are less stringent than the federal regulations which is not allowable under the conditions of state program authority.*
3. *The original definition of "process water" in Chapter 10 did include "water originating from a pit or shaft in which mining is occurring or has occurred,..." , therefore the definition of process wastewater is consistent with Chapter 10.*

6. Consider changing the name of "silvicultural point source" to something more reflective of the activity.

The DEQ has evaluated the merits of changing the name of "silvicultural point source". Because this term and definition are consistently applied in the federal regulations and in state regulations since 1972 and the regulated community is accustomed to the term and not objecting, changing the definition may cause more confusion and inconsistency than retaining the term. Therefore, the WQD does not recommended changing the term "sivicultural point source".

Section 4 - General Permits

1. On page 2-21, paragraph (i)(ii) - How do interested persons know when an authorization is issued?

The DEQ agrees that this is a valid concern and suggests that, consistent with current practices under the storm water general permit authorizations, all authorizations along with the general permit be posted at the physical location covered by the authorization. The following language has been added to Section 4 (l):

(l) *Permit conditions:*

- (i) *General permits will include all conditions determined necessary by the state for protection of the surface waters of the state.*
- (ii) *General permits will require a copy of the authorization letter be posted at the physical location of the permitted site in a prominent and safe place for public viewing.*

Section 5 - Effluent Permits

1. On page 2-28, paragraph (v)(O) - Clarify in a narrative the meaning and purpose of this provision.

The provision is specifically requested for use in calculation of mixing zones. In preparing the mixing zone calculation, it is necessary to know how far into and how deep the discharge outfall is.

2. On page 2-29, paragraph (v)(T) - Specify the types of SEO and OGCC permits and address the need for LQD and AQD permits.

Reference to the specific types of SEO and OGCC permits has been added. Reference to LQD and AQD is sufficiently covered in the provision requesting any other relevant state permits.

3. Readdress comment #37 regarding the timing of permits.

The WQD after considering public comment through the rule making process with the Advisory Board concluded that it was reasonable to not subject an applicant to a 180 day waiting period before finding out the application was incomplete. A 45 day comment period was determined to be reasonable for a completeness review. This information was shared with the NPDES Task force at the time rule making was being considered. The WQD and NPDES Task force concluded that it was not necessary or appropriate to include a minimum time for technical reviews because the complexities will vary. The task force did recommend that the WQD stay within the existing average time frames for permit review and issuance.

Section 7 - Isolated Wetlands

1. Provide an explanation of how this section will be implemented (Specific Criteria)

The primary goal is to achieve no net loss of naturally occurring wetland function and value in the state. Man-made wetlands that were created as mitigation for some previous disturbance are treated the same as naturally occurring wetlands. Below is the process that will be considered when attaining this goal.

The applicant will evaluate the size of the wetland disturbance.

If the disturbance is one acre or less, then the project is permitted by rule provided that there is no discharge of solid wastes, hazardous wastes, hazardous materials, hazardous constituents radioactive material or any toxic substance (Section 7((f)).

If the disturbance is greater than one (1) acre, then the applicant will submit a notice of intent (NOI) for coverage under an isolated wetland mitigation general permit. The WQD will work to develop and issue the general permit. With the NOI, the applicant will also submit a mitigation plan. A mitigation plan that utilizes Wetland Banked Credits will be approved by WQD in accordance to the Wyoming Statewide Wetland Mitigation Bank, Guidelines for Interpretation and Implementation, April 1995. The guideline shall, at a minimum provide for:

- o Criteria under which mitigation credits may be earned;*
- o Geographical and other appropriate limitations for the application of mitigation bank credits;*
- o Criteria for the use, banking or sale of banked credits;*
- o The approval by the department for the earning, using, banking, transfer or selling of mitigation bank credits; and*

- *Requirements for the maintenance and submission by the department of records concerning ecological function and wetland value losses, and credit and debit accounts for each mitigation bank.*

All NOIs received will be evaluated for completeness within 30 days of receipt. If the NOI is determined to be incomplete, a notice will be provided to the operator describing the additional information needed for a complete NOI. Please refer to Section 4(f) for more details related to the processing procedures for NOIs.

If appropriate, the WQD will issue a written authorization under the isolated wetland mitigation general permit.

2. Address concern that this section is being implemented through a guidance document that is not subject to public review and comment and can change.

The Wyoming Statewide Wetland Mitigation Bank, Guidelines for Interpretation and Implementation, April 1995 is a guideline document that is not a defined set of regulations but rather an expression of the department's policy. This document may be modified in the future, however, any changes must be approved by the Advisory Board.

3. Address the need for public notification and notifying downstream landowners.

The WQD has considered the suggestion to incorporate notification requirements for downstream landowners and concluded that notifying downstream landowners is not necessary. Since the wetlands are considered to be isolated waters, it is unlikely that downstream landowners will be affected by the activity. However, according to Section 7(b)(iv), the mitigation plan must include the name(s) and address(s) of adjacent property owners who may be affected by the activity.

Section 15 - Public Participation

1. Address notification of downstream landowners.

The WQD has reevaluated this suggestion and stand by our previous response to this comment. It is WQD's opinion that there is sufficient opportunity for interested parties to obtain information regarding a permit through the provisions that are included in Section 15, which are the same consideration for notice provided to downstream States. The NPDES Task Force also provided recommendations that suggest the operators should work, prior to development, with the surface users and the appropriate permitting agency to identify the appropriate water management techniques that would be the most beneficial for livestock, agriculture, and wildlife. In addition, watershed permitting, once implemented, will help to facilitate communication regarding water management options among potentially affected parties within a watershed.

All Appendices

1. In all Appendices look for consistency in the location of definitions (front or back).

The WQD reviewed the Appendices and concluded that where there are discrepancies in formatting of definition locations it was because the definitions were applicable only to those provisions of the appendix. Therefore, the WQD concluded that the location of definitions within the appendices was appropriate and no changes were made.

Appendix B, C and D

1. Should Coal Mines be subject to these Appendices in addition to Appendix J?

Yes, the provisions of Appendices B, C and D pertain to application requirements consistent with federal regulations at 40 CFR 122.21(g), 40 CFR 122.21 (k) and 40 CFR 122.21 (h) respectively. The provisions of Appendix J pertain to effluent limits specific to coal mines. The provisions of Appendices B, C and D were not expressly combined with Appendix J because Appendices B, C and D apply to more than just coal mines.

Appendix H

1. Consider SAR and Ec limits for irrigation. Provide a narrative effluent end of pipe limit in Appendix H.

In January 2002, the Wyoming DEQ, through the Water Quality Division (WQD) organized a workgroup to help the agency evaluate the need for numeric criteria for SAR and Ec. In January 2004, the WQD issued its findings and conclusions from the work completed by the workgroup and are attached to this memorandum. For the reasons described in the attached "Finalization of the Recommendations of the SAR/EC Workgroup" it is the WQD's opinion that the agency recommendations will satisfactorily address concerns with Ec and SAR. Specifically, the recommendations to address concerns/problems associated with interpretation and application of the numeric standard the WQD is pursuing the following:

- *Development of a Chapter 1, Section 20 Implementation Policy that would be public noticed and brought before the Water and Waste Advisory Board. The WQD anticipates completion and public notice of a draft document by October 2004.*
- *Clarification on what is meant by the term "measurable decrease". This clarification would be incorporated into the aforementioned Implementation Policy.*

2. Provide a narrative explanation of beneficial use.

The Clean Water Act requires that effluent limits be established in permits that are based on technologies available to treat pollutants in addition to limits based on water quality standards for protecting the designated uses of receiving streams. The national Effluent Limitation Guidelines (ELG) associated with the Oil and Gas Point Source Category predate the development of coal bed methane extraction technology; however, the technology is similar enough to conventional gas extraction that, in the professional judgement of the Wyoming Department of Environmental Quality (WDEQ), these ELGs are appropriately applied to coal bed methane gas production.

According to the federal regulations, "no discharge" is allowed for onshore operations, unless the discharge of produced water occurs west of the 98th meridian and is used for agricultural purposes and/or wildlife propagation. The basis for this "no discharge" exemption (subpart E of 40 CFR 435) is that, within certain limits, produced water can be a benefit to wildlife, stock, irrigation and the health and diversity of an arid environment. The regulations further state that the produced water shall be of good enough quality to be used for wildlife or livestock watering, or other agricultural uses and that the produced water is actually put to such uses during periods of discharge.

This federal effluent guideline was revised in the mid 1970's from earlier versions to allow surface discharge west of the 98th meridian after EPA received comments supporting surface discharges were received from the Wyoming Game and Fish Department, Wyoming Department of Environmental Quality, and several members of the Agricultural Community.

Appendix J

1. On Page J-3 - Should reference to Appendix B and C be taken out?

No, the provisions of Appendices B, C and D pertain to application requirements consistent with federal regulations at 40 CFR 122.21(g), 40 CFR 122.21 (k) and 40 CFR 122.21 (h) respectively. The provisions of Appendix J pertain to effluent limits specific to coal mines. The provisions of Appendices B, C and D were not expressly combined with Appendix J because Appendices B, C and D apply to more than just coal mines.

2. Why does "process water" include pit pumpage? Recommend removing.

"Pit pumpage" from mining activities is appropriately included in the definition of "process wastewater" for the following reasons:

- 1. The pit pumpage clearly falls within the definition of "pollution" that would be regulated under the Wyoming Environmental Quality Act.*
- 2. The definition of is consistent with the federal regulations. Excluding "pit pumpage" from the definition would arguably lead to rules that are less stringent*

than the federal regulations which is not allowable under the conditions of state program authority.

3. *The original definition of "process water" in Chapter 10 did include " water originating from a pit or shaft in which mining is occurring or has occurred,... ", therefore the definition of process wastewater is consistent with Chapter 10.*

Addendum

DEQ Response to EQC July 7, 2004 Questions

This addendum provides additional clarification to EQC questions raised on July 7, 2004, regarding proposed Wyoming Water Quality Rules and Regulations Chapter 2. Specifically, this addendum addresses the Agricultural and/or Wildlife Use provisions of Appendix H.

On September 15, 1975, U.S. EPA published, in Federal Register, Vol. 40, No. 179, a Notice of Interim Final Rule Making for offshore segment of the oil and gas extraction point source category (40 CFR Part 435). This interim final rule making established effluent guidelines for existing source. The Interim Final Rule did not contemplate allowing surface discharge for the onshore segment of the oil and gas extraction point source category. The following Wyoming organizations commented on the Interim Final Rule: Wyoming Department of Environmental Quality; Wyoming Environmental Institute; Powder River Basin Resource Council - Buffalo, Wyoming; Wyoming Game and Fish Department; and the Wyoming State League of Women Voters. In addition, many other states and interested parties commented on the Interim Final Rule.

On October 13, 1976, U.S. EPA published, in Federal Register, Vol. 41, No. 199, a Notice of Interim Final Rule Making for onshore segment of the oil and gas extraction point source category (40 CFR Part 435). The regulation amended Part 435 and was applicable to existing sources for the onshore subcategory, the coastal subcategory, the beneficial use subcategory and the stripper subcategory. The applicable subcategory to Wyoming was the beneficial use subcategory which where applicable to facilities where the produced water has a beneficial use when discharged to navigable waters.

The term "onshore" was defined as all land and water areas landward from the inner boundary of the territorial seas. The term "beneficial use" was defined as meaning that the produced water is of good enough quality to be used for livestock watering or other agricultural uses and is being put to such use.

435.32 (a) and (b) established the following effluent limitations for the Beneficial Use Subcategory of the Onshore Segment of the Oil and Gas Extraction Point Source Category.

(a)(1) There shall be no discharge of waste water pollutants into navigable waters from any source (other than produced water) associated with production, field exploration, drilling, well completion, or well treatment (i.e., drilling muds, drill cuttings, and produced sands).

(a)(2) Produced water discharges shall not exceed the following limitation:
Oil and grease.....45 mg/l.

(b) The discharger must show beneficial use of the produced water being discharged to qualify for this subpart.

The following Wyoming organizations commented on the Interim Final Rule: State of Wyoming; Powder River Basin Resource Council; State of Wyoming State Engineers Office; Wyoming Department of Agriculture; Wyoming Game and Fish Department; and the Wyoming State League of Women Voters; League of Woman Voters, Cheyenne, Wyoming; Wyoming Environmental Institute; City of Worland, Wyoming. In addition, many other states and interested parties commented on the Interim Final Rule. Some of the more significant issues raised were as follows:

(1) Many commenters stated that no discharge requirements for onshore oil and gas production should not be universal and that discharge of low TDS produced waters when used for cattle water, irrigation, etc. should be excluded.

EPA agreed with the comment and discharge to surface waters of produced water was allowed and left to the permit issuing agency to determine if the beneficial use provisions were being met.

(2) It was suggested that the Wyoming standard of 10 mg/l be used.

EPA stated that they would evaluate and adjust in the future if data suggested that a change was appropriate.

(3) Some commenters supplied information about the problems of taste and odor caused by produced water discharges, even when these wastes were low in TDS and were considered beneficial use discharges.

EPA responded even if beneficial use can be shown, the discharge is still subject to further regulation of applicable water quality standards.

On April 13, 1979 U.S. EPA published, in Federal Register, Vol. 44, No. 73, Federal Effluent Guidelines for the oil and gas extraction point source category (40 CFR Part 435). This was a revision to the existing provisions of Part 435. Specifically, Subpart E (435.50 -52) was amended as follows:

1. The term "Beneficial Use" was changed to "Agricultural and Wildlife Water Use Subcategory" because of the term "beneficial use" is used by agencies regulating water quantity, which created unnecessary confusion.

2. 435.50 was revised by limiting the applicability of the Agricultural and Wildlife Water Use Subcategory to onshore facilities located in the continental United States and west of the 98th meridian for which produced water has a use in agriculture or wildlife propagation when discharged into navigable waters.

3. 435.51 (c) included the following revisions: The term "use in agricultural or wildlife propagation" means that the produced water is of good enough quality to be used for wildlife or livestock watering or other agricultural uses and that the produced water is actually put to such use during periods of discharge.

4. 434.52 (a) included the following revisions:

(1) There shall be no discharge of waste pollutants into navigable waters from any source (other than produced water) associated with production, field exploration, drilling, well completion, or well treatment (i.e., drilling muds, drill cuttings, and produced sands).

(2) Produced water discharges shall not exceed the following daily maximum limitation:
Oil and grease.....35 mg/l.

The federal effluent guidelines have not been revised since 1979. The Wyoming DEQ has historically taken the position that if the produced water discharge meets the effluent limitations established to protect designated uses established in the water quality standards, through protection of water quality criteria, then there is a rebuttable presumption that the water will be used by agriculture or wildlife.

In recent years 2000-2001, U.S. EPA has requested that DEQ demonstrate how the water is being used for agriculture or wildlife. The Wyoming Game and Fish Department provided a letter to the DEQ in 2001 stating that historic conventional oil and gas discharges were a benefit to wildlife. This letter addresses the demonstration for historic discharges. New conventional oil and gas facilities must provide the DEQ with an Agricultural or Wildlife Use statement with the application to satisfy this demonstration.

Because the EPA has taken the position that the federal effluent guideline 40 CFR Part 435 does not apply to coal bed methane facilities, EPA is not requiring DEQ to require documentation of actual use. DEQ continues to support the position that there is a rebuttable presumption that the water will be used by agriculture or wildlife as long as all applicable water quality standards are met.