BEFORE THE ENVIRONMENTAL QUALITY COUNCIL

PETITION TO AMEND WYOMING WATER QUALITY RULE, CHAPTER 2, APPENDIX H	)))	05-3102

PETITIONER'S FIRST STATUS REPORT

COME NOW, Petitioners, and on this 8th day of May, 2006, respectfully submit their First Report on the status of the above-captioned rulemaking Petition.

1. Course of Proceedings

Petitioners filed their Petition to Amend Wyoming Water Quality Rule, Chapter 2, Appendix H December 7, 2005. The Council held a public prehearing conference on the Petition pursuant to the Environmental Quality Rules or Practice and Procedure Applicable To Rule-Making Hearings or Hearing by an Administrator of a Division of DEQ, Chapter III, Section 2(c) February 16, 2006, and, at the conclusion of that prehearing conference, voted unanimously to set the Petition for a rulemaking hearing.

In response to comments from the public and from some of the Council members, Petitioners submitted to the Council on March 2, 2006 a revision which left intact the provisions of Appendix H as to traditional oil and gas, and focused the proposed rule changes exclusively on CBM in a new Appendix I.

On April 18, 2006, Formal Opinion 2006-001 of the Wyoming Attorney General was made public. The eight-page Opinion, dated April 12, 2006, and addressed to Governor Dave Freudenthal, discussed the following question and answer:

Question:

Does the Wyoming Environmental Quality Act (EQA) grant authority to regulate water quantity to ensure that all produced water from coalbed natural gas (CBNG) production is at all times actually used for wildlife or livestock water or other agricultural uses.

Brief Answer:

No. The EQA allows regulation of the quantity of water if the quantity has an unacceptable effect on the quality of water.

The Attorney General is scheduled to discuss his opinion with the Council at its May 11 meeting. Petitioners do not know at this time whether that discussion will take place in public or in an executive session.

In light of recent developments, Petitioners respectfully submit their status report, along with a proposal for going forward to address the significant issues that were recognized by this Council at the February 16 conference.

2. Summary of Petitioners' Position

Petitioners are disappointed in the administration's continued pattern of seeking ways to say it cannot take action to address the real concerns created by CBM water, and they disagree with the superficial and result-oriented legal analysis of the AG Opinion. However, Petitioners believe that the Council can proceed with a rulemaking that does effectively address the issues raised by the original Petition, and that the Council can do so within the parameters of the AG Opinion. The solution is embodied in the attached Exhibit 24, the proposed Appendix I.

3. Discussion

The AG Opinion Recognizes Broader Authority to Regulate Water Quantity than the DEQ Currently Exercises. This Authority is Sufficient for Regulation to Address the Problems Raised by Petitioners.

The AG Opinion takes away with one hand and gives back with the other. The Question is framed in a distorted way that confuses state and federal law, and is designed to get the answer it got: "No."[1] The answer is then qualified: "The EQA allows regulation of the quantity of water if the quantity has an unacceptable effect on the quality of water." That allows broad regulatory latitude, because it recognizes authority to regulate the downstream effect of water quantity on water quality. For example, currently the DEQ refuses to take enforcement action when the cumulative impacts of CBM discharges, combined with channel geology, result in water quality that is toxic to existing vegetation. *See* Exhibit 25, exchange of e-mails regarding SA Creek, where small releases of CBM water, possibly combined with seepage from CBM reservoirs, created low flows in SA Creek. USGS readings found ECs in excess of 7500, definitely harmful to vegetation, and consequently injurious to the livestock that depends upon it. Yet DEQ conclused no violation occurred because CBM discharges met end-of-pipe effluent limits. DEQ enforcement personnel explained this is "what we would expect under the low flow conditions existing. . ." and failed to consider that low flow conditions were created by CBM water quantity, which clearly "has an unacceptable effect on the

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[1] The real question may be; why didn't the Governor, or the DEQ Director, ask three or four years ago for the answer to the question: "What authority does the DEQ have under the EQA and the CWA to address the pollution created by CBM produced water?"

quality of water." Under the law as set forth the AG Opinion, DEQ could and should regulate such an impact.

This broad latitude is further supported by the language of the EQA,[2] which authorizes DEQ/EQC to "prevent, reduce and eliminate pollution." Wyo. Stat. § 35-11-102. The definition of "pollution" is set forth at p. 3 of the AG Opinion:

> . . . contamination or alteration of the physical, chemical, or biological properties of any waters of the state, including change in temperature, taste, color, turbidity or odor of the waters or any discharge of any acid, or toxic material, chemical or chemical compound, whether it be liquid, gaseous, solid, radioactive or other substance, including wastes, into any waters of the state which creates a nuisance **or renders any waters harmful, detrimental or injurious** to public health, safety or welfare, to domestic commercial , industrial, **agricultural, recreational or other legitimate beneficial uses, or to livestock, wildlife or aquatic life**, or which degrades the water for its intended use, or adversely affects the environment.
>
> Wyo. Stat. § 35-11-103(c)(emphasis in AG Opinion).

For example, "pollution" and the DEQ/EQC authority, extends to a situation in which produced water ("waste"[3]) is discharged "into any waters of the state" and "renders any waters harmful . . . to . . .agricultural . . . uses. . . or to livestock," which would include livestock forage, channel erosion, vegetative changes to more salt-tolerant less palatable species, etc. Produced water which mobilizes salts, and leaves deposits in the channel to be later picked up by produced water or natural flows, or to infiltrate into

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[2] Including:

No person, except when authorized by a permit issued pursuant to the provisions of this act, shall:

. . .

(iv) Increase the quantity or strength of any discharge. . .

Wyo. Stat. § 35-11-301(a).

[3] "Wastes" means sewage, industrial waste and all other liquid, gaseous, solid, radioactive, or other substances which may pollute any waters of the state;" Wyo. Stat. § 35-11-103(c)(2).

groundwater, also fits within this definition, and within DEQ/EQC authority. These sorts of impacts are just the impacts which Petitioners have sought to have the EQC address through their original Petition.

Petitioners therefore offer an amended rule, that deletes the change to ¶(a)(i), and instead adds two provisions that exactly track the language of the AG Opinion, so that CBM-produced water would be subject to the limitations that (1) the quantity of produced water would not cause, or have the potential to cause, unacceptable water quality, and (2) the produced water would not constitute "pollution" as defined in the EQA. *See* Draft Appendix I, Exhibit 24.

An important element of the proposed Appendix I language is the requirement at sub-paragraph (a) that the applicant produce "credible data" establishing the requirements above. As defined at 35-11-103(c)(xix),

> "Credible data" means scientifically valid chemical, physical and biological monitoring data collected under an accepted sampling and analysis plan, including quality control, quality assurance procedures and available historical data.

This requirement is important because it puts the burden of proof where it belongs: on the applicant, and not on the potentially injured landowner. For too long, DEQ has improperly placed the burden on the protesting landowner to show damage from CBM produced water, when the EQA clearly places the burden on the applicant to show that the laws and regulatory requirements will be complied with – in this case, that the discharge would not cause pollution or have the potential to cause unacceptable water quality. The EQA provides that permits should be issued "upon proof by the applicant that the procedures of this act and the rules and regulations promulgated hereunder have been complied with." Wyo. Stat. § 35-11-801(a). That proof should be stringent enough

so that the public can assess and rely on it, and DEQ must by regulation be required to demand proof that fits the EQA standard of "credible data."

With these proposed changes to Chapter 2, Appendix I, Petitioners believe that their interests can be addressed within the confines of the AG Opinion.

3. What now?

The Council has the following options:

A. Do nothing.
B. Proceed with the rulemaking as set forth in the original Petition.
C. Proceed with the rulemaking as proposed herein.

A. The do-nothing approach worked well when Wyoming was "open for business," but it is a poor substitute for thoughtful policy or effective regulation. The evidence and testimony at the February 16 conference made it clear that there has been a crying need for the State to address impacts to landowners and to the environment caused by CBM produced water. It is no longer acceptable for the DEQ to say, "our hands are tied." Fortunately, this Council has the authority to promulgate rules that direct the DEQ to untie its hands.

B. The Council could also proceed with the rulemaking as set forth in the original Petition. Petitioners believe that their original argument, based on the Clean Water Act and the exclusion in 40 C.F.R. part 435 Subpart E, is still valid and legally correct, notwithstanding the Attorney General's attempt to disregard the controlling effect of the Clean Water Act. The AG Opinion focuses on state law (and interestingly, relies largely on DEQ's own regulations for authority), and addresses federal law only in a limited way. The Opinion attempts to distinguish the federal cases cites by Petitioners,

yet ignores the central point for which they were cited – to support the common-sense position that water quality and water quantity are intertwined. (*See* Petition at 10-11). (Possibly the AG does not address that point because the Opinion is essentially in agreement with it.) The AG further cites to the Federal Register for a reference to its discussion of the "beneficial use" exclusion's history (AG Opinion at 4-5), but he omits this pertinent discussion in the same document:

> Subcategory E was initially established in response to comments from certain western states asking that the Agency allow the use of produced water for agricultural or wildlife purposes. Investigation showed that in arid portions of the western United States low salinity produced waters were often the only, or at least a significant, source of water used for those purposes. Although not required by the Clean Water Act, the Agency chose to accommodate this situation by the creation of Subpart E. <u>It is intended as a relatively restrictive subcategorization based on the unique factors of prior usage in the region, arid conditions and the existence of low salinity, portable water.</u>

44 Fed. Reg. 22069, 22072 (April 13, 1979)(emphasis added)(complete copy attached as Exhibit 26).

Subcategory E was surely not intended as a license to discharge 75,000 acre-feet of waste water a year into the ephemeral draws of Wyoming. The practice is a violation of the Clean Water Act, and the EQA.

What the AG Opinion ignores, when it suggests that the Petition proposes to have DEQ regulate water quantity that is unrelated to water quality, is that, with the passing antelope test DEQ is already improperly making a beneficial use presumption that is outside the scope of its authority. *See* Exhibit 27, DEQ Response to Comments at 1-2, in which DEQ takes the position that the current Chapter 2, Appendix H language is in fact a blanket "beneficial use" determination (perhaps the AG should opine on whether Wyoming law authorizes the DEQ to make such a determination at all).

No matter what the EQA says, DEQ is bound by its commitment to primacy under the Clean Water Act to comply with its provisions. The current practice under Chapter 2, Appendix H,[4] violates the CWA and EQA and the Council is well within its authority to promulgate rules that bring it into compliance.

The Council is not bound to abide by the opinion of the Wyoming Attorney General. If it were, the Attorney General might just as well be named Director of each and every Board and Agency of the State of Wyoming. Aid for Women v. Foulston, 441 F. 3d. 1101, 1108, n.6 (10th Cir. 2006)("It is the well-settled position of this court that attorney general opinions are not binding law in Kansas, but are merely persuasive authority. Thus, county and district attorneys are not bound by opinions of the Attorney General.") In Wyoming, an Attorney General's opinion is far from a controlling statement of the law. The Wyoming Supreme Court held that an AG's opinion was "entitled to some weight given the fact that state officials acted upon the opinion" in Director of the Officer of State Lands & Investments v. Merbanco, Inc., 70 P.3d 241, 256 (Wyo. 2003)(emphasis added).

The EQA requires the Attorney General, "upon request" of the Council, to "provide such legal assistance as the council may require. . ," and it also authorizes the Council to "employ independent legal assistance as necessary to the proper performance of its duties." Wyo. Stat. § 35-11-112(e).

The Council may request, or not request, the legal assistance of the Attorney General, it may accept or reject the Attorney General's opinion, or it may employ independent legal assistance. The Council has the legal authority to proceed with the

[4] Chapter 2 has never been approved by EPA.

original Petition.

C. Finally, the Council could proceed with a rulemaking hearing based upon the revised rule modification discussed above and attached as Exhibit 24. Such an approach would presumably have the blessing of the Wyoming Attorney General, and it would go far to accomplish the objectives identified in the February 16 conference before this Council.

Petitioners propose that no further pre-hearing conference would be necessary for this approach, as the practical considerations were thoroughly aired at the February 16 conference, and the basis for the modification is fully discussed in the AG Opinion. Contrary to the assertions of industry in their May 5, 2006 *Joint Motion to Deny and Terminate Proceedings on Petition to Amend Wyoming Water Quality Rule Chapter 2, Appendix H,* there is no requirement that the rulemaking proceedings be terminated. Setting a pre-hearing conference is at the discretion of the Council. Environmental Quality Rules or Practice and Procedure Applicable To Rule-Making Hearings or Hearing by an Administrator of a Division of DEQ, Chapter III, Section 2(c) ("council may hold a prehearing conference"), and nothing prohibits amendment of the original rulemaking petition.

Wherefore, Petitioners respectfully request that the Environmental Quality Council set this Petition for Rulemaking for hearing as expeditiously as possible under the Wyoming Administrative Procedures Act, receive comments and information, and adopt the amended Chapter 2, Appendix I of the Wyoming Water Quality Rules attached hereto as Exhibit 24.

Dated this 8th day of May, 2006.

Kate M. Fox

Kate M. Fox
Davis & Cannon
422 W. 26th St.
P.O. Box 43
Cheyenne, WY 82003
(307)634-3210

CERTIFICATE OF SERVICE

I hereby certify that I served, via e-mail and United States Mail, a true and correct copy of the foregoing First Status Report, dated May 8th, 2006, addressed as follows:

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APPENDIX I

Additional Requirements Applicable to

Produced Water Discharges from Coal bed Natural Gas

(coalbed methane "CBM") Facilities

(a) Applications for produced water discharges from coal bed methane gas production facilities shall be on the form provided by the administrator, and shall include, in addition to the requirements of Section 5 (a)(v), credible data establishing each of the following: ~~Application requirements specific to all produced water discharges from coal bed methane gas production facilities must provide the following information, in addition to that described in Section 5 (a) (v), to the administrator, using the application form provided by the administrator.~~

(i) That the produced water discharged into surface waters of the state shall have use in agriculture or wildlife propagation. The produced water shall be of good enough quality to be used for wildlife or livestock watering or other agricultural uses and actually be put to such use during periods of discharge;~~.~~

(ii) That the quantity of produced water shall not cause, or have the potential to cause, unacceptable water quality;

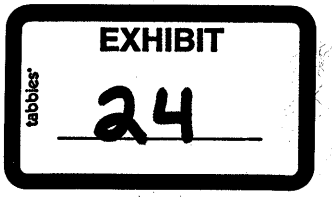
(iii) That the produced water shall not cause contamination or other alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity or odor of the waters; or shall not cause the discharge of any acid or toxic material, chemical or chemical compound, whether it be liquid, gaseous, solid, radioactive or other substance, including wastes, into any waters of the state which:

(a) creates a nuisance, or

(b) renders any waters harmful, detrimental or injurious to public health, safety or welfare, to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses, or to livestock, wildlife or aquatic life, or

(c) degrades the water for its intended use, or

(d) adversely affects the environment.



(b) Permits for all produced water discharges from gas production facilities shall include the following conditions and limitations:

(i) In no case shall any produced water discharge contain toxic materials in concentrations or combinations which are toxic to human, animal or aquatic life.

(ii) Diffuse discharges. Water shall not be discharged in a diffuse manner such that damage to land and/or vegetation occurs.

(iii) Facility identification. All facilities authorized to discharge produced water shall be clearly identified with an all-weather sign posted at a visually prominent location. The sign shall be securely mounted and maintained to prevent the sign from being knocked down by livestock or wind. In the case where multiple outfalls are permitted or authorized, a sign shall be posted to identify each outfall. Signs shall, as a minimum, convey the following information:

(A) The name of the company, corporation, person or persons who hold(s) the discharge permit;

(B) The name of the facility (lease, tank battery number, etc.) as identified by the discharge permit; and

(C) The WYPDES permit number assigned to the facility and outfall identification number assigned to each outfall.

(iv) Measures must be implemented to minimize erosion of the drainage at the point of discharge.

(v) Discharges of produced water will not contain substances that will settle to form sludge, bank or bottom deposits in quantities sufficient to result in significant aesthetic degradation, significant degradation of habitat for aquatic life or adversely affect public water supplies, agricultural or industrial water use, plant life or wildlife.

(vi) Discharges of produced water may not result in the formation of a visible hydrocarbon sheen on the receiving water.

(vii) The following effluent limitations are protective for stock and wildlife consumption. Limitations on additional parameters or limitations more stringent will be imposed when such limitations are necessary to assure

compliance with Wyoming Water Quality Rules and Regulations, Chapter 1.

(A) Chlorides. The chloride content of any produced water discharge shall not exceed 2,000 mg/l in any single properly preserved grab sample except in those cases where a modification is granted in accordance with paragraph (c) of this appendix.

(B) Sulfates. The sulfate content of any produced water discharge shall not exceed ~~3,000~~500 mg/l in any single properly preserved grab sample except in those cases where a modification is granted in accordance with paragraph (c) of this appendix.

(C) Total dissolved solids and specific conductance. The total dissolved solids content of any produced water discharge shall not exceed ~~5,000~~2,000 mg/l for total dissolved solids or 7500 µmhos/cm for specific conductance in any single properly preserved grab sample except in those cases where a modification has been granted in accordance with paragraph (c) of this appendix.

(D) pH. In no case shall the pH of any produced water discharge be less than 6.5 or greater than 9.0 standard units as measured by a single grab sample.

(E) Barium. The barium content of any produced water discharge shall not exceed .2 mg/l in any single properly preserved grab sample except in those cases where a modification is granted in accordance with paragraph (c) of this appendix.

(viii) Samples collected to demonstrate compliance with effluent limitations specified in this appendix shall be collected as grab samples and reported as an instantaneous maximum, unless otherwise specified.

(ix) There shall be no discharge of waste pollutants into surface waters of the state 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). These materials shall be managed in accordance with applicable state and federal regulations.

(x) All water quality samples collected by the Department and discharge permit holders subject to this Appendix shall be taken from the free fall of water from the last treatment unit which is located out of the natural drainage. The sample must not be mixed with waters of any other surface water or with

water from another discharge point.

(c) Additional Permit Conditions and Limitations

(i) Where discharge water is accessible to livestock and/or wildlife; meets the effluent limitations as specified in this appendix; and meets the criteria for the protection of livestock and wildlife as specified in Wyoming Water Quality Rules and Regulations Chapter 1, Wyoming Surface Water Quality Standards, the discharge will be considered in compliance with the requirements of Appendix I (a) (i) of these regulations

(ii) For discharge permit applications filed after the date of adoption of these regulations, modification of effluent limits described in paragraph (b) (vii) of this appendix may be granted on a case by case basis. The Water Quality Administrator shall review all requests for modification of effluent limits submitted under this section and make a determination based upon the technical merits of a Use Attainability Analysis. Such requests shall also provide a signed "letter of agricultural or wildlife use" by the land owner specifically requesting that the discharge will serve a specific agricultural or wildlife use or a demonstration that the conditions of Appendix I (c) (i) have been met.

(iii) Location of disposal pits. Location of disposal pits shall be managed in accordance with applicable state (e.g. Oil and Gas Conservation Commission) and federal (e.g. Bureau of Land Management) regulations.

(iv) The permittee shall take all reasonable measures to prevent downstream erosion that would be attributable to the discharge of produced water.

Kate Fox

From: Brian Lovett [BLOVET@state.wy.us]
Sent: Monday, April 03, 2006 5:06 PM
To: Jill Morrison; John Corra; John Wagner
Cc: Kate Fox; Mary Flanderka; Ryan Lance
Subject: Re: CBM EC exceedence in SA Creek

Jill, I have reviewed the referenced USGS data and have had the inspection staff investigate the permitted discharges on SA Creek.
Inspection staff visited the SA Creek facilities on February 23, 2006 and March 22, 2006. The USGS data reflects what we would expect under the low flow conditions occurring at the time of the USGS sampling and corresponds to the antidotal information we have received regarding these waters. The results of the field inspections are summarized below.
Thank you for your concern in this matter. If I can provide any additional information please contact me. Brian.

SA Creek WYPDES authorized discharges:

J. M. HUBER
WYPDES Permit WY0041025 has an Irrigation Compliance Point(ICP) and end of pipe limits (EOP). No flow was present at the ICP at the time of the inspection. The EOP results for specific conductance reported have ranged from 1700 to 2200 (7500 permitted).

WYPDES Permit WY0049981 has an ICP and EOP limits but was discharging into a full containment reservoir at the time of our visit and was not contributing flow to the ICP. The EOP specific conductance was 2000 (7500 permitted).

WYPDES Permit WY0040355 has EOP limits for specific conductance and has reported values of 1800-2200 (7500 permitted). This outfall is contributing to flow in SA Creek and potentially reaching Powder River.
However increases in specific conductance are occurring in the channel and do not result in any permit compliance concerns.

YATES
WYPDES Permit WY0047520 has EOP limits for specific conductance and was not contributing flow to SA Creek..

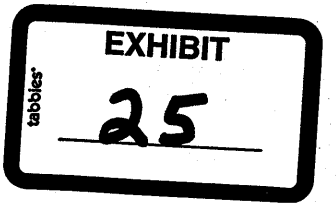
WYPDES Permit WY0047589 also has EOP limits for specific conductance and has reported values ranging from 1900-3100 (7500 permitted). This facility was not contributing to flow in SA Creek.

STORMCAT
WYPDES Permit WY0046701 has EOP limits and has reported specific conductance of 100-1400 (7500 permitted). This discharge is currently to on channel reservoirs that are containing the discharge.

WYPDES Permit WY0047007 has EOP limits for specific conductance. This discharge is currently going to an off-channel full containment reservoir. Reported specific conductance for the outfall ranges from 1900 to 2400 (7500 permitted).

In Summary; The identified permits are in compliance with the established effluent limits, specific conductance increases as flow proceeds down the channel. There is no regulatory limit associated with the USGS monitoring point.

>>> "Jill Morrison" <jillm@powderriverbasin.org> 02/13/06 3:35 PM >>>
Gentlemen:



According to the USGS data below on SA Creek the CBM discharge reaching the Powder River in SA Creek has violated the EC limit of 7500 for the last two months recorded, August (EC 8130) and September (7990) of 2005. See the link below. The data collected from Oct, Nov, Dec and Jan has not yet been posted. I'd like to know what DEQ is doing regarding these EC exceedences?
http://wy.water.usgs.gov/projects/qw/data2005/2005_stations/06324300.htm

Thanks, Jill Morrison

Jill Morrison
Organizer
Powder River Basin Resource Council
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check our website: www.powderriverbasin.org

§ 180.303 Oxamyl; tolerances for residues.

* * * * *

Commodity	Parts per million
* * *	* * *
Citrus fruits	3
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[FRL 1201-4; PP 7F1909/R188]
[FR Doc. 79-11635 Filed 4-12-79; 8:45 am]
BILLING CODE 6560-01-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 435

Effluent Guidelines and Standards, Oil and Gas Extraction Point Source Category

AGENCY: Environmental Protection Agency.

ACTION: Final and Interim Final Rules.

SUMMARY: Final effluent limitations guidelines establishing "best practicable control technology currently available" (BPT) are hereby promulgated for the offshore, onshore, coastal and agricultural and wildlife water use subcategories in the oil and gas extraction industry. These final regulations combine the near and far offshore subcategories of the offshore segment of the industry into a single offshore subcategory. The beneficial use subcategory is renamed the agricultural and wildlife water use subcategory. Finally, the definition of the stripper subcategory is clarified. However, the Agency does not yet have sufficient technical data to promulgate effluent limitations for this subcategory, and, thus, those sections remain reserved. Additionally, this regulation promulgates, as interim final, changes in the descriptions and applicability of the coastal and agricultural and wildlife water use subcategories. Comments on these interim final changes are solicited. The limitations are based upon the application of BPT as defined in section 304(b) of the Clean Water Act of 1977, (PL 95-217, 33 U.S.C. 1251 *et. seq.*) (The Act).

DATES: The effective date of these regulations is April 13, 1979. Comments on the interim final regulations must be received on or before June 12, 1979.

ADDRESS: Comments should be directed to: John M. Cunningham, Effluent Guidelines Division (WH-552), Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460, (202) 426-7770.

FOR FURTHER INFORMATION CONTACT: John M. Cunningham, (202) 426-7770.

SUPPLEMENTARY INFORMATION:

Background

On September 15, 1975 (40 Fed. Reg. 42543) and October 13, 1976 (41 Fed. Reg. 44942), EPA promulgated interim final effluent limitations based on the application of "best practicable control technology currently available" (BPT) for the offshore and onshore segments of the Oil and Gas Extraction point source category. Concurrently, the Agency also proposed effluent limitations based on the application of "best available technology economically achievable" (BAT), pretreatment standards and standards of performance for new sources. After promulgation of these interim final regulations, members of the oil and gas industry filed Petitions for Review of the interim limitations for both the onshore segment, *American Petroleum Institute, et al.*, v. *EPA* (No. 76-4497, 5th Cir.) and offshore segment; *American Petroleum Institute, et al.* v. *EPA* (No. 75-3588, 9th Cir.). In the course of negotiations on these cases, stipulations were entered in which the Agency agreed to promulgate certain of the regulations contained in this notice. These include, among others, the limitations on deck drainage in the offshore subcategory, changes to the Agricultural and Wildlife Water Use subcategory, and with certain reservations, the description of the coastal subcategory.

The regulations set forth below incorporate comments received after publication of the interim final regulations and the Agency's stipulated agreements based on those comments. These regulations deal only with BPT limitations. No changes in the proposed BAT, new source, or pretreatment regulations issued on those same dates are made by the regulations set forth below. Based on comments received to date, the Agency believes that further technical and economic study is required prior to promulgation of those regulations.

Legal Authority

These regulations are promulgated pursuant to sections 301(b) and 304(b) of the Act. Section 301(b)(1) requires the attainment of effluent limitations based upon the application of "best practicable control technology currently available" by July 1, 1977. Section 304(b) provides for the promulgation of regulations defining a technology as "best practicable control technology currently available" and specifies the factors to be taken into account in defining BPT.

Summary and Basis of Regulations

Effluent limitations for oil and grease are established for all subcategories with the exception of the stripper subcategory. The major source of waste waters generated by facilities in this industrial category is produced waters. These produced waters vary from 0 to 99 percent of the total volume of fluids produced. This extreme fluctuation of flow volumes of produced waters depend on natural phenomena and is not subject to process controls. Consequently, the effluent limitations for produced water are concentration based rather than based upon mass per unit of production.

No limitations have been established for several other waste water pollutants identified in field surveys. These decisions were made either because technology is not presently available to control the pollutant discharge or available data indicate they are are normally reduced incidently with the removal or reduction of another pollutant parameter.

Additionally, facilities subject to these regulations may be required to prepare and implement spill prevention control and countermeasure (SPCC) plans under section 311(j) of the Clean Water Act. These requirements are set forth at 40 CFR Part 112.

A report entitled "Development Document for Interim Final Effluent Limitations Guidelines and Proposed New Source Performance Standards for the Oil and Gas Extraction Point Source Category" was prepared in support of the initial interim final BPT limitations. this document discussed the oil and gas industry, available waste treatment technology and the results of the technical study which resulted in the limitations contained in these regulations. Additionally, a supplementary report on the possible economic impacts of the regulations was issued at that time.

Since publication of interim final regulations, interested parties have submitted comments and new data for consideration by the Agency. The changes made in this notice are based on an analysis of those comments and data. In largest part, these revisions merely clarify the interim final regulations. However, in some cases these regulations do alter the anticipated impact of the original regulations. This notice contains a discussion of those revisions and evaluation of those impacts.

Copies of the development document, supplementing economic analysis and public comments are available for

inspection and copying at the EPA Public Information Reference Unit, Room 2922 (EPA Library), Waterside Mall, 401 M Street, S.W., Washington, D.C. Copies of the interim final documents were sent to numerous persons or institutions affected by the regulation or who have placed themselves on a mailing list for this purpose (See EPA's Advance Notice of Public Review Procedures, 38 *Fed. Reg.* 21202, August 6, 1973). An additional limited number of copies of the Development Document are available from the Distribution Officer (WH-552), Effluent Guidelines Division, Environmental Protection Agency, Washington, D.C. 20460.

Summary of Public Participation

As a result of comments received following publication of the interim final regulations, the limitations originally established have been reevaluated. A summary of public participation in this rulemaking, public comments, and the Agency's consideration and response is contained in Appendix B of this preamble.

Summary of Changes

A number of changes are being made to the interim final regulations. A detailed discussion of those changes and their technical basis can be found at Appendix A to this preamble.

Offshore Subcategory—Applicability and Description

Because the BPT limitations for the old near offshore subcategory (subcategory A) and the far offshore subcategory (subcategory B) were identical, and because some confusion existed into which subcategory some facilities should be placed, the two subcategories are combined into a single offshore subcategory.

Coastal Subcategory—Applicability and Description

The coastal subcategory is redefined on a descriptive rather than geographic basis. This subcategory will include facilities operating over water or wetlands located landward of the inner boundary of the territorial seal. This area encompasses certain coastal bays and all inland lakes and wetlands.

Agricultural and Wildlife Water Use Subcategory—Applicability and Description

The beneficial use subcategory is renamed to avoid confusion with the term in western water rights law. Additionally it is redefined to include facilities operating west of the 98th meridian which have produced water that is used for agricultural or wildlife watering purposes.

Deck Drainage Limitations—Offshore and Coastal Subcategories

The oil and grease limitations for deck drainage in the offshore and coastal subcategories were originally established based on data derived from the treatment of deck drainage and produced water in combination. Although the Agency presently has only limited information concerning the technological capability for treating deck drainage separately, there is substantial data that sources in these subcategories are able to achieve the limitation established under the oil discharge regulations promulgated pursuant to section 311 of the Clean Water Act. Consequently, pending further acquisition of data, a limitation of "no discharge of free oil," comparable to that established under section 311, is being promulgated for this parameter.

Agricultural and Wildlife Water Use Subcategory—Effluent Limitations

It has come to the Agency's attention that some of the data used to establish the oil and grease limitation for this subcategory could not be verified as having been analyzed by an EPA approved method. Consequently, those data had to be removed from the data base. Removing those data points resulted in the maximum daily oil and grease concentration being reduced from 45 mg/1 to 35 mg/1.

Economic Analysis

The Agency has made a study of the economic and inflationary impacts of these regulations. Since changes made by these final regulations should not increase costs beyond those projected for interim final regulations, the impacts are estimated to be the same as those of complying with the interim final regulations. It is estimated that the capital cost of complying with the limitations, based on the best practicable control technology currently available, will be between $112.4 and $206.7 million, and the total annual operating costs, including amortization, operating and maintenance expense, to be between $14.1 and $23.6 million. The costs and impacts associated with the regulations are detailed in the economic analysis documents.

Additionally, data has been received which suggests that the interim final revision of the description of the coastal subcategory could result in a reduction of the production from certain affected wells of up to 7.6 million barrels of oil and 32 billion cubic feet of gas at current economic conditions. Estimated continued production of those wells would be 270 million barrels of oil and 1,109 billion cubic feet of gas. The associated capital and operating costs of the wells affected by this revision would be approximately $10 million per year over the average life of the affected wells. Expected deregulation of interstate natural gas prices could significantly reduce the predicted number of well closures since the data upon which closures were estimated assumed that all gas would be sold at regulated interstate prices.

The economic and inflationary effects of these regulations were evaluated in accordance with Executive Orders 11821 and 12044.

Small Business Administration Loans

Section VIII of the Act authorizes the Small Business Administration, through its economic disaster loan program, to make loans to assist any small business concerns in effecting additions to or alterations in their equipment facilities, or methods of operation so as to meet water pollution control requirements under the Act, if the business is likely to suffer a substantial economic injury without such assistance.

For further details concerning this Federal loan program write to EPA, Office of Analysis and Evaluation, WH-586, 401 M Street, S.W., Washington, D.C. 20460.

Solicitation of Comments

Comments are solicited with respect to the revised statement of description and applicability of the Coastal and Agricultural and Wildlife Water Use Subcategories. Comments must be received on or before June 12, 1979.

Dated: April 4, 1979.

Douglas M. Costle,
Administrator.

Appendix A—Discussion of revisions

Offshore Subcategory—Applicability and Description

The interim final regulations for the oil and gas extraction industry defined two separate subcategories, near and far offshore, for the offshore segment of the industry. While this classification was appropriate at a time when the Agency planned to impose different effluent limitations in these subcategories, the establishment of identical limitations based upon "best practicable technology currently available" and the similarity of factors influencing the regulation of offshore facilities have led the Agency to conclude that different subcategories for offshore facilities are unnecessary. Consequently, EPA is now combining

the near and far offshore subcategories into a single offshore subcategory.

Additionally, certain ambiguities with respect to the applicability and description of the offshore subcategories were raised as issues in a Petition for Review of the interim final regulations brought by members of the offshore industry in the Court of Appeals for the Ninth Circuit. First, there was confusion as to the proper classification of facilities which were located in one subcategory of the offshore segment but which discharged into the other subcategory. Further, industry litigants expressed concern that platforms which piped effluent to land-based treatment facilities and then discharged the treated effluent offshore would be classified in the onshore subcategory.

At the time when the offshore segment consisted of two subcategories, the Agency agreed with litigants challenging the interim final offshore regulations to include a preamble provision explaining that, for the offshore subcategory only, classification in a subcategory was to be based on point of discharge. This provision stated: "For the purpose of the effluent limitations guidelines for the offshore segment of the oil and gas extraction category, the locations of the discharge of a point source into the receiving waters shall determine the subcategory into which the point source will be placed."

However, in the exercise of its responsibility to promulgate appropriate regulations, the Agency has combined the two offshore subcategories and defined the classification of offshore sources based upon their location of operation. This action satisfies all objections raised by the industry and effectively implements the objectives of the parties. Not only does combining the subcategories eliminate confusion about the classification of facilities within the offshore segment, but by classifying facilities based on their location of operations, facilities located offshore but treating onshore will be placed in the offshore subcategory. The Agency believes that this is a proper response to this problem. Facilities piping effluent to onshore treatment facilities could, in most cases, use less effective on-site treatment. To classify those facilities as onshore, with a concomitant zero discharge requirement, would discourage the use of land-based treatment and might, in the long run, produce greater levels of pollutant discharge. Thus, classification based on location of operation was considered proper.

In litigation challenging the interim final regulations for the onshore segment of the industry, litigants argue that their operations should be classified based upon point of discharge. The Agency stipulation in the offshore litigation was in no way intended to affect this issue. For the reasons stated above, EPA has not adopted the industry's recommended approach.

Coastal Subcategory—Applicability and Description

The coastal subcategory was originally established when the interim final regulations for the onshore segment of the industry were promulgated on October 13, 1976. (41 FR 44943). This subcategory was established in recognition of the fact that oil drilling and production operations existed on platforms inside the territorial seas which would not qualify for inclusion in either the far offshore or near offshore subcategories. The coastal subcategory was defined in the interim final regulation on a geographic basis which contained specific boundaries for the subcategory identified in terms of latitude and longitude. These boundaries were set to include all platforms of which the Agency was aware which were both inside the territorial seas and which were located in the waters of states that permitted the discharge of produced water.

After analyzing comments and data received during the comment period, and after further consideration by the Agency, a number of problems were evident with respect to this approach. First, industry identified a significant number of facilities located in coastal areas which were not included within the definition of the subcategory because they are located in areas in which state laws do not permit the discharge of produced water. However, since more stringent state requirements are enforceable regardless of the subcategory to which a platform belongs, the Agency believes that their exclusion on this basis is unnecessary. Second, it was pointed out that certain platforms in upper Cook Inlet, Alaska were not included in the subcategory although subject to the same conditions as other platforms in the coastal subcategory.

An overall problem identified by these comments is that defining the subcategory on a geographic basis requires the Agency to reassess the existing boundaries of the subcategory whenever industry explores new areas that might be considered coastal. Since this process would be administratively cumbersome and could lead to unnecessary delays in exploration activities, the Agency has concluded that the coastal subcategory should not be geographically defined. Instead, the Agency proposed to change the definition to include all facilities located over waters landward of the boundary of the territorial seas, including wetlands adjacent to such waters.

An additional problem with the previous geographic definition was that it classified in the coastal subcategory an estimated 1700 wells which operated on land but which discharged into coastal waters. Under this revised definition these facilities would be reclassified as either onshore or stripper depending upon their rate of production.

Industry has submitted data indicating that approximately 1200 wells, previously classed as coastal, would now be classified as onshore. This will require the achievement of a limitation of zero discharge and industry data indicate that 112 of these wells would cease production in such case. Additionally, the data projects a loss of up to 7.6 million barrels of oil and 32 billion cubic feet of natural gas over the entire operating lives of the affected wells. The continuing production from this class of wells is estimated to be 270 million barrels of oil and 1,109 billion cubic feet of natural gas. These figures are based on the current regulated interstate price. [1]

These figures do not, of course, indicate that a presently indeterminate number of wells which would before have been classified as onshore will now be classed as coastal. This would include facilities operating over lakes, including the Great Lakes, and certain West Coast bays, including Cook Inlet, Alaska.

The Agency believes that this reclassification is warranted under the criteria for technology-based limitations contained in section 304(b)(1). No evidence has been presented which suggests that the technological capacity of these facilities to meet a limitation of zero discharge is in any way different from other onshore wells. While space constraints or reinjection difficulties may operate with respect to coastal and offshore platforms, no such conditions apply to these wells operating on land.

Additionally, evaluation of other relevant statutory criteria support this

[1] Since the signature of these regulations by the Administrator, the President has initiated a phased deregulation of the price of domestic oil. This deregulation should drastically reduce the impact of this modification on oil production at affected wells. Although the impact of this regulation should now be minimal, it is not possible to predict that effect until Congress has acted on a proposal to tax portions of the increased revenues generated by the deregulation.

modification. The Agency gave serious consideration to the cost of this regulation in relation to its effluent reduction benefits and associated non-water quality environmental impacts. In its assessment of effluent reduction benefits, the Agency determined the composition of existing discharges and identified a range of significant pollutants including, among others, such toxic pollutants as phenols. Determination of the total level of reduction of these pollutants is difficult for oil and gas facilities since the flows and concentrations of pollutants vary among wells and over the life of an individual well. However, available data indicate that the reclassification of certain wells into the onshore subcategory would result in the reduction of up to 227,000 pounds per year of phenols alone. These are reductions of discharges into environmentally sensitive and productive wetlands. While technology may not exist which would enable platform operators to reduce the concentrations of these pollutants, land based facilities have the technological capacity to eliminate their discharge altogether. This is an obligation which other onshore facilities are presently meeting.

The only non-water quality environmental impacts resulting from this modification stem from the operation of reinjection equipment in those wells reclassified as onshore. These impacts which have been reviewed by the appropriate EPA divisions as part the decision making process, include the energy required to operate such equipment and associated air emissions. Depending upon whether natural gas or diesel fuel is used, emissions are projected to range from 1,387 to 52,500 pounds per year of hydrocarbons, 1,150 to 1,183 pounds per year of sulfur oxides, 59,995 to 283,167 pounds per year of particulates and 69,986 to 1,436,000 pounds per year of nitrogen oxides.

The definition promulgated in this notice is consistent with the definition recommended by the industry in its comments on the interim final regulations. The Offshore Operators Committee recommended that the definition be modified to read ". . . the waters of bays, sounds inlets, and other water bodies landward of the territorial seas and affected by the ebb and flow of the tides where State Water Quality Criteria permit the discharge of produced water." The American Petroleum Institute recommended that the subcategory "should extend to all inland bays, inlets, estuaries, and coastal lakes which lie landward where discharges are allowed or certified by the States." Similar comments were received from many individual oil companies. The definition which has been adopted includes all areas covered by the recommendations of the industry and expands that definition to include water bodies not affected by the ebb and flow of the tide as well as wetland areas. As stated above, the Agency does not believe it necessary to limit the definition to those areas where water quality criteria permit discharge since water quality criteria requiring more stringent limitations (including no discharge) than those found in effluent guidelines must be enforced in any case.

Facilities constructed on man-made islands which are comparable to oil and gas platforms and located in areas defined as coastal will be classified in the coastal subcategory. However, such classification will be made on a permit-by-permit basis.

Agricultural and Wildlife Water Use Subcategory—Applicability and Description

The Agency is changing the name of subcategory E from the "Beneficial Use" subcategory to the "Agricultural and Wildlife Water Use" subcategory. This change in name is prompted by the confusion resulting from the initial labeling of the subcategory. The term "beneficial use" has a long history of use in Western United States water law which is unconnected with its meaning in these regulations, and the Agency believes that confusion stemming from this prior usage can be avoided by simply renaming the subcategory.

Additionally, the Agency is clarifying the scope of this subcategory by specifying that only facilities located west of the 98th meridian may qualify for inclusion. Subcategory E was initially established in response to comments from certain western states asking that the Agency allow the use of produced water for agricultural or wildlife purposes. Investigation showed that in arid portions of the western United States low salintity produced waters were often the only, or at least a significant, source of water used for those purposes. Although not required by the Clean Water Act, the Agency chose to accommodate this situation by the creation of Subpart E. It is intended as a relatively restrictive subcategorization based on the unique factors of prior usage in the region, arid conditions and the existence of low salinity, portable water. Thus, all sources subject to regulation under §§ 301 and 304 of the Act which use produced water for agricultural or wildlife watering purposes at all times during their operations may be included in the subcategory.

The 98th meridian was chosen for use in the definition of the subcategory because it approximates the boundary of relevant geographic and arid or semi-arid climatic conditions which warrant the creation of this subcategory. Because of the unique combination of factors, and in contrast to the situation existing in the coastal subcategory, the Agency does not foresee the goegraphical makeup of subcategory E being subject to frequent changes, and, therefore, believes that a geographical limit is not only justified, but is also in harmony with the intent of the Act.

Deck Drainage Limitations—Offshore and Coastal Subcategories

Deck drainage from coastal and offshore platforms generally consists of a composite of substances which collect on platform decks from a variety of sources including production and drilling equipment, deck washings and rain. Although specific numerical effluent limitations on the discharge of oil and grease were established for this parameter in the interim final regulations, inadequacies in the original data base require that those limitations be withdrawn. An effluent limitation of "no discharge of free oil" is being established for the discharge of deck drainage.

The interim final effluent limitations were based on data collected from facilities treating either produced water or a combination of produced water and deck drainage. Since many platforms treat deck drainage separately from produced water, and since exploratory rigs do not treat produced water at all, these limitations did not necessarily reflect the degree of reduction achievable by these sources. However, most sources in the coastal and offshore subcategories have been subject to, and have complied with, limitations established pursuant to the oil discharge provisions of section 311 of the Clean Water Act and its implementing regulations at 40 CFR Part 110. This limitation prohibits any discharge which would cause a film or sheen on the surface of the water or cause a sludge or emulsion to be deposited beneath the surface of the water or on the adjoining shore. The history achievement of this restriction by sources in these subcategories indicates that it is both technologically and economically achievable. Consequently, the limitation on deck drainage will be no "discharge of free oil" which corresponds to the

restriction under section 311. Of course, facilities may still be subject to spill prevention regulations at 40 CFR Part 112.

EPA has stipulated to inclusion of this limitation in litigation challenging the interim final limitations in the offshore segment of the industry.

However, Region II of EPA has collected data from exploratory drilling rigs which suggest that concentration limitations on deck drainage are both technologically and economically achievable by sources in these subcategories. This data is being reviewed, and additional data may be obtained. Upon completion of this review, specific concentration limits representing BPT may be promulgated.

Agricultural and Wildlife Water Use Subcategory—Effluent Limitations

Effluent limitations applicable to this subcategory are being revised. The State of Wyoming and the EPA Region VIII office have provided evidence that the analytical procedures applied to some of the samples used to calculate the oil and grease limitation for this subcategory wer not documented. As a result we have no way of knowing whether the EPA approved procedure was used. Because of this, the points were removed from the data base, and the revised limitation of 35 mg/1 reflects this change.

Stripper Subcategory

This regulation clarifies the definition of the stripper subcategory to indicate that it is the average production per producing oil well on a field which is relevant in classifying a source in this subcategory. The interim final regulations defined stripper wells, as in part, as those wells "which produce less than 10 barrels per calendar day." That definition left some uncertainty as to whether some wells on a particular lease would be classed in the stripper subcategory while others might be placed in the onshore subcategory. This definition has been revised to reflect the Agency's intention that it is the average production per oil wells at a field which serves as the basis for categorization. In keeping with this intention, the regulations specifically exclude water injection and gas wells from those wells used to compute the average production. Although no specific effluent limitations are being promulgated at this time for the stripper subcategory, proper classification of a source is still significant since it may exclude that source from other subcategories and authorize the permit writer to establish applicable effluent limitations under section 402(a)(1) of the Clean Water Act.

Monitoring Frequency

In the offshore and coastal subcategories the monthly average limitations on oil and grease from produced water are specified under a column headed "Average of daily values for thirty consecutive days," and concern has been expressed that the appearance of these limitations implied a minimum monitoring schedule. To avoid this confusion the Agency is deleting the word "daily" from the column specifying monthly average limitations.

The sampling frequencies reflected in the effluent limitations guidelines established for the offshore and coastal subcategories are not intended to establish sampling frequencies for purposes of compliance monitoring. Compliance monitoring requirements should be established in a case-by-case basis in consideration of such factors as facility accessibility, the volume and nature of the discharge involved, and the cost of monitoring. Since the effluent limitations guidelines contained in these regulations were established by statistical analysis of data directly related to sampling frequency, it is essential that permit limitations other than the daily maximum for oil and grease of 72 mg/1, which is based upon four samples in any twenty-four hour period, be consistent with the sampling frequency used.

To illustrate the effect of sampling frequencies (other than weekly) on the nonthly average limitation, the following graph from the Development Document is reproduced. (Attached as Appendix C). Thus, if sampling is required only on a monthly basis the monthly average limitations would be the same as the daily maximum (72 mg/1), if twice monthly sampling is required the monthly average limitation would be 57 mg/1, and if weekly sampling is required the monthly average limitation would be 48 mg/1 as appears in the regulation. Section IX of the Development Document should be consulted for further clarification of the graph and the effect of monitoring frequency on monthly average limitations. It should be reemphasized that monitoring frequency does not affect the daily maximum limitation.

Appendix B—Summary of Public Participation

Following promulgation of both interim final regulations (Offshore Segment and Onshore Segment) the public was invited to comment on the regulations and the data used in support of the limitations contained in the regulations.

The following parties responded with comments: State of Colorado, Department of Natural Resources; David K. McGowan; Gulf Oil Company; The State of Louisiana; Gulf Energy and Minerals Co.—U.S.; Phillips Petroleum Company; Alaska Oil and Gas Association; Offshore Operators Committee; Atlantic Richfield Company; Marathon Oil Company, Getty Oil Company; Shell Oil Company; Texaco, Inc.; Mid-Continent Oil and Gas Association—Louisiana Division; Exxon Company—U.S.A.; Colorado Department of Health; Office of the Governor, State of Texas; American Petroleum Institute; Petroleum Association of Wyoming; Rocky Mountain Oil and Gas Association; Henry Walter; American Society of Mechanical Engineers; Continental Oil Company; Shell Oil Company; Texas Mid-Continent Oil and Gas Association; Mobil Oil Corporation; Columbia Gas System Service Company; Pennzoil Company; Sun Oil Company; Union Oil Company; U.S. Department of Health, Education, and Welfare; Chevron Oil Company; State of Alaska; Engineers Council of Houston; U.S. Department of the Interior; Erie County Department of Health.

A copy of all public comments are available for inspection and copying at the EPA Public Information Reference Unit, Room 2922 (EPA Library), Waterside Mall, 401 M Street, S.W., Washington, D.C. A copy of the Development Document, preliminary draft contractors reports, the economic impact study, and certain supplementary materials supporting the study of the industry are also maintained at this location for public review and copying. The EPA information regulation, 40 CFR Part 2, provides that a reasonable fee may be charged for copying.

The more significant issues raised during the public comment periods and the treatment of those issues in the development of this final regulation are as follows:

(1) Many commentors argued that the guidelines should be modified to authorize noncompliance with effluent limitations during periods of "upset" or "bypass". An upset is unintentional noncompliance occurring for reasons beyond the reasonable control of the permittee. An upset provision is necessary, it was argued, because such upsets will inevitably occur due to limitations in control technology. The Agency agrees that some form of upset provision should be provided in the NPDES permits and has recently proposed a generic upset provision for

inclusion in all permits. 42 *Fed. Reg.* 37094 (August 21, 1978).

A bypass is an act of intentional noncompliance with permit limitations when pollution control equipment is circumvented to prevent loss of life, injury or severe property damage. It was argued that a bypass provision should also authorize noncompliance during periods of corrective and preventive maintenance. In many cases, however, "shutting-in" of well may constitute both a technologically and economically feasible alternative to noncompliance during periods of such maintenance. Where shutting-in of wells would produce a permanent and substantial loss of natural resources, a bypass would be warranted and proposed regulations expand the definitions of "severe property damage" to include this situation. 43 *Fed. Reg.* 37093-94 (August 21, 1978). Industry has also argued that shutting-in of wells does not constitute a feasible alternative to bypassing in a far broader class of cases. The Agency is currently reviewing data which has been submitted on this matter.

However, the Agency does not believe that issues of upset or bypass are appropriately addressed in national effluent limitations. These are permit matters which should be dealt with in the context of permit issuance. Consequently, upset and bypass provisions were included in the proposed regulations dealing with NPDES permits. 43 *Fed. Reg.* 37078 (August 12, 1978). These regulations will be issued shortly in final form.

(2) Many commentors stated that the coastal subcategory (Subcategory D) should not be defined geographically as was done in the interim final regulation. After considering the comments and arguments made during the comment period, the Agency agrees and the definition of the coastal subcategory. A further discussion of this change can be found in Appendix A, "Discussion of Revisions."

(3) Most commentors argued that the interim final limitations for deck drainage in the offshore and coastal subcategories should either be eliminated entirely or should be modified to require no numerical limitations. The reasons given for suggesting such a change included the difficulty of monitoring such discharges, the assumption that they were already controlled by regulations issued under section 311 of the Act, the assumption that such discharges are not harmful, and the charge that EPA's analysis in support of the limitations did not meet the requirements of sections 301 and 304 of the Act. While EPA does not agree with all of the arguments made in support of the position that deck drainage limitations should be eliminated, inadequacies in the data base supporting interim final limitations require that they be withdrawn at this time. A discussion of the changes and the Agency's reasons for making them are discussed in Appendix A, "Discussion of Revisions."

(4) Several commentors believed that the definition of the old beneficial use subcategory was too restrictive and was contrary to the water rights laws of many Western States. The Agency is renaming and modifying the definition of this subcategory and a discussion of these proposed changes can be found in Appendix A, "Discussion of Revisions."

(5) Many comments were received which stated that the definition of a "facility" which would be eligible for inclusion in the stripper subcategory (Subcategory F) was not clear. The definition has been clarified in a fashion consistent with most of the comments. A discussion of the Agency's response to this comment is contained in Appendix A, "Discussion of Revisions."

Additionally, commentors suggested that the definition of the stripper subcategory be modified to include marginal gas wells. However, no data were presented which indicate that the economic impact of exclusion of gas wells from this subcategory warrants remedial action. All data indicate that marginal gas wells are few in number and that they produce limited amounts of effluent. Treatment of this effluent is neither technologically infeasible nor economically unreasonable. No basis exists under the relevant criteria of the Act for separate treatment of these wells. Should additional data become available relevant to classification of these gas wells, the Agency will reevaluate its position.

(6) Oil and grease limitations for produced water in the offshore and coastal subcategories are expressed as two limitations—a daily maximum concentration and a monthly average limitation. Many commentors argued that the monthly average limitation is not necessary since it is based upon the same statistical analysis as is the daily maximum.

However, statistical analysis of data for individual facilities shows that many facilities are able to meet the daily maximum limitations while operating at a higher long term average concentration of oil and grease than that achieved by best practicable control technology currently available. The addition of a longer term average than a daily average decreases the chance that a facility can operate above a long term average achievable at BPT and still consistently remain below the effluent limitations. For this reason, the Agency believes that, where practicable, the inclusion of a longer term average, such as a monthly average, will insure better compliance with the effluent discharges which the Agency believes can be met with best practicable control technology currently available. If monitoring frequencies are established in individual permits which are different than the weekly sampling assumed for the monthly average limitation contained in the offshore and coastal subcategories, the monthly limitation would also have to be adjusted to be consistent with the sampling frequency specified in the permit. In general, if sampling were required more frequently than weekly the monthly average limitation should be lower; while if less frequent sampling were required than weekly sampling, the monthly average limitation would have to be higher. A fuller discussion of this point is contained in Appendix A, "Discussion of Revisions."

Additionally, many commentors were concerned that the heading of the column specifying the monthly average limitation implied on minimum monitoring schedule. This has been dealt with by deleting the word "daily" from that heading. This change is discussed in Appendix A, "Discussion of Revisions."

costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent limitations—In milligrams per liter—Oil and grease

Pollutant parameter waste source	Maximum for any 1 day	Average of values for 30 consecutive days shall not exceed	Residual chlorine minimum for any 1 day
Produced water	72	48	NA
Deck drainage	(1)	(1)	NA
Drilling muds	(1)	(1)	NA
Drill cuttings	(1)	(1)	NA
Well treatment	(1)	(1)	NA
Sanitary:			
M10	NA	NA	[2]1
M9M[3]	NA	NA	NA
Domestic [3]	NA	NA	NA

[1] No discharge of free oil.
[2] Minimum of 1 mg/l and maintained as close to this concentration as possible.
[3] There shall be no floating solids as a result of the discharge of these wastes.

Subpart E—Agricultural and Wildlife Water Use.

§ 435.50 Applicability; description of the beneficial use subcategory.

The provisions of this subpart are applicable to those onshore facilities located in the continental United States and west of the 98th meridian for which the produced water has a use in agriculture or wildlife propagation when discharged into navigable waters. These facilities are engaged in the production, drilling, well completion, and well treatment in the oil and gas extraction industry.

§ 435.51 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "onshore" shall mean all land areas landward of the territorial seas as defined in 40 CFR 125.1(gg).

(c) 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.

§ 435.52 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of facility, raw materials, production processes, product produced, treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(a) The following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

(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:

Effluent characteristics	Effluent limitation (mg/l)
Oil and Grease	35.

Subpart F—Stripper Subcategory

§ 435.60 Applicability; description of the stripper subcategory.

The provisions of this subpart are applicable to those onshore facilities which produce 10 barrels per well per calendar day or less of crude oil and which are operating at the maximum feasible rate of production and in accordance with recognized conservation practices. These facilities are engaged in production, and well treatment in the oil and gas extraction industry.

§ 435.61 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR 401 shall apply to this subpart.

(b) The term "onshore" shall mean all land areas landward of the inner boundary of the territorial seas as defined in 40 CFR 125.1(gg).

Dave Freudenthal, Governor

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

John Corra, Director

December 14, 2005

Dennis M. Kirven
Kirven and Kirven, P.C.
104 Fort Street
Buffalo, WY 82834-0640

RE: RESPONSE TO COMMENTS RELATED TO PROPOSED WYOMING POLLUTANT DISCHARGE ELIMINATION SYSTEM (WYPDES) PERMIT WY0052850

Mr. Kirven:

The Water Quality Division (WQD) has received your letter dated February 24, 2005 in which you provided comments on the above referenced draft permit. This letter is to provide a written response to the comments raised in your letter, and notification of the issuance of this permit. This permit was issued on November 29, 2005.

Comment: "The issuance of these permits would violate the Wyoming Environmental Quality Act and the rules and regulations promulgated there under, and specifically Quality Standards for Wyoming Surface Water, Chapter 1, §20... the applications for permits submitted by Yates fail to show that there will not be a measurable decrease in forage and livestock production caused by the discharge of water into containment reservoirs described. These permits should therefore be denied."

Response: The effluent limits established in the permit are protective of livestock uses associated with the downstream receiving waters. The permit does not establish effluent limits for protection of irrigation because no irrigation is occurring downstream of the outfalls on Indian Creek. Based on the information you provided to WQD in your November 9, 2005 letter, it appears the permit was drafted with the appropriate effluent limits. No changes have been made to the permit.

Comment: "40 CFR, Part 435, Subpart E specifically requires that each applicant for a NPDES permit document the agricultural and wildlife use of the water...the application

EXHIBIT 27 tabbies

is totally lacking any documentation concerning the usage of this water by agricultural entities."

Response: This discharge is in compliance with Chapter 2, Appendix H (a)(i) and (d)(i) of the Wyoming Water Quality Rules and Regulations. These sections address agricultural and wildlife use of produced water from coal bed methane production facilities.

Comment: "Any discharge of produced water may over time establish wetland plants along the course of various discharge routes, including three-square bulrush, broadleaf cattail, Nebraska sedge, inland salt grass, foxtail barley, and nutells alkaligrass. Bulrushes have been identified as plants that cattle will not graze because its palatability is low. Wetlands will not provide increased forage for livestock production and will detract from places of calving traditionally used by livestock along dry drainage bottoms."

Response: Flooding and displacement of calving grounds are not issues that can be addressed through the WYPDES program.

Comment: "The assumption of the Yates application is only two (2) wells will use these reservoirs and that the water will be contained by the reservoirs with no spilloff unless there is an unusually large natural event. However, the estimates made for the wells are inaccurate and the number of wells which will discharge into the area is inaccurate...If the estimates of Kennedy were used, the combined water production of the two (2 Yates wells would be 130 gallons per minute. Yates's estimates are based on water production from the Stranahan fields several miles to the northeast...Yates's own map indicates at least five wells located above the two reservoirs."

Response: The permit limits flow to 0.12 MGD. If Yates did underestimate the potential water production at this facility, they will still need to comply with the flow limit in the permit.

Comment: "The application does not contain an analysis as to the long term effects of infiltrated water from the containment ponds in downgrading aquifers. A recent experience in the area involving 'Skewed' reservoir demonstrated the risk to underlying aquifers. No monitoring wells are included in the application to monitor any possible contaminant to aquifers. Adami Ranch maintains two stock water wells to service its stock watering system within one mile of the containment pond. Contamination or degradation of those wells would seriously impact the agricultural production in the area."

Response: The WYPDES program does not regulate pollution of groundwater. For details on groundwater monitoring requirements at CBM reservoirs, please contact

WQD's Groundwater Pollution Control program at (307) 777-5985.

Comment: "The entire Indian Creek drainage needs to be studied for the cumulative effect of all CBM projects planned for development. At least four other companies, Lance Oil & Gas Co., Kennedy Oil, Bill Barrett Co., and Devon Energy, have projects which will impact the Indian Creek drainage and the total impact must be analyzed."

Response: The Indian Creek watershed is scheduled for stakeholder meetings in 2006, along with Dead Horse Creek and Burger Draw. WQD will notify landowners when the first Indian Creek watershed meeting dates are set.

Comment: "Any discharge from the reservoirs of Yates will travel across lands owned by Adami Ranch. No easement exists for conveyance of this water across the property. Artificially produced water by coalbed methane is not entitled to use a natural drainage area and would constitute trespass across the lands of Adami Ranch..."

Response: The purpose of this permit is to ensure that the discharged effluent is of sufficient quality to protect the downstream designated uses of Indian Creek and the Powder River. Issues related to trespass and private property rights are beyond the jurisdiction of the WYPDES program.

If you wish to file a formal appeal to the issuance of this permit, you have the opportunity to do so. Chapter 1 of the "Wyoming Department of Environmental Quality Rules of Practice and Procedure" states that "Unless otherwise provided by these Rules or the Environmental Quality Act, all appeals to Council from final actions of the Administrators or Director shall be made within sixty (60) days of such action."

If you have any further questions, please contact me at (307)777-5504.

Sincerely,

Jason Thomas
Wyoming Department of Environmental Quality
Water Quality Division

cc: WYPDES permit files
Todd Parfitt, DEQ/WQD
Leah Krafft, DEQ/WQD

PENNACO ENERGY

A Wholly Owned Subsidiary Of Marathon Oil Company

December 6, 2005

Kathy Shreve, Environmental Senior Analyst
Wyoming Department of Environmental Quality
Water Quality Division
122 W. 25th St., Herschler Bldg. 4-W
Cheyenne, WY 82002

Re: Cottonwood Creek Federal WYPDES Permit Application
Pennaco Energy, Inc.

Dear Ms. Shreve:

Please consider and approve the enclosed WYPDES permit application for Pennaco Energy, Inc. (Pennaco). This application is being filed under Option 2, "Surface discharge to Class 2 or 3 receiving stream of the Powder River or Little Powder Rivers (Class 2ABWW)". Enclosed for your use are the following:

- WYPDES Permit Application for Coal Bed Methane;
- Permit Application Tables;
- Water Balance;
- Water Quality Data representative of the Anderson, Pawnee, and Wall coal seams; and,
- Permit Application Map.

Discharging into and containment in on-channel reservoirs is the proposed water management strategy for this facility. Under this WYPDES permit application, Pennaco will be producing coal bed methane (CBM) water from 214 wells and discharging to 28 outfalls situated on unnamed ephemeral tributaries of Cottonwood Creek (Class 3B), which is tributary to the Powder River (Class 2ABWW). The proposed outfalls have been located in conjunction with the landowners' requirements to meet their stock watering needs.

The CBM water discharge of 2.25 MGD shown in the Water Balance Table was calculated based on actual flow data from nearby facilities. In all likelihood, actual project flow volumes may be lower than 2.25 MGD as the coal seams are dewatered from the operation of this and nearby facilities during the time period required to develop the new wells for Cottonwood Creek Federal. Pennaco respectfully requests a flow limit of 2.25 MGD to allow flexibility in water management as CBM wells are phased in/out of production.

If you have any questions or comments please feel free to contact David Hill at the address or phone number shown below.

Sincerely,

Pablo Velasquez
Operations Manager

/gfk

Enclosures

cc: DEQ-(3)
PEI – file
CBMA-file

3601 Southern Drive • Gillette, WY 82718 • Telephone 307/685-5100 • Fax 307/682-7621

20. Section 40 CFR Part 435 Subpart E requires that the permittee document agricultural and wildlife uses of produced water. Provide documentation that the produced water will be used for agriculture or wildlife during periods of discharge. Agriculture and wildlife use includes irrigation, livestock watering, wildlife watering and other agricultural uses. Agricultural and wildlife use documentation includes (but is not limited to) a certified letter from a landowner(s), a formal written statement from a state, federal or local resource management agency, or a formal written statement with supporting documentation from a natural resources or environmental professional accompanied by the credentials of the natural resources or environmental professional. Agriculture and wildlife certification must be submitted for each outfall's discharge, ~~and must have original signatures.~~

An Agriculture/Wildlife Use Statement is no longer required per Chapter 2, Appendix H(a)(i), Wyoming Water Quality Rules and Regulations.

I (CEO or other ~~authorized person)~~ certify that I am familiar with the information contained in this application and that to the best of my knowledge and belief, such information is true, complete, and accurate. I am requesting **28** outfalls in this application.

Pablo Velasquez	**Operations Manager**
Printed Name of Person Signing*	Title*
Signature	December 6, 2005
	Date

*All permit applications must be signed in accordance with 40 CFR Part 122.22. "for" or "by" signatures are not acceptable.

Section 35-11-901 of Wyoming Statutes provides that: Any person who knowingly makes any false statement, representation, or certification in any application ... shall upon conviction be fined not more that $10,000 or imprisoned for not more than one year, or both.

Mail this application to:

WYPDES Permits Section
Department of Environmental Quality/WQ
122 West 25th Street, Herschler Building, 4W
Cheyenne, WY 82002

Please include unique footer information on each page of this application and on all supporting documentation using the following format:
Company Name: Year/Month/Day/NEW, MOD, RENEWAL/10 Digit HUC Code/Permit # (if a modification or renewal) or Application # (from this particular company) for that particular day