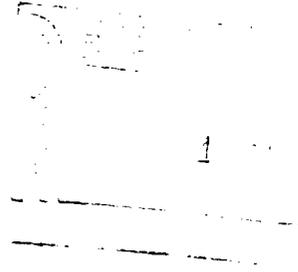




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Elizabeth S. Bush  
Coordinator, Public Issues



April 19, 1995

Ms. Ruth Andrews  
New Mexico Oil and Gas Association  
P.O. Box 1864  
Santa Fe, NM 87504-1864

RE: Proposed High/Angle/Horizontal/Directional Drilling Rules

Dear Ruth,

ARCO Permian has several concerns about the proposed draft rules. In particular, any rules should simplify and streamline the process for both the operator and the regulatory agency.

**Specific Comments on Draft**

**Section A. Definitions**

(d) Well drill should read "well drilled"

(h) Vertical well - means a well that does not have an intentional departure or course deviation from the vertical.

It is important to make this distinction as a vertical well may drift, more than a few degrees. Even though there may be significant deviation and a directional survey is required to determine the bottom hole location, the well is still and should be considered a vertical well.

(i) This definition needs to be clarified. Is a vertical well determined to be at  $0^\circ$ . If so this definition is probably all right. We suggest however that the deviation from vertical be changed to  $70^\circ$  to allow for greater than  $5^\circ$  dip in the beds. It is not uncommon for formations to not be horizontal and dip considerably. An operator would want the horizontal extension to follow the dip of the formation to maximize penetration and production.

(j) We suggest the following alternate wording:

" High angel well.....deviation from vertical of less than  $70^\circ$   ~~$85^\circ$~~  and whose lateral may does not run....."

(l) The bottom hole location of a vertical well may not be directly beneath the surface location due to drift. It is not uncommon for the locaiton to be several degrees away. We suggest the last part of this definition be deleted to read:

"Lateral - means any portion of a well bore which has intentionally departed from the vertical point. ~~directly beneath the surface location.~~"

ARCO Permian  
NMOCD Proposed Rule  
High Angle/Horizontal Well

(m), (n), (o), (p) We suggest these be changed to deleted the distances. More generic language would be preferred as the criteria is constantly changing with technology. Distances quoted in this draft for various radii are out of date and regularly exceeded. Technology continues to improve and whatever is quoted in this rule will not remain current. An arbitrary number placed here will at some point in the future become a hindrance to normal business. Changes in technology and standards would also necessitate another rule making to amend the rules.

(n) We suggest that this be changed to read ".....build rate between 1 degree ~~1.5 degrees~~ per foot and 3.5 degrees per foot within a 40 - 80 foot ~~20-40 foot~~ radius....". These numbers are more typical.

Section C.

(1) The requirements regarding the plat and information to be provided appears to be excessive. Information exceeding a standard drilling application should be kept to a minimum. As long as the lateral will be within the operator's drilling unit and not require a location exception no additional information should be required. Only information in those sections that may be impacted by the well location should have to be provided.

(4) The word "estimated" should be inserted before the words "maximum length".

(7) The words "estimated preliminary" should be inserted in front of the word "procedure" in the first line. This will allow for some flexibility in the procedure associated with the operating situation at the time of plug and abandonment.

(10) A copy of the AFE should not be required. An affidavit that the project has been approved by working interest owners should be sufficient. Furthermore, why should the NMOCD have to see either the AFE or an affidavit. It appears that this would be an operator's business that the regulatory agency has no authority to review.

Exemption language must be included in the rules relative to special field rules that may already be in existence. ARCO's Empire Abo Unit has special field rules related to horizontal wells.

I plan to send similar comments to the NMOCD before the hearing next week.

Sincerely,



Elizabeth S. Bush  
Coordinator, Public Issues

ESB



Texaco Exploration  
and Production Inc

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DATE: April 19, 1995

Ms. Ruth Andrews  
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Post-It™ brand fax transmittal memo 7671		# of pages = 2	
To	Ruth Andrews	From	Frank Gray
Co.	NMOGA	Co.	Texaco
Dept.		Phone #	
Fax #	505-986-1094	Fax #	

RE: NEW MEXICO OIL CONSERVATION DIVISION  
PROPOSED ADMINISTRATIVE APPROVAL PROCEDURE  
HIGH ANGLE HORIZONTALLY DRILLED WELLS

Dear Ruth,

Texaco Exploration and Production Inc. is very interested in the New Mexico Oil Conservation Commission efforts for a procedure for administrative approval rather than hearing for high angle horizontal drilled wells. The following are Texaco's comments concerning the proposed procedures and needed modifications to those procedures:

1. Page 3, A.n - The definition of "short radius" is a little conservative in today's standards. A "short radius lateral" may have a build rate between 38°/100' and 286°/100', which has an average radius of 150' to 20', respectively. The horizontal sections have exceeded 750' into the 2,000' range.
2. Page 3, A.o - "Medium radius" is a build rate between 8°/100' and 38°/100', which has an average radius of 716' to 150', respectively. The horizontal sections have exceeded 7,000'.
3. Page 3, A.p - "Long radius" is a build rate of less than 8°/100', or a radius of greater than 716'. The horizontal section has exceeded 7,000', and with today's technology has the potential for unlimited length.
4. Page 4, B.1 - since the bottom hole location is the important matter, it appears more important to ensure that this location is on the project 40 acre unit. It is of little or no importance that the surface location be on the 40 acre proration unit.
5. Page 5, C.1 - The 9 section plat requirements appear to be requiring too much information. This type of plat should be limited to the proration units immediately surrounding the project proration unit.

Ms. Ruth Andrews

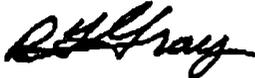
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April 20, 1995

6. Page 6, C.7 - It is premature to have to submit the plugging procedure with the drilling package.
7. Page 6, C.9 - It is not important to regulatory agency why another well is needed. The proration unit allowable will be fixed and the number of wellbores is the concern of the operator in order to produce maximum oil and gas.
8. Page 6, C.10 - A copy of operator's AFE will contain proprietary information which could not be released to become a part of public domain.
9. Page 6, C.11 - It does not appear to be necessary to furnish the OCD with a list of all working interest owners in a drilling well. This requirement should not be different from the administrative approval requirements for an unorthodox well location requirement.
10. Page 6, C.12 - It is reasonable to furnish list of operators in offset spacing units however it is not feasible to furnish list of WIO in proration units around well. This information would be very expensive, if even possible, to obtain.
11. Page 8, I.1 - A "subsequent" directional survey should not be required. Directional surveys are taken while the well is being drilled. The direction, extent and terminus are obtained from these surveys.

Please consider these comments and suggestions in the testimony and written comments from NMOGA/industry to the NMOCD hearing on this matter. If you have any questions on this matter, please advise.

Yours truly,



R. F. Gray  
Regulatory Compliance Manager

RFG/s