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**Elizabeth A. Casbeer**  
Regulatory/Compliance Analyst

Post-It™ brand fax transmittal memo 7671		# of pages ▶
To <i>M. Stogner</i>	From <i>E.A. Casbeer</i>	
Co. <i>NMOC D</i>	Co. <i>ARCO Permian</i>	
Dept. <i>Oil Cons. Div</i>	Phone # <i>915/688-5590</i>	
Fax # <i>505/827-1389</i>	Fax # <i>688-5956</i>	

April 9, 1997

**VIA FACSIMILE**

STATE OF NEW MEXICO  
Oil Conservation Division  
ATTN: Michael E. Stogner  
2040 South Pacheco Street  
Santa Fe, NM 87505

RE: Case No. 11762, Proposed Changes to Rule 111

Mr. Stogner:

ARCO Permian wishes to express its strong support for the proposed changes to Rule 111. We have experienced the regulatory process associated with permitting directional and horizontal wells in New Mexico, and concur that the current notice requirements are unnecessary and burdensome. The proposed rules clarify that the Rule 104 process should be used for unorthodox bottomhole locations resulting from directional and horizontal drilling projects, which adequately addresses correlative rights in these situations. The proposed changes also describe what happens when an operator experiences excessive deviation on a vertical well, which helps in managing drilling operations.

ARCO has participated in the Rule 111 work group process, and we thank the commission for this opportunity. We also wish to express our gratitude for the commission's continuing efforts to streamline and eliminate unnecessary regulatory processes.

Yours very truly,

*Elizabeth A. Casbeer*  
Elizabeth A. Casbeer  
Regulatory Compliance Analyst

xc: Liz Bush - 54/MIO  
R/C Files

## Mike Stogner

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**From:** Rick Foppiano  
**To:** MikStogner; Howarcw  
**Subject:** Rule 111 Presentation on Thursday  
**Date:** Tuesday, April 08, 1997 9:27AM

Mike, I rushed an express mail a package of material to Rand yesterday that included a complete set of the color slides, a redlined and clean copy of the Rule 111 changes as they were docketed, and the originals of the comments from Enron and Dugan. You can tell from the last fax that we are still fine-tuning the language in Part D. As a result, I don't expect to have a redlined/clean version of our most recent set of changes until the hearing.

I should have included an extra set of the color slides for you, but I forgot in all the rush. Rand will get his package today; you might see if you can borrow it. I will bring your copy with me. To help you prepare for your part, we are expecting that you will start the presentation with the cover slide, making any comments you see fit, and then walk the audience through the following introductory slides:

- Discussion Agenda
- The Rule 111 Work Group
- The work group process
- Summary of our efforts

At that point, I can step up to the plate and handle the "Problems and Solutions" section, and the "Current Rule" section. Donna will take over for the "Discussion of New Rule 111" section, and Wade will do the "Comparison of the Two Versions." I will close with the "Summary."

Enron is wrestling with suggesting changes to the "50 foot" rule to an allowance based on measured depth. Their idea is essentially the same as mine was a couple of months ago, but their justification is based on accuracy. If they decide to run with the idea, they will present it when industry is allowed to speak. I encouraged them to have some technical data to back up their proposal. The work group as a whole cannot support their 1% rule, but Enron knows that. I told him that OXY would probably support it, and Donna said Burlington might also. I think George also likes increased flexibility. But the ball is in Enron's court on this issue, because the work group is only moving forward on CONSENSUS issues.

This is my plan so far, if you agree. We make our presentation, answer the commissioner's questions, offer another version that includes your suggested changes as well as Rand's, Frank's and Dugan's, and the changes that the work group recommends based on discussions with Enron. In short, the version I faxed to everyone yesterday. So far, I have heard back from Donna, and she has no objections to the latest version. I really need to hear if the NMOCD will object to approving directional survey companies. Following that, industry steps up to the plate (which may be only Enron) and offers their comments. Enron will support the work group's product.

All in all, I think the group is fairly well prepared. Enron should provide some fireworks, if they push for their 1% rule. At least people won't be falling asleep.....

REF

# OXY FACSIMILE COVER SHEET

DATE 4/7/97

TO: ADDRESSEE Mike Stogner

COMPANY NMOCD

ADDRESS Santa Fe, NM

ADDRESSEE'S TELEPHONE NUMBER \_\_\_\_\_

ADDRESSEE'S FACSIMILE NUMBER 505-827-8177

COMMENTS: Oxy's comments re: rule 111 changes attached. I will bring original with me to Santa Fe.

FROM: ORIGINATOR Richard E. Foppiano

COMPANY OXY USA Inc.

ADDRESS P.O. Box 50250 Midland, Texas 79710 BLDG \_\_\_\_\_

TELEPHONE NUMBER 915-685-5913 ROOM NO. \_\_\_\_\_

NUMBER OF PAGES (INCLUDING THE COVER) 2  
(PLEASE NUMBER ALL PAGES)

IF YOU DID NOT RECEIVE A PAGE(S), OR THE DOCUMENTS ARE NOT LEGIBLE, PLEASE CALL THE VERIFICATION NUMBER BELOW WITHIN 15 MINUTES AFTER RECEIPT OF TRANSMISSION IF YOU DO NOT CALL WE WILL ASSUME YOU RECEIVED THE PAGES SATISFACTORILY  
THANK YOU.

**5742**

FACSIMILE NUMBER 915/685-██████ VERIFICATION NUMBER \_\_\_\_\_



OXY USA Inc.

6 Desta Drive, Suite 6000, Midland, TX 79705, P.O. Box 50250, Midland, TX 79710-0250  
Telephone 915 685-5600 Fax 915 685-5754  
April 3, 1997

New Mexico Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

\*\*\* BY FAX \*\*\*

Attention: Mr. Michael E. Stogner

Re: *Case No. 11762, Proposed Changes to Rule 111*

Dear Mr. Stogner:

OXY USA Inc. wishes to express its strong support for the proposed changes to Rule 111. We have experienced the regulatory process associated with permitting directional and horizontal wells in New Mexico, and concur that the current notice requirements are unnecessary and burdensome. The proposed rules clarify that the Rule 104 process should be used for unorthodox bottomhole locations resulting from directional and horizontal drilling projects, which adequately addresses correlative rights in these situations. The proposed changes also spell out what happens when an operator experiences excessive deviation on a vertical well, which helps in planning drilling operations.

OXY has participated in the Rule 111 work group process, and we thank the commission for this opportunity. We also wish to express our gratitude for the commission's continuing efforts to streamline and eliminate unnecessary regulatory processes.

Sincerely,

A handwritten signature in cursive script that reads "Rick".

Richard E. Foppiano, P.E.  
Regulatory Affairs Advisor  
Western Region - Midland

REF:ref



**ARCO Permian**  
600 North Marienfeld  
Midland TX 79701-4373  
PO Box 1610  
Midland TX 79702-1610  
Telephone 915 688 5570

**Elizabeth A. Casbeer**  
Regulatory/Compliance Analyst

April 7, 1997

**VIA FACSIMILE**

STATE OF NEW MEXICO  
Oil Conservation Division  
ATTN: Michael E. Stogner  
2040 South Pacheco Street  
Santa Fe, NM 87505

RE: **Case No. 11762, Proposed Changes to Rule 111**

Mr. Stogner:

ARCO Permian wishes to express its strong support for the proposed changes to Rule 111. We have experienced the regulatory process associated with permitting directional and horizontal wells in New Mexico, and concur that the current notice requirements are unnecessary and burdensome. The proposed rules clarify that the Rule 104 process should be used for unorthodox bottomhole locations resulting from directional and horizontal drilling projects, which adequately addresses correlative rights in these situations. The proposed changes also describe what happens when an operator experiences excessive deviation on a vertical well, which helps in planning drilling operations.

ARCO has participated in the Rule 111 work group process, and we thank the commission for this opportunity. We also wish to express our gratitude for the commission's continuing efforts to streamline and eliminate unnecessary regulatory processes.

Yours very truly,

**Elizabeth A. Casbeer**  
Regulatory Compliance Analyst

xc: Liz Bush - 54/MIO  
R/C Files



**MEMORANDUM**  
**OCCIDENTAL OIL AND GAS**

April 5, 1997

TO: Donna Williams (Burlington Resources) Fax #: 688-6007  
George Sharpe (Merrion) Fax #: 505-326-5900  
C. Wade Howard (Texaco) Fax #: 688-4831  
Mike Stogner (NMOCD) Fax #: 505-827-8177  
Randy Cate (Enron) Fax #: 686-3773

FROM: Richard E. Foppiano *Rick*

SUBJECT: More Changes to Rule 111

As promised, please find attached Draft #6 of the proposed changes to Rule 111. To make it read easier, I identified the changes from the earlier version (which is the version sent out to industry in February) in bold italics. Some notes on the attached draft:

1. I made a note in the margin of the redlined version to associate the suggested change with the party that initiated it. This is just for our reference.
2. We forgot to review Dugan's comments as a group, so I went ahead and made the non-controversial changes they suggested. I didn't agree with his suggestion to add the word "allowable" to our B (2), since that would mean you would have to have a maximum horizontal displacement less than 330' even when I was drilling on a 40 acre unit 660' from the side boundaries. I also didn't agree with his suggested deletion of "...when dealing with prorated pools..." in C (3), since maximum allowables only apply to pools that are prorated, either by market demand, maximum efficient rate or by depth bracket. And finally, our suggestion to delete D (1) takes care of his concerns about who pays for the survey.
3. As we agreed, I deleted paragraph D (1), which is F (1) in the current rule.
4. As we agreed, I took a stab at some general language for a new D (1) to require directional survey companies to be approved by the NMOCD, and to have some minimum spacing for the shot points. I talked to Mike on Friday, and he is concerned about increasing regulatory burdens. He had an idea, though, that maybe such approval could be accomplished just by the surveying company demonstrating that they are approved in other states. This is an application of the "reciprocity" concept similar to professional registration. He also made a good point about allowing some flexibility for the shot spacing, to take into account future advances in technology.

**The immediate next step for each of you is to review the new additions and deletions and get back to me ASAP. I have to get the attached to Rand Carroll in advance of the Thursday commission hearing, so please don't delay!**

(2)

April 5, 1997

Page 2

I have made the final revisions to the slide presentation, and will try to have a color set for the presenters (Wade & Donna) as quickly as possible. As I get a complete set, I will call you and you can come by and pick it up. It will be your set for the hearing, so you can make notes on it (although I would recommend using post-its). The slide show is based on the version that was sent out to industry, and we can advise the commission at the end that we have some additional changes. This seems to be the cleanest way to handle the latest changes.

I will also include copies of comments from George Sharpe and Phillips Petroleum.

We are almost there, guys! Just a little more.....

REF:ref  
Attachment

REF:ref

(3)

C:\DATA\WPDOCUME-1\R111\_6.DOC

Draft No. 6

Date: April 5, 1997

(Note => [~~This indicates proposed deletions~~] This indicates proposed additions. *Changes from the docketed version are noted in bold italics.*)

RULE 111-Deviation Tests[~~Deviated Wells~~] and Directional Wells:

**III.A.** Definitions: The following definitions shall apply to this Rule only:

(1) [(10)] Azimuth - [*means*] the deviation in the horizontal plane of a wellbore expressed in terms of compass degrees.

Rand

(2) [(1)] Deviated Well - [*means*] any wellbore which is intentionally deviated from vertical but not with an intentional azimuth. Any deviated well is subject to Rule 111.B [~~B~~ and ~~C~~].

Rand

(3) [(2)] Directional Well - [*means*] a wellbore which is intentionally deviated from vertical with an intentional azimuth. Any directional well is subject to Rule 111.C [~~D~~].

Rand

(4) Drilling Unit - [*means*] the surface acreage assigned to a [~~vertical~~] wellbore in accordance with [~~NMOED~~] Rule 104. Included in this definition is a "unit of proration for oil or gas" as defined by the Division and all non-standard such units previously approved by the Division.

Rand + Dugan

(5) [(11)] Kick-off Point - [*means*] the point at which the wellbore is intentionally deviated from vertical.

Rand

(6) [(14)] Lateral - [*means*] any portion of a wellbore past the point where the wellbore has been intentionally departed from the vertical.

Rand

(7) [(9)] Penetration Point - [*means*] the point where the wellbore penetrates the top of the pool from which it is intended to produce.

Rand

(8) Producing Area - [*means*] all points that lie within [~~along~~] a [~~rectangular or square~~] window formed by plotting the measured distance from the North, South, East and West boundaries of a project area, inside of which a vertical wellbore can be drilled and produced in conformity with the setback requirements from the outer boundary of a

Rand + Dugan + Frank + Chavez



standard spacing and proration unit for the applicable pool(s).

(9) [(+3)] Producing Interval - [~~means~~] that portion of the wellbore drilled inside the vertical limits of a pool, between its penetration point and its terminus [~~and within the producing area~~].

Rand

(10) [(+7)] Project Area - an area designated on Form C-102 that is enclosed by the outer boundaries of a drilling unit, a combination of complete drilling units, or an approved secondary, tertiary or pressure maintenance project [~~means one or more drilling units which are to be dedicated to the project well~~].

(11) [(+6)] Project Well - [~~means~~] any well drilled, completed, produced or injected into as either a vertical well, deviated well or [~~as a~~] directional well.

Rand

(12) Terminus - [~~means~~] the farthest point attained along the wellbore.

Rand

(13) Unorthodox - any part of the producing interval which is located outside of the producing area.

(14) [(+3)] Vertical Well - [~~means~~] a well that does not have an intentional departure or course deviation from the vertical.

Rand

(15) [(+5)] Wellbore - [~~means~~] the interior surface of a cased or open hole through which drilling, production, or injection operations are conducted.

Rand

### III.B. Deviated Wellbores:

(1) Deviation Tests Required. [-] Any vertical or deviated well which is drilled or deepened shall be tested at reasonably frequent intervals to determine the deviation from the vertical. Such tests shall be made at least once each 500 feet or at the first bit change succeeding 500 feet. A tabulation of all deviation tests run, sworn to and notarized, shall be filed with Form C-104, Request for Allowable and Authorization to Transport Oil and Natural Gas.

(2) Excessive Deviation. When the deviation averages more than five degrees in any 500-foot interval, the operator shall include the calculations of the maximum possible horizontal displacement of the hole. When the maximum possible horizontal displacement exceeds the distance to the nearest outer boundary line of the appropriate unit, [~~and~~] the operator [Division] shall run [~~may require that~~] a directional survey [~~be run~~] to establish the location of the producing interval(s).

Frank Chavez

(3) Unorthodox Locations. If the results of the directional survey indicate that the producing interval is more than 50 feet from the approved surface location and closer than the minimum setback requirements to the outer boundaries of the applicable unit, then the well shall be considered unorthodox. To obtain authority to produce such well, the operator shall file an application with the Division Director, copy to the appropriate OCD District Supervisor, and shall otherwise follow the normal process outlined in Rule 104 (F) (3) to obtain approval of the unorthodox location.

Rand

(4) Directional Survey Requirements. Upon request from the Division Director, any vertical or deviated well [which was deviated in an indeterminate direction or toward the vertical] shall be directionally surveyed. The Supervisor of the appropriate Division District shall be notified of the approximate time any directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the Division upon completion of the well. The Division shall not assign an allowable to the well until all such directional surveys have been filed.

~~(C. Deviated Wellbores:~~

~~(1) The Supervisor of the appropriate Division District may approve the written request of an operator to drill a deviated wellbore or to deviate an existing wellbore to:~~

- ~~— (a) straighten a crooked hole by deviating towards the vertical;~~
- ~~— (b) side track junk in the hole by deviating in an indeterminate direction (no intentional azimuth);~~
- ~~— (c) side track an existing wellbore by deviating in an indeterminate direction (no intentional azimuth) for the purpose of recompleting into an existing producing formation or plugging the originally completed formation and recompleting into a different formation.~~

~~(2) The Supervisor of the appropriate Division District may require any request for a deviated well to be submitted for administrative approval by the Division Director.~~

~~(3) Applications for administrative approval for a deviated well shall:~~

- ~~— (a) be filed in duplicate and shall be accompanied by plats showing [both] the surface location of the subject well, its spacing unit and all adjoining spacing units;~~
- ~~— (b) state the reason(s) for deviating the subject well, and~~

(6)

~~(c) shall include a statement or plat showing the names and addresses of all operators of spacing units, or working interest owners of undrilled spacing units offsetting the unit in which the project is located and attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to all those parties by submitting a copy of the application to them by certified mail return receipt requested and advising them that if they have an objection, it must be filed in writing within twenty (20) days of the date notice was sent:~~

~~(4) The bottomhole location of any deviated well shall be at an orthodox well location or an unorthodox location previously approved pursuant to Rule 104 and shall be considered acceptable if the actual subsurface location in the formation to be produced is orthodox or is no more than 50 feet from the approved subsurface location:~~

~~(5) The Division Director may approve the application for a deviated well upon receipt of waivers from all offset operators or owners of undrilled tracts or if no offset operator or owner has entered an objection to the project within 20 days after the application was received by the Director.]~~

### III.C. [D] Directional Wellbores:

~~[(1) The Division Director, shall have the authority without notice and hearing to administratively approve a directional wellbore project when:~~

~~(a) the surface location of the proposed or existing project well is within the boundaries of the project area, consisting of a single or multiple drilling unit(s); substantially in the form of either a square or a rectangle, as applicable, being a legal subdivision of the U.S. Public Land Survey;~~

~~(b) the producing interval of the wellbore(s) is totally confined to a producing area. The wellbore(s) may be re-oriented to any azimuth based upon a change in conditions either geologic or mechanical, which is encountered either before or after the commencement of a project, but only insofar as the producing interval(s) remains totally confined to the producing area;~~

~~(c) the project area includes either a single drilling unit or multiple contiguous drilling units; and;~~

~~(d) the project well includes either a single lateral or multiple laterals which conform to conditions (a) and (b) above:~~

~~(2) To obtain administrative approval to drill a directional well, the applicant shall file a written application in duplicate with the Division Director, copy to the appropriate OED District Supervisor, which shall include:~~

~~(1) a statement addressing the reason(s) for directionally drilling the subject well;~~

~~(2) a plat indicating the section, township and range in which the well is to be drilled, the project area, the proposed surface producing interval, the producing area for the project well, any existing wells in the applicable pool(s) in the proposed project area, all offsetting drilling units in the applicable pool(s) and their associated operator, and any wells in those units;~~

~~(3) a vertically oriented plan view (cross-sectional view) for the subject well including the true vertical depth of the top and bottom of the subject pool, degree of angle to be built in the project wellbore(s), the true vertical and the measured depth of the estimated kickoff point, the estimated penetration point and the lateral length;~~

~~(4) a horizontal plan view for the subject well and its spacing unit showing the drilling unit and drilling-producing window, including the estimated azimuth and maximum length of the lateral(s) to be drilled;~~

~~(5) a type log section on which is identified the top and bottom of the subject pool, and;~~

~~(6) a statement or plat showing the names and addresses of all operators of spacing units, or working interest owners of undrilled spacing units offsetting the unit in the applicable pool(s) in which the project is located and attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to all those parties by submitting a copy of the application to them by certified mail return receipt requested and advising them that if they have an objection, it must be filed in writing within twenty (20) days of the date notice was sent.]~~

(1) Directional Drilling Within a Project Area. A permit to directionally drill a wellbore may be granted by the Supervisor of the appropriate Division District if the producing interval is entirely within the producing area or at an unorthodox location previously

approved by the Division.

(2) Unorthodox Wellbores. If all or part of the producing interval of any directional wellbore is projected to be outside of the producing area, the wellbore shall be considered unorthodox. To obtain approval for such wellbore, the applicant shall file a written application in duplicate with the Division Director, copy to the appropriate OCD District Supervisor, and shall otherwise follow the normal process outlined in Rule 104 (F) (3).

(3) Allowables for Project Areas that Consist of Multiple Proration Units. The maximum allowable assigned to the project area when dealing with prorated pools shall be based upon of the number of standard proration units (or approved non-standard proration and spacing units) that are developed or traversed by the producing interval of the directional wellbore or wellbores. Such maximum allowable shall be applicable to all production from the project area, including any vertical wellbores on standard proration units inside the project area.

*Rand*

(4) Directional Surveys Required. A directional survey shall be required on each well drilled under the provisions of this section. The Supervisor of the appropriate Division District shall be notified of the approximate time all directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the Division upon completion of the well. The Division shall not assign an allowable to the well until all such directional surveys have been filed. If the directional survey indicates that any part of the producing interval is outside of the producing area, or, in the case of an approved unorthodox location, less than the approved setback requirements from the outer boundary of the applicable unit, then the operator shall file an application with the Division Director, copy to the appropriate OCD District Supervisor, and shall otherwise follow the normal process outlined in Rule 104 (F) (3) to obtain approval of the unorthodox location.

~~[E. Requirements/Conditions of Administrative Approval:~~

~~(1) The Division Director may approve the application upon receipt of waivers from all offset operators or owners of undrilled tracts or if no offset operator or owner has entered an objection to the project within 20 days after the application was received by the Director.~~

~~(2) Any order issued by the Director approving an application for a directional wellbore shall require that:~~

~~— (a) the applicant shall conduct a directional survey on the wellbore after directional~~



~~drilling operations in order that the direction, extent and terminus of said wellbore may be determined to be in compliance with the provision of any order with copies submitted to the Santa Fe NMOCED and to the NMOCED district office in which the well is located, and,~~

~~(b) the Supervisor of the appropriate Division District shall be notified of the approximate time all directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the Division upon completion of the well. The Division shall not assign an allowable to a well until the operator has submitted an affidavit that all such directional surveys have been filed.]~~

**11LD [F]. Additional Matters:**

~~[(1) The Division Director, at the request of an offset operator, may require any operator to make a directional survey of any well. The directional survey and all associated costs shall be at the expense of the requesting party and shall be secured in advance by a \$5,000 indemnity bond posted with and approved by the Division. The requesting party may designate the well survey company and the survey may be witnessed by the Division and the operator.]~~

Dugan  
Exxon  
Enron

(1) Directional surveys required under the provisions of this rule shall have shot points no more than 200 feet apart and shall be run by competent surveying companies that are approved by the Division Director. Exceptions to the minimum shot point spacing will be allowed provided the accuracy of the survey is still within acceptable limits.

Enron

(2) The Division Director, may, at his discretion, set any application for administrative approval ~~[for public hearing.]~~ whereby the operator shall submit appropriate information and give notice as requested by the Division Director. Unprotected applications may be approved administratively within 20 days of receipt of the application and supporting information. If the application is protested, or the Division Director decides that a public hearing is appropriate, the application may be set for public hearing.

Stogin

(3) Permission to deviate or directionally drill any wellbore for any reason or in any manner not provided for in this rule shall be granted only after notice and opportunity for hearing.

## ***CLEAN VERSION***

### **RULE 111-Deviation Tests and Directional Wells:**

**(1) Azimuth** - the deviation in the horizontal plane of a wellbore expressed in terms of compass degrees.

**(2) Deviated Well** - any wellbore which is intentionally deviated from vertical but not with an intentional azimuth. Any deviated well is subject to Rule 111.B.

**(3) Directional Well** - a wellbore which is intentionally deviated from vertical with an intentional azimuth. Any directional well is subject to Rule 111.C.

**(4) Drilling Unit** - the surface acreage assigned to a wellbore in accordance with Rule 104. Included in this definition is a "unit of proration for oil or gas" as defined by the Division and all non-standard such units previously approved by the Division.

**(5) Kick-off Point** - the point at which the wellbore is intentionally deviated from vertical.

**(6) Lateral** - any portion of a wellbore past the point where the wellbore has been intentionally departed from the vertical.

**(7) Penetration Point** - the point where the wellbore penetrates the top of the pool from which it is intended to produce.

**(8) Producing Area** - all points that lie *within* a window formed by plotting the measured distance from the North, South, East and West boundaries of a project area, inside of which a vertical wellbore can be drilled and produced in conformity with the setback requirements from the outer boundary of a standard spacing and proration unit for the applicable pool(s).

**(9) Producing Interval** - that portion of the wellbore drilled inside the vertical limits of a pool, between its penetration point and its terminus.

**(10) Project Area** - an area designated on Form C-102 that is enclosed by the outer boundaries of a drilling unit, a combination of complete drilling units, or an approved secondary, tertiary or pressure maintenance project.

**(11) Project Well** - any well drilled, completed, produced or injected into as either a

**vertical well**, deviated well or directional well.

(12) Terminus - the farthest point attained along the wellbore.

(13) Unorthodox - any part of the producing interval which is located outside of the producing area.

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

(15) Wellbore - the interior surface of a cased or open hole through which drilling, production, or injection operations are conducted.

**III.B. Deviated Wellbores:**

(1) Deviation Tests Required. Any vertical or deviated well which is drilled or deepened shall be tested at reasonably frequent intervals to determine the deviation from the vertical. Such tests shall be made at least once each 500 feet or at the first bit change succeeding 500 feet. A tabulation of all deviation tests run, sworn to and notarized, shall be filed with Form C-104, Request for Allowable and Authorization to Transport Oil and Natural Gas.

(2) Excessive Deviation. When the deviation averages more than five degrees in any 500-foot interval, the operator shall include the calculations of the maximum possible horizontal displacement of the hole. When the maximum possible horizontal displacement exceeds the distance to the nearest outer boundary line of the appropriate unit, the operator shall run a directional survey to establish the location of the producing interval(s).

(3) Unorthodox Locations. If the results of the directional survey indicate that the producing interval is more than 50 feet from the approved surface location and closer than the minimum setback requirements to the outer boundaries of the applicable unit, then the well shall be considered unorthodox. To obtain authority to produce such well, the operator shall file an application with the Division Director, copy to the appropriate OCD District Supervisor, and shall otherwise follow the normal process outlined in Rule 104 (E) (3) to obtain approval of the unorthodox location.

(4) Directional Survey Requirements. Upon request from the Division Director, any vertical or deviated well shall be directionally surveyed. The Supervisor of the appropriate Division District shall be notified of the approximate time any directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the Division upon completion of the well. The Division shall not assign an



allowable to the well until all such directional surveys have been filed.

**III.C. Directional Wellbores:**

**(1) Directional Drilling Within a Project Area. A permit to directionally drill a wellbore may be granted by the Supervisor of the appropriate Division District if the producing interval is entirely within the producing area or at an unorthodox location previously approved by the Division.**

**(2) Unorthodox Wellbores. If all or part of the producing interval of any directional wellbore is projected to be outside of the producing area, the wellbore shall be considered unorthodox. To obtain approval for such wellbore, the applicant shall file a written application in duplicate with the Division Director, copy to the appropriate OCD District Supervisor, and shall otherwise follow the normal process outlined in Rule 104 (F) (3).**

**(3) Allowables for Project Areas that Consist of Multiple Proration Units. The maximum allowable assigned to the project area when dealing with prorated pools shall be based upon of the number of standard proration units (or approved non-standard proration and spacing units) that are developed or traversed by the producing interval of the directional wellbore or wellbores. Such maximum allowable shall be applicable to all production from the project area, including any vertical wellbores on standard proration units inside the project area.**

**(4) Directional Surveys Required. A directional survey shall be required on each well drilled under the provisions of this section. The Supervisor of the appropriate Division District shall be notified of the approximate time all directional surveys are to be conducted. All directional surveys run on any well in any manner for any reason must be filed with the Division upon completion of the well. The Division shall not assign an allowable to the well until all such directional surveys have been filed. If the directional survey indicates that any part of the producing interval is outside of the producing area, or, in the case of an approved unorthodox location, less than the approved setback requirements from the outer boundary of the applicable unit, then the operator shall file an application with the Division Director, copy to the appropriate OCD District Supervisor, and shall otherwise follow the normal process outlined in Rule 104 (F) (3) to obtain approval of the unorthodox location.**

**III.D. Additional Matters:**

**(1) Directional surveys required under the provisions of this rule shall have shot points**

**no more than 200 feet apart and shall be run by competent surveying companies that are approved by the Division Director. Exceptions to the minimum shot point spacing will be allowed provided the accuracy of the survey is still within acceptable limits.**

(2) The Division Director, may, at his discretion, set any application for administrative approval **whereby the operator shall submit appropriate information and give notice as requested by the Division Director. Unprotected applications may be approved administratively within 20 days of receipt of the application and supporting information. If the application is protested, or the Division Director decides that a public hearing is appropriate, the application may be set for public hearing.**

(3) Permission to deviate or directionally drill any wellbore for any reason or in any manner not provided for in this rule shall be granted only after notice and opportunity for hearing.