

CHAPTER 21

Legal and Developmental Issues Involving Horizontal Drilling in The Appalachian Basin

Rex Burford

West Virginia Oil and Natural Gas Association

with assistance from

John H. Johnston

Robinson & McElwee

Charleston, West Virginia

Synopsis

§ 21.01. Introduction and Overview.

[1]--History.

[2]--Current Interest.

[3]--Interstate Oil Compact Commission Resolution.

[4]--Current Regulatory Status in Appalachia.

[5]--New Regulatory Considerations.

[6]--Additional Technological Advancements.

[7]--Result of Technical Advancements.

§ 21.02. Definitions.

§ 21.03. Physical Factors Affecting Development.

§ 21.04. Legal Issues Involving Private Rights in Appalachia.

[1]--Implied Covenants.

[a]--Covenant of Reasonable Development.

[b]--Covenant to Protect Against Drainage.

[c]--Covenant of Reasonable Care and Due Diligence.

[d]--Summary.

[2]--Surface Trespass.

[3]--Subsurface Trespass.

§ 21.05. Recommendations for Modifications of State Oil and Gas Conservation Statutes and Regulations.

§ 21.06. Existing State Regulations.

§ 21.07. Appalachian Considerations.

[1]--Horizontal Drilling Activity to Date.

[2]--Status of Oil and Gas Conservation Statutes in the Appalachian

Basin States.

[3]--Maximum Drainage of Horizontal Wells.

§ 21.08. Application of Horizontal Drilling to Coal Bed Methane Development.

§ 21.09. Conclusion.

§21A. Appendix -- Summary of State Spacing Regulations for Kentucky, New York, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia.

§ 21.01. Introduction and Overview.

"The law is dragged kicking and screaming into the future." This well worn statement is appropriate in the context of the relationship of the current state of the law in Appalachia to the emerging practice of horizontal drilling. This Chapter serves two purposes. First, it is a survey of existing eastern state oil and gas conservation laws pertaining to horizontal drilling. Second, it is meant to be a useful tool to encourage discussion about horizontal drilling and the developing body of law emerging from this rapidly advancing technology. Changes in existing state statutes and regulations will be necessary to accommodate the efficient and rapid assimilation of the new technological advances which are making horizontal drilling a practical means of producing oil and gas.

Horizontal drilling will require a reorientation of both legal and technical thinking about the process of oil and gas drilling. Mr. Joe Goetz, Manager of Technical Marketing for Halliburton Services, Inc., in prepared remarks at a March 1991 Symposium in Houston, Texas, on the subject sponsored by *Gas Daily*, noted that the concepts involve "Paradigm Shifts." That is, the "accepted" set of rules by which we operate are not always correct. A small chart will illustrate the concept under conventional drilling vs. horizontal drilling.⁽¹⁾

CONVENTIONAL (Vertical) HORIZONTAL

Top Beginning

Bottom End

Up Topside

Down Bottomside

Spacing Orientation

Target Zone Invaded Zone

Attorney Richard A. Counts of Kingsport, Tennessee, at the June 1990 meeting of the Interstate Oil Compact Commission (IOCC) in Bismarck, North Dakota, aptly stated: "The most exciting technologies in the world are of no use unless the regulatory framework is in place to allow the development of these resources."⁽²⁾ Estimates are that the number of wells drilled horizontally will continue to increase, as indicated in Illustration 1.⁽³⁾

[1]--History.