LEVERAGING RISK IN OIL FIELD CONTRACTS

Prepared for:

The BITUMINOUS Insurance Companies'

OIL AND GAS SEMINAR
Claim-Risk Control-Underwriting
February 17, 1993
Rock Island, Illinois

by:

David E. Pierce

Professor of Law
Washburn University School of Law
Topeka, Kansas

Of Counsel
Shughart Thomson & Kilroy
Kansas City, Missouri

Leveraging Risk in Oil Field Contracts

Prepared for the BITUMINOUS Insurance Companies'

OIL AND GAS SEMINAR
Claim-Risk Control-Underwriting
February 17, 1993
Rock Island, Illinois

by

David E. Pierce

Professor of Law
Washburn University School of Law
Topeka, Kansas

Of Counsel
Shughart Thomson & Kilroy
Kansas City, Missouri

TABLE OF CONTENTS

Leveraging Risk in Oil Field Contracts

Prepared for the BITUMINOUS Insurance Companies'

OIL AND GAS SEMINAR
Claim-Risk Control-Underwriting
February 17, 1993
Rock Island, Illinois

by

David E. Pierce[1]

I. STRUCTURING RELATIONSHIPS TO MANAGE RISK

Business relationships can be structured to achieve varying goals. For example, a transaction may be structured as a "lease" instead of a "sale" to confer a tax benefit on one, or both, of the parties to the transaction; a transaction may be structured to ensure that a certain party has "control" over the details of how contractual obligations will be performed. This article focuses on how the structure of common relationships encountered in the oil and gas industry can impact the "risk" assumed by the parties to the relationship. For purposes of this article, "risk" means the possible liability a party may incur to compensate a party to the relationship, or third parties, for losses they may suffer arising out of oil and gas development activities.[2] The "risk" can arise

---

[2]This should be distinguished from the risk associated with a dry hole--the risk that you spend a lot of money to drill a hole in the ground and no oil or gas in commercial quantities is found. For example, in the United States if an oil and gas developer has good geological information and properly drills, tests, and equips a well in an unproven area (a "wildcat" exploration well), the chances of completing a successful well are about 1 in 10. If it costs $1,000,000 to drill and test a well, there is a 90% chance the undertaking will be a total loss. See generally API, **Introduction to Oil & Gas Production** 68 (4th ed. 1988). Generally, this type of risk is "shared" with others through joint operations where other developers agree to share in a portion of the risk of failure proportionate to their ability to participate in a share of the rewards of successful development. Another way of

out of liabilities created by contract,[3] tort,[4] or statute.[5]

---

leveraging all or part of the risk is through various investment techniques, such as the limited partnership, where the money raised from the investors may actually eliminate, for the general partner, any risk associated with a dry hole. Indeed, the general partner will often make money regardless of the outcome of the drilling operations. The economic risk of a dry hole is transferred to the limited partners. This same sort of developer dry hole risk-leveraging can occur using an investment or operating agreement between joint working interest owners.

[3]Such as a "warranty" or an "indemnity" agreement.

[4]"Tort" refers to any wrong or injury done to another person or entity. For example, if A drives their car carelessly and strikes B, A has committed a tort against B. A's negligent (tortious) driving was the proximate cause of B's injury so A will be held liable for damages suffered by B arising out of the incident. Tort include, for example: negligence, nuisance, trespass, strict liability, assault, and battery.

[5]New liabilities can be created by statute and statutes can create new penalties for existing liabilities. For example, prior to enactment of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. §§ 9601 to 9675 (1988), commonly called the "Superfund" statute, a person who buried hazardous substances on property they owned in the past, often had no liability for subsequent problems at the site. The existing statutory, contract, and tort law mechanisms generally made it difficult, if not impossible, to impose liability for past lawful activities which, a decade or century later, were found to create significant environmental problems. However, in 1980 Congress altered the risk associated with such past disposal activities by passing CERCLA. By statute, CERCLA imposed liability on any person who disposed of hazardous substances at the facility as well as any person who owned the facility at the time of disposal. CERCLA § 107(a)(2) & (3), 42 U.S.C. § 9607(a)(2) & (3) (1988).

Even if the disposal of hazardous substances would give rise to liability under contract or tort law, CERCLA adds new penalties and damages that might not otherwise be recoverable as contract or tort damages. For example, CERCLA entitles a private party to recover the amount of their cleanup costs, even though the cleanup costs may far exceed the market value of the property once the hazard is abated. CERCLA § 107(a)(4)(B), 42 U.S.C. § 9607(a)(4)(B) (1988) (entitled to recover "necessary costs of response . . . consistent with the national contingency plan"). CERCLA also provides various penalties for a failure to act when ordered by the Environmental Protection Agency (EPA). CERCLA § 106(b), 42 U.S.C.

Most oil and gas transactions employ "standard" approaches to creating and defining the relationship. For example, some form of "oil and gas lease" is almost uniformly used to conduct development of a landowner's mineral interest.[6] These standard relationships have given rise to fairly standard business risks that can be identified, evaluated, and adjusted. As courts render opinions that define old and new risks, and legislatures pass laws to create new risks or eliminate existing risks, the business community, together with its lawyers and insurers, must keep pace of developments to effectively manage risk. Oil and gas industry risk management, like risk management in other industries, consists of avoiding or minimizing risks, sharing risks with other responsible parties, and transferring risks through contract and transaction structuring techniques.

A. Avoiding or Minimizing Risk

Often the best way to manage risk is to avoid it altogether. For example, assume an oil and gas developer is interested in acquiring leases in an area. A portion of the area of interest contains pits where oil and gas wastes were disposed in the early 1940s. If the lessee takes a lease covering the entire area, it runs the risk of being classified a current "owner" or "operator" under the Comprehensive Environmental Response, Compensation and

---

§ 9606(b) (1988) ($25,000/day penalty for refusing to comply with EPA cleanup order "without sufficient cause"); CERCLA § 107(c)(3), 42 U.S.C. § 9607(c)(3) (1988) (failure to respond to cleanup order "without sufficient cause" can result in EPA recovery of "punitive damages" equal to three times the amount spent by the EPA to conduct the cleanup).

[6]As I noted in a 1987 writing:

> The development of oil and gas in America is accomplished through a standard relationship created by documents called oil and gas leases. It has become axiomatic there is no such thing as a standard oil and gas lease form, such as a 'Producers 88.' However, even though the terms of the documents are seldom similar, the general structure of the legal relationships they create are typically identical.

D. Pierce, Rethinking the Oil and Gas Lease, 22 **Tulsa L. J.** 445, 445-56 (1987).

Liability Act (CERCLA).[7] However, if the lessee has effective pre-lease environmental assessment procedures in place, it can discover the potential risk and avoid it by refusing to include the problem land within the oil and gas lease.[8] In CERCLA cases the liability risk can often be managed by avoiding any relationship with the problem property.[9]

Another technique for risk avoidance is to rely upon independent contractors to perform certain high-risk tasks. For example, most oil and developers do not operate their own drilling rigs. Instead, they contract with independent contractors to provide drilling services. Depending upon how the transaction is structured, and the degree of control retained by the oil and gas lessee over the details of the drilling contractor's work, the lessee may be able to avoid certain types of tort liability associated with the drilling operation.

The mineral interest owner effectively avoids the financial risks and most of the liability risks associated with development by transferring all development rights and obligations to their oil and gas lessee. By leasing the minerals instead of developing them, the mineral interest owner avoids potential liability by transferring all control over development to the oil and gas lessee. The mineral interest owner thereby becomes a passive income recipient instead of an active participant in development.

Risks can be minimized by recognizing the potential risk and

---

[7]40 C.F.R. § 107(a)(1), 42 U.S.C. § 9607(a)(1) (1988). See generally United States v. A & N Cleaners & Launderers, Inc., 788 F. Supp. 1317, 1332-33 (S.D.N.Y. 1992) (lessee of commercial real estate held to be an "owner" under CERCLA).

[8]The lessee may be able to enter into an agreement with the mineral interest owner of the problem land to ensure it is not leased to competing developers. However, to the extent the developer is given increasing levels of control over the problem land the level of CERCLA liability risk will increase. See generally Nurad, Inc. v. Wiliam E. Hooper & Sons Co., 966 F.2d 837, 842-43 (4th Cir. 1992) (exercise of control or authority to control can give rise to CERCLA "operator" liability).

[9]This can be accomplished by ensuring the client does not become an owner or operator of the site nor a disposer of waste at the site. See generally Nurad, Inc. v. William E. Hooper & Sons Co., 966 F.2d 837, 843-44 (4th Cir. 1992) (lessee not liable for leaking underground storage tanks because lease did not give them any authority to control the tanks). Also, if the client is a drilling contractor, care would need to be taken to ensure the contractor does not perform services at the site that could give rise to liability.

then adopting various procedures and business practices to manage the risk. For example, assume the lessee decides to exercise extensive control over the drilling contractor's work; the contractor will be considered an employee of the lessee and the lessee will be liable for torts committed by the drilling contractor arising out of the scope of its employment. However, once the lessee acknowledges this risk, it can take action to minimize the risk by hiring the most experienced drilling contractor with the best accident and work history. The lessee can also take additional steps necessary to train or inform its employees and contractors concerning unique hazards at the site and safety procedures that must be followed.

B. Sharing Risk

One of the most common ways to leverage risk is to share it with others. For example, if lessee A joins with lessee B to drill a well, generally they will be sharing not only the financial risk involved, but also the liability risk associated with the undertaking. Whenever there is more than one owner of the working interest in a well or spacing unit, the working interest owners will enter into a joint operating agreement ("JOA") to coordinate their development activities. The JOA will specify which owner will be in charge of day-to-day operations as the "operator" and will define each party's proportionate right to production from the well. Generally, a party's proportionate right to production will be equal to the party's proportionate share of the risk associated with the venture.

Most production occurs under some version of the A.A.P.L. Model Form Operating Agreement.[10] ARTICLE VII.[11] of the 1989

---

[10]There are now four versions of the "Model Form Operating Agreement." Development agreements entered into prior to 1978 will usually employ the "Ross-Martin" Form 610 "Model Form Operating Agreement--1956". Development agreements entered into from 1978 through 1982 will probably use the "A.A.P.L. Form 610 - 1977 Model Form Operating Agreement". Development agreements entered into after 1982 will probably use the "A.A.P.L. Form 610 - 1982 Model Form Operating Agreement". Development agreements entered into from and after 1990 will probably use the "A.A.P.L. Form 610 - 1989 Model Form Operating Agreement".

The time periods are only rough approximations. Often a developer will not change to a new form of agreement for many years; electing instead to use an earlier version with the alterations and additions they have developed through experience with the form. In addition to the Model Forms, there is also the occasional custom-made form of operating agreement. These are often encountered when the well is being operated by a promoter

A.A.P.L. Model Form attempts to define the relationship of the parties to the agreement stating:

> The liability of the parties shall be several, not joint or collective.[12] Each party shall be responsible only for its obligations, and shall be liable only for its proportionate share of the costs of developing and operating the Contract Area.[13] . . . . It is not the intention of the parties to create, nor shall this agreement be construed as creating, a mining or other partnership, joint venture, agency relationship or association, or to render the parties liable as partners, co-venturers, or principals.[14] In their relations with each other under this agreement, the parties shall not be considered fiduciaries or to have established a confidential relationship but rather shall be free to act on an arm's-length basis in accordance with their own respective self-interest, subject, however, to the obligation of the parties to act in good faith in their dealings with each other with respect to activities hereunder.[15]

The primary focus of this provision is on the payment of debts incurred by the operator or other parties to the JOA.

---

with passive working interest investors. Offshore operations are often conducted under company-generated operating agreement forms.

[11]1989 Form, ARTICLE VII. EXPENDITURES AND LIABILITY OF PARTIES, page 11.

[12]As between the parties to the contract, this provision would be enforceable. However, as to third parties the nature of the parties' business relationship will determine whether they will enjoy several, as opposed to joint, liability for their association with the enterprise.

[13]The "Contract Area" is the area encompassed by the JOA; typically the spacing unit for a single well. However, it is not unusual to have a larger area, encompassing several well sites, governed by the same JOA.

[14]Again, this will be given effect between the parties to the agreement but will not bind third parties. If the actual business relationship has the attributes of a partnership, mining partnership, or a joint venture, the parties to the agreement will incur the resulting liability to third parties, regardless of what they declare the relationship to be in their contract.

[15]Since this provision defines the rights of the parties to the agreement against one another, it will be enforceable.

The tort risks are addressed in ARTICLE X.[16] which provides:

> Operator may settle any single uninsured third party damage claim or suit arising from operations hereunder if the expenditure does not exceed _____ Dollars ($_____) and if the payment is in complete settlement of such claim or suit. If the amount required for settlement exceeds the above amount, the parties hereto shall assume and take over the further handling of the claim or suit, unless such authority is delegated to Operator. All costs and expenses of handling, settling, or otherwise discharging such claim or suit shall be at the joint expense of the parties participating in the operation from which the claim or suit arises. If a claim is made against any party of if any party is sued on account of any matter arising from operations hereunder over which such individual has no control because of the rights given Operator by this agreement, such party shall immediately notify all other parties, and the claim or suit shall be treated as any other claim or suit involving operations hereunder.

This provision provides for a sharing of tort risks that arise out of JOA operations.

C. Transferring Risk

Most oil and gas contracts leverage risk by transferring it to another party to the agreement. For example, in the JOA the risk of loss associated with the operator's negligence is transferred to the other parties to the JOA. ARTICLE V[17] provides:

> Operator shall conduct its activities under this agreement as a reasonable prudent operator, in a good and workmanlike manner, with due diligence and dispatch, in accordance with good oilfield practice, and in compliance with applicable law and regulation, but in no event shall it have any liability *as Operator* to the other parties for losses sustained or liabilities incurred *except such as may result from gross negligence or willful misconduct.*

Therefore, if the loss is caused by the Operator's simple negligence, it will be a joint loss paid by all parties to the agreement. In effect, the parties to the JOA are agreeing to "hold

---

[16] 1989 Form, ARTICLE X. CLAIMS AND LAWSUITS, page 15.

[17] 1989 Form, ARTICLE V. OPERATOR, page 4.

be enforceable by Lessor, even after the Lease terminates or otherwise ceases to burden the Leased Land.

Sometimes the transfer of risk is more subtle. For example, if a lessee assigns an oil and gas lease, most form leases contain the following clause:

> In the event of assignment hereof in whole or in part, liability for breach of any obligation issued hereunder shall rest exclusively upon the owner of this Lease, or portion thereof, who commits such breach.

After the date of the assignment, the lessor has agreed to look to the new assignee for performance of the lease covenants. In effect, the risk of future performance under the lease has been shifted from the lessee to the lessor and the new assignee. However, most form leases give the lessor no control over who can become an assignee of the lease. The assignee may be financially weak or a poor operator, or both.

To reallocate the risk associated with the assignee's performance, the lessor may try to negotiate for the following assignment provision:

> ASSIGNMENT BY LESSEE
>
> LESSEE can Assign all or any part of the Lease. However, LESSEE will remain obligated for the proper performance of all express and implied Lease obligations. LESSEE's liability for the non-performance of lease obligations will be in addition to the liability of any assignee obtaining an interest through the LESSEE or any assignee obtaining an interest through LESSEE's assignee. The liability of LESSEE and all assignees transferred an interest in the Lease is joint and several.

Wording to make subsequent <u>assignees</u> jointly and severally liable could provide:

> Any person or entity obtaining an Assignment of rights in the Lease: (1) Is deemed to have accepted liability for the non-performance of any express or implied Lease obligations accruing prior to the date of Assignment; and (2) Is liable for the proper performance of express and implied lease obligations from and after the date of Assignment. Liability for the non-performance of lease obligations will be in addition to the liability of LESSEE, any assignees obtaining an interest through the LESSEE, or any assignees obtaining an interest through LESSEE's assignees. The liability of LESSEE and all assignees transferred an interest in

the lease is joint and several.

Such a clause may prompt the parties to the assignment to allocate the risk created by the lease clause through their own indemnity provisions. For example, in an assignment by A to B, A might insist upon the following clause:

> B assumes, and agrees to comply with, from and after the date of this assignment, the express and implied covenants created by the oil and gas lease. From and after the date of this assignment, B agrees to indemnify A against any liability, claim, demand, damage, or cost, including litigation costs and attorney fees, associated with the oil and gas lease and the interest assigned to B.

B should insist upon a reciprocal indemnity from A; for example: "A agrees to hold harmless and indemnify B against any claims or liabilities, arising prior to the date of this Assignment, for noncompliance with the express and implied covenants created by the oil and gas lease." Liability for all matters under the lease and prior assignments should be specifically allocated between the parties.

The most important thing to remember about transfers of risk is that the transfer is effective only between the parties to the agreement. For example A cannot avoid liability to a third party by having B agree to assume all of A's liability. Although A may have an enforceable contract with B to reimburse A for any loss, A will still be liable to the third party. A, not the third party, assumes the risk of B being able or willing to honor its indemnity agreement.

Another problem with risk transfer is that it is often subject to various public policy limitations which may invalidate certain provisions or require special language to create the transfer. For example, in Louisiana,[19] New Mexico,[20] Texas,[21] and Wyoming[22] there are specific statutes which restrict the degree to which parties to certain oil and gas contracts can transfer risk associated with their negligent acts. The precise terms of each statute must be carefully reviewed to define what can and cannot be indemnified against. Each statute was designed to protect oil and gas service

---

[19]La. Rev. Stat. Ann. § 9.2780 (1991).

[20]N.M. Stat. Ann. § 56-7-2 (1978).

[21]Tex. Civ. Prac. & Rem. Code Ann. §§ 127.001 to 127.007 (1986 and Supp. 1993).

[22]Wyo. Stat. §§ 30-1-131 to 30-1-133 (1992).

companies and drilling contractors from indemnity provisions demanded by operators contracting for their services. However, the language of each statute is broad and could include a wide range of oil and gas contracts. Therefore, any proposed indemnity arrangement must be carefully evaluated in light of the precise terms of the applicable statute and the existing case law interpreting the statute.

Another common technique for transferring risk is to have a third party (an insurance company) contract to protect against the risk. For example, if a party has been unable to avoid risk, and is unable to transfer the risk through an indemnity, the party may be able to contract with an insurance company to insure against the risk of loss in the event it occurs.

In most instances risk will be managed through a combination of risk avoidance, minimization, sharing, transfer, and insurance. When entering into oil and gas agreements, parties should be aware of the various risks and attempt to use each risk managing technique to maximize their risk position.

II. THE OIL AND GAS DEVELOPMENT PROCESS

To understand the unique risks and problems impacting the oil and gas industry, one must have a basic understanding of oil and gas law and how the petroleum industry operates. Oil and gas law consists of rules created by courts, legislatures, and administrative agencies, to facilitate orderly development of petroleum resources. To fully understand these rules it is helpful to view the development process in a chronological sequence consisting of the following five phases:

1. Exploration;
2. Land Acquisition and Financing;
3. Drilling;
4. Production; and
5. Post-Production.

A. Exploration

The search for petroleum normally begins with geologists examining information about the earth and theorizing where accumulations of oil and gas are likely to occur. Oil and gas accumulate in subsurface structures capable of holding oil, gas, and water. Usually this will be a body of sedimentary rock. The structure must be enclosed to trap the petroleum and keep it from migrating to the surface where it would dissipate. This enclosed body of sedimentary rock, capable of containing oil, gas, or water, is called a "reservoir."

The reservoir must also be located near an area where it is likely the ingredients for oil and gas formation existed millions of years ago. The widely accepted theory is that oil and gas were formed from compressed layers of dead plants and animals which accumulated at the bottom of ancient seas. As these layers of organic material were covered by sediments and subjected to extreme pressure, oil and gas were released which migrated into porous sedimentary rocks. The consolidated organic mud, called "shale," is referred to as the "source rock" and the less consolidated sedimentary rock, which is able to accommodate oil and gas pushed from the source rock, is called "reservoir rock." Therefore, the exploration process is a search for ancient sea beds and other areas where source rock and reservoir rock may be present.

Geologists employ surface and subsurface geological studies to search for oil and gas deposits. The earth's surface is studied to try and predict how surface features correlate to its subsurface structure. However, the surface, due to erosion, seldom reflects a similar subsurface configuration. Gravity meters can be used on the surface to measure the density of subsurface rocks to determine if they are the type associated with oil and gas deposits. The gravity meter, or "gravimeter," measures variations in the earth's

gravitational pull. Magnetometers can also be used to help detect sedimentary rock beneath the earth. The "magnetometer" measures the intensity of the earth's magnetic field. However, the most useful exploration aids are subsurface studies.

Subsurface studies employ techniques which give the geologist an accurate picture of rock structures beneath the earth. The seismic survey, using a seismograph, is the primary source of information used in making development decisions. Seismic surveys are conducted by drilling shallow holes, called "shot holes," in which an explosive is placed. Instruments for timing and recording shock waves created by the detonated explosive, called "geophones," are placed at specified intervals in a linear fashion according to the geologist's directions. When the explosive is detonated, shock waves travel into the earth where they are reflected by various rock layers. The reflected and refracted shock waves are detected by the geophones and recorded by the seismograph. After processing and interpretation, data on the reflected shock waves can provide a picture of the subsurface rock structure. Data on the refracted waves provides information concerning the type of rock encountered.

After a seismic survey has been made, the geologist attempts to construct a map of the subsurface rock structure called a "contour map." These maps incorporate all available data concerning the area and are updated throughout the development process to reflect new information acquired through drilling, testing, and production. Information on wells already drilled in an area can be obtained from files maintained by the State Geological Survey in cooperation with the State's Oil and Gas Conservation Commission. Subject to certain confidentiality requirements, formation samples, copies of well histories, electric logs, radioactivity logs, drilling time logs, and other geophysical data are collected by the State where the activity takes place. However, even with an accurate map of the area indicating the presence of the rock type and structures favorable to the accumulation of oil and gas, the only way to determine if oil or gas is present is to drill a hole into the target formation.

Prior to conducting exploratory operations on a person's land, the developer must obtain from the mineral owner, and in some cases the surface owner, permission to enter the premises. Normally this permission is granted by obtaining an oil and gas lease from the owners of the minerals. Sometimes exploration is conducted under a separate contract, between the mineral owner and developer, which gives the developer a permit solely to enter and conduct seismic and other geophysical operations. However, in most cases the developer wants the right to drill wells on the premises and produce oil and gas to allow it to capitalize upon favorable exploration discoveries.

B. Land Acquisition and Financing

Before commencing exploratory activities, the developer must acquire the right to enter the property to conduct the desired operations. The developer must ensure it has acquired the right to use the surface of the land and the right to produce minerals found beneath the surface. This is accomplished by purchasing an oil and gas lease from the landowner granting the right to enter and develop minerals and a right to retain a share of the produced oil and gas, customarily 7/8ths of total production. This 7/8ths share of production represents the developer's compensation for assuming the risk and financial burden of development. The developer's rights under the oil and gas lease are called the "leasehold interest" or "working interest."

The landowner customarily retains a right to a 1/8th share of the produced minerals, free of development and production costs, called a "royalty." The landowner may also receive a one-time cash payment as additional consideration for granting the lease, called a "bonus."[23] Most leases also provide for "delay rental," a payment to the landowner to allow the developer to delay drilling operations for a stated period of time. However, the oil and gas lease is a contract and subject to whatever enforceable terms regarding compensation and rights in the property the parties negotiate.

The developer may acquire the lease directly from the landowner or from a lessee who owns the development rights under a current lease. In any event, the developer will obtain an attorney's title opinion which indicates the record owners of the oil and gas property interests in the land where operations are to be conducted. The opinion is also used to identify other interests which need to be acquired or leased to give the developer full control over the lease acreage. Persons investing in the operation, and lenders providing financial support, require a title opinion to ensure their investment or collateral is actually under the developer's control. Since this opinion is used to account for all interests in the drill site prior to drilling, it is called a "drilling title opinion" or "drill site title opinion." Its major focus concerns who owns the right to develop the drill site area. Once all the necessary rights in the targeted tract of land have been acquired, the developer is ready to use his geological and geophysical information to select the drilling prospect.

At this stage the developer defines where the well will be located, target formations and depth, and projected costs. Depending upon how the developer plans to finance the well, he may need to seek support from other developers or private investors to

---

[23] See generally Wright v. Brush, 115 F.2d 265, 267 (10th Cir. 1940).

raise the necessary drilling funds. This may require compliance with various state and federal securities laws. Also, this often results in the creation of new oil and gas property interests. For example, suppose the developer acquires the lease from an existing lessee of the property. The lessee assigns his rights in the lease retaining a 1/16th cost-free share of production, payable out of the developer's 7/8ths share, when and if the well is capable of producing. The lessee's retained interest is called an "overriding royalty."[24] Similarly, the developer can create additional overriding royalties or convey cost-bearing portions of the working interest as consideration for investment capital, well services, or other purposes.

C. Drilling

Once the developer obtains the funds to drill the well, he will begin contracting with third parties to conduct the drilling and provide related well services. The developer and driller may enter into one of three general types of drilling contract. For small investor-financed operations the most common is a "turnkey drilling contract" where the developer agrees to pay a specified sum for the drilling of a well to a particular depth or formation. The driller assumes the risk of costs in excess of the agreed price. In a "footage drilling contract" the developer pays the driller a specified sum per foot drilled with payment due upon reaching the objective depth or formation. The "day work drilling contract" requires the developer to pay driller a specified sum for each day the drilling rig and crew are available for the developer's use.[25] Many of the risks assumed by the driller in the turnkey contract are allocated to the developer in the footage and day work contracts.

Prior to drilling, the operator must apply to the State Conservation Commission for a drilling permit. This is generally done by submitting an application for a drilling permit which includes the information and fees required by statute and administrative regulation. After approval of the application, the developer is ready to drill the well at a location which complies with state law.

After the well is drilled to its projected depth, the developer will conduct various tests to determine whether any of the penetrated formations are likely to contain commercial deposits of oil or gas. A service company will be hired to "log" the well

---

[24] See generally Campbell v. Nako Corporation, 195 Kan. 66, 70, 402 P.2d 771, 775 (1965).

[25] The "day work" contract is probably the most common form used by the industry.

to determine whether favorable formations are present. "Logging" consists of lowering electrical instruments into the well on a wire cable and then pulling them back up to the surface while various physical measurements are made of rock formations encountered in the well. This information is recorded on a graph or "log," which the geologist studies to identify formations which appear to contain oil or gas.

Oil, gas, and water each create a certain graph pattern due to the reactions of the electrical or radioactive impulses created by the logging instruments. Since it is very expensive to complete a well and test formations, log analysis is used to determine whether the expense of completing the well in a particular formation is warranted. It is often difficult to accurately detect or distinguish oil, gas, and water in the log readings. If the log indicates oil or gas might be present, a device may be lowered to the favorable formation to remove samples of the reservoir rock, called "core samples," for further analysis. In addition, a "drill stem test" may be conducted where a portion of the targeted formation is opened in an effort to produce from the formation.

All this information is used to determine whether casing pipe should be placed in the well and an attempt made to complete it as a producing well. If the log, core, and drill stem test information, when interpreted by trained personnel, indicates there are no promising formations, then the well will be declared a "dry hole". It will then be plugged. However, if a well capable of producing oil or gas is obtained, the developer will enter the production phase of operations.

D. Production

After a producing well has been completed, the developer will construct the necessary surface fixtures to pump, collect, treat, store, and measure the oil and gas. The developer will usually sell the oil and gas to a purchaser who collects the oil by truck after it has been measured and valued according to its specific gravity, temperature, and basic sediment and water content. The oil's value is also affected by the transportation costs required to get it to an oil pipeline or refinery. Oil purchases are normally conducted through short-term contracts which seldom exceed one month. If gas is produced, the producer usually enters into a gas sales contract with a third party purchaser.

All parties owning an interest in the well will be required to execute a "division order." The division order is a contract between the interest owner and the purchaser specifying each person's share of production in the well and the person the purchaser will pay for the production it buys. The attorney for the producer normally prepares a "division order title opinion" identifying each interest owner in the well and their share of

production. This opinion is used to prepare the division orders and identify royalty interest ownership problems which may not have been addressed in the drilling title opinion.

During the production phase the operator of the well, and the production purchasers, will make periodic accountings to state oil and gas conservation and taxing authorities, federal taxing authorities, and the various interest owners. The creation of new interests, and transfers of existing interests, may occur throughout the well's productive life. All of these transactions require the producer and purchaser to continually manage the well accounts to ensure production and costs are being properly allocated among the well's interest owners.

Management of production operations, when more than a single working interest owner is involved, is coordinated by having each working interest owner enter into a contract called a "joint operating agreement." The joint operating agreement designates one working interest owner as "operator" and gives them authority to run the daily lease operations. Major expenditures require the consent of the other working interest owners and a voting scheme is established to decide well-management problems. The joint operating agreement also includes accounting procedures to specify how each working interest owner will be charged for well equipment, services, and the operator's overhead.

As initial production from the well decreases, the developer may consider reworking the well to try and stimulate production. If the primary productive life of the well has passed, the developer may want to institute various "enhanced recovery" programs to try and recover oil not otherwise recoverable through ordinary production techniques. Enhanced recovery programs employ techniques such as the injection of water, natural gas, carbon dioxide, or nitrogen, into the reservoir to help flush oil from within the rock pores toward production wells. Substantial amounts of additional oil can often be obtained through such enhanced recovery programs. However, at some point production from the well will cease or decrease to a level where production costs exceed the value of production.

E. Post-Production

When it becomes uneconomic to operate a well, the developer must properly abandon the well and well site. Proper abandonment includes plugging the well and reclaiming the drill site. Prior to conducting plugging operations, the developer must file, with the State Conservation Commission, a notice of intent to abandon the well. After complying with regulatory requirements, the developer can plug the well.

In addition to plugging the well, the developer must remove

equipment associated with the well and level the land to its previous contour. If abandonment of the well will terminate the lease, the developer should ensure the proper documents are filed for record to release the lease as an encumbrance against the landowner's title.

III. SPECIAL INDUSTRY ATTRIBUTES

The high risk, capital intensive nature of the petroleum industry often results in litigation. The stakes are often too great for voluntary compromise. The process is further complicated by the complex nature of oil and gas ownership in the United States.

A. Complex Ownership of the Resource

The development process would be much simpler if the developer would purchase, in fee, all the land it desired to develop and use its own funds to drill wells on the land. This is seldom, if ever, the case. In most situations, the developer has only a lease giving it the right to enter the land, drill wells, and produce oil and gas in accordance with the lease terms. In many instances, the relationship may be further complicated when surface ownership is severed from the mineral interest, the owner of the surface being someone other than the mineral owner. In such cases the developer will have to coordinate development with the surface and mineral owners.

Relationships are further complicated by oil and gas conservation laws which establish a minimum amount of acreage, called a drilling, spacing, or proration unit, on which a well can be drilled and produced. For example, if an area is spaced to allow one well per 640-acre tract, and the developer owns an interest in 40 acres, the developer must somehow account for the ownership of the remaining 600 acres. This is normally done through a pooling agreement.

Attempts to leverage capital and spread the risks of development complicate ownership of the working interest. To acquire uncommitted working interests in the leased lands, or a spacing unit encompassing the leased lands, the developer may enter into arrangements to obtain control over the entire working interest in return for overriding royalties, production payments, payments from profits, or options to convert overriding royalties to a fractional working interest when the developer recovers its development costs. Perhaps the developer will agree to "carry" the uncommitted working interest in return for recovery of two or three times the total development costs attributed to the carried interest.

Similar arrangements may also be used to reduce the amount of

capital necessary to acquire uncommitted interests. The developer may also desire to share the financial risk with other interested parties through partnerships or joint ventures. Each of these arrangements usually results in further division of the working interest and add to the complexities of development.[26]

B. Capital-Intensive

In recent years, the major incentives for joint operations have been the downturn in the economy, lower oil and gas prices, and higher discovery and production costs. Today, even the major oil companies are actively participating in leveraged joint operations to control expenditures and minimize capital risk. What were once financing devices for the undercapitalized developer are now the industry norm for all developers.

The major oil and gas development expense is a lengthy hole in the ground which, in most cases, has no economic value to the developer when it is incapable of producing oil or gas in commercial quantities. In most cases it is a liability because it must be properly plugged and abandoned. The developer's second major expense is often the acquisition of acreage, which in most cases will be substantially devalued by a dry hole. Unlike other investments, if a well is a dry hole, there will not be any salvageable security to offset the debt. Combine these major expense items with odds favoring a dry hole, and it becomes evident why developers often consider some form of joint operation to share capital risk.

C. Risk-Intensive

The large sums of capital at stake in drilling a well, coupled with the likelihood of a dry hole, create substantial monetary risk for the developer. Aside from the monetary risk, there is also substantial risk inherent in the nature of oil and gas development operations. Drilling and completion operations can be dangerous; the opportunity for personal injury or property damage exists throughout all stages of development. Most development agreements attempt to leverage risk at various levels of the transaction through contracts which: allocate risk between parties involved with the development process, specify performance standards, require insurance or bonding, and provide for indemnity or damages.

However, the industry's most common approach to reducing risk is sharing it with others willing to join in operations with the developer. Joint operations are used primarily to reduce monetary

---

[26] See, e.g., Wagner v. Sunray Mid-Continent Oil Co., 182 Kan. 81, 318 P.2d 1039 (1957).

risk; contractual clauses are used to allocate operational risks.

IV. INDUSTRY PRACTICES

Many times it will not be the complex nature of the oil and gas industry which make the job of managing risk difficult. Instead, it will be the relatively common practices of the industry which defy all legal reason, but which the parties nevertheless find necessary to meet some compelling business need at the moment.

It is not unusual to have major activities being undertaken without any formal written agreement between the affected parties. Such occurrences can be attributed to the unique players involved in the oil and gas development process and the often unrealistic constraints within which they must operate, the most unrealistic constraint being "time."

A. Time Restrictions

Time is money, especially when a contracted drilling rig and crew is on stand-by at a cost of hundreds or thousands of dollars a day awaiting the parties to work out the details of their general understandings. The rig seldom waits for the final agreement. Instead, the parties may commence operations without a formal agreement, relying on assurances they will "mutually agree" upon unresolved matters at a later date. Often, circumstances force negotiations and document preparation into a wholly inadequate time frame.

The oil and gas industry has developed around a common law-imposed race. The rule of capture required the industry, at least prior to effective conservation laws, to operate at a rapid pace to win title to the oil and gas. The tendency to race remains. Once a developer decides to acquire leases in an area, or drill, the race is on and the participants seldom wait on legal details.

B. The People Involved

The oil and gas industry is replete with non-lawyers writing or compiling conveyances and contracts. Usually, reliance is placed on a form which "an attorney drafted." Therefore, of course it must be "legal" for any situation regardless of the facts and law of the state where it is used.

Negotiations are often conducted, without the benefit of counsel, through various letters which contemplate a "formal written agreement." However, these so-called "letter agreements" often result in one or a series of enforceable contracts concerning

the subject matter without any "formal written agreement" or input by counsel. Oral contracts create similar problems.

A related problem arises when attempting to conduct operations under a contract obtained by assignment from a lease broker or another developer. In such cases the developer has no input into the contract terms and, if obtained by a lease broker, the terms are commonly compiled by the printing outlet which sold oil and gas lease forms to the broker. In such situations the developer must attempt to conduct operations under a contract which fails to address the specific circumstances of the parties. If the lease has increased in value, whether actual or speculative, it may not be practical to seek desired amendments or supplements.

C. Use of Forms

Oil and gas attorneys, like real property or probate attorneys, tend to be traditionalists. They like their forms including the "whereas," the "witnesseth," and the "know all men by these presents." Many times the drafting exercise consists of fitting the transaction to the form, as opposed to tailoring the form to the transaction. Too often a royalty or other clause is pulled from a form and used without independent analysis of its effect, much less considering whether the provisions could be more artfully composed for clarity or to meet the specific circumstances at hand.

Forms also tend to be used by land personnel and other representatives of the developer as an exemption from legal review or input. However, considering the time and people attributes of the industry, it appears the use of forms, and their attendant problems, will continue.

D. Change

The oil and gas attorney acts as a soothsayer, attempting to take appropriate action today which will protect the developer's interests tomorrow, and perhaps thirty or more years afterwards. An example of the need to anticipate change is most readily observed in gas sales contracts where price escalations depend upon future regulatory restrictions. Regulation, deregulation, and reregulation must be considered and contingencies provided for in the contract.

Changes in laws, production techniques, production capacity, and the demand for energy can all have significant effects on the value of, or ability to operate under, existing agreements. Many developers have given up trying to provide for the future, electing to use short-term contracts instead. The basic development document, the oil and gas lease, has a potentially long duration

of "for so long as oil or gas is produced." In some cases this could mean a lease term in excess of a half century. Therefore, the attorney must always, to the extent feasible, consider the possibility of change when drafting agreements.

V. THE BASIC OIL FIELD RELATIONSHIPS

The basic oil field relationships are created, and defined, by various oil and gas contracts. Each phase of the oil and gas development process is marked by an associated group of commonly encountered contracts. The chart on the next page lists the common contracts and the parties to each contract:

COMMON OIL AND GAS DEVELOPMENT SEQUENCE

	Parties	Contract	Parties
1.	Mineral Owner (Lessor)	--- OIL & GAS LEASE ---	Developer (Lessee)
2.	Lessee	--- INVESTMENT AGREEMENT ---	Investors
3.	Lessee	--- LEASE PURCHASE AND SALE AGREEMENTS ---	Other Developers
4.	Lessee	--- ASSIGNMENTS ---	Investors & Developers
5.	Lessee	--- EXPLORATION AGREEMENTS ---	Other Developers
6.	Lessee	--- FARMOUT AGREEMENTS ---	Other Lessees
7.	Lessee	--- OPERATING AGREEMENT ---	All Working Interest Owners
8.	Mineral Owner Working Interest Owners Non-Working Interest Owners	--- POOLING AGREEMENT ---	All Interest Owners
9.	Operator	--- DRILLING CONTRACT ---	Drilling Company
10.	Operator	--- WELL SERVICE CONTRACTS --	Service Companies
11.	Mineral Owner Working Interest Owners Non-Working Interest Owners	--- OIL DIVISION ORDER ---	Oil Purchaser
12.	Mineral Owner Non-Working Interest Owners	--- GAS DIVISION ORDER -	Working Interest Owner
13.	Working Interest Owner	--- GAS DIVISION ORDER ---	Gas Purchaser
14.	Working Interest Owner	--- GAS PROCESSING AGREEMENT ---	Gas Processor
15.	Working Interest Owner	--- GAS SALES AGREEMENT (END USER) ---	End User
16.	Working Interest Owner	--- TRANSPORTATION AGREEMENTS ---	Pipelines
17.	Working Interest Owner	--- MARKETING AGREEMENTS --	Gas Marketer/Broker
18.	Working Interest Owner	--- GAS SALES AGREEMENT (PIPELINE) ---	Pipeline

The initial contract in the development process will often be the oil and gas lease between the landowner and a promoter or developer.

A. Oil and Gas Leases

The oil and gas lease typically begins the chronology of contracts encountered in the development process. The lease establishes the general framework which guides the negotiation and performance of subsequent oil and gas contracts affecting the leased land. Through the oil and gas lease the landowner/lessor transfers all their development rights to the lessee for a stated period, such as "three years," and a secondary term for "so long as oil or gas is produced from the leased land." In return for leasing the right to develop the property, the landowner is entitled to a royalty on any production obtained from the land. The lessor, however, retains ownership to the minerals, subject to the terms of the oil and gas lease.

B. Assignments

Often all or part of the original lessee's rights under the lease are assigned and reassigned to others interested in promoting or developing the leased land. Much of the post-lease contract activity relates to commerce in lease rights without any immediate concern for development. The reluctance to depart from the "standard form" lease is due largely to its function as the industry's "negotiable instrument" for lease rights.[27] The major contract encountered in such transactions is the purchase and sale agreement. The assignment functions as the "deed" conveying the lessee's interest in the lease. However, the assignment often includes many contractual provisions which are not commonly found in real property conveyances.

The primary concern under the purchase and sale agreement is to give the buyer an opportunity to ascertain all relevant facts affecting the continued existence and value of the leasehold interest. In addition to the traditional title examination to identify the owners of the interest, the purchaser must ensure the express and implied terms of the lease contract are being performed. This is particularly important since many lease provisions operate as a special limitation on the continuing existence of the lease. The process is more like purchasing an existing business than merely purchasing property interests. A careful review of all business relationships must be conducted. For example, if the property being purchased is a lease covering

---

[27] See generally D. Pierce, Rethinking the Oil and Gas Lease, 22 **Tulsa L. J.** 445 (1987).

lands where a producing gas well is located, any existing gas purchase contracts must be reviewed along with an evaluation of the producer's access to gas transportation facilities and markets.

The purchaser must also identify all potential liabilities it will be assuming when it becomes a working interest owner. This is particularly critical when the purchase involves producing, or previously producing, properties. Assuming the position of a working interest owner can result in liability for remedying past production problems - such as failure to plug abandoned wells or pollution caused by past operations.

C. Pooling Agreements

To comply with well spacing limitations, and obtain the maximum per-well allowable, it may be necessary to combine different tracts of land to create the unit of acreage required by regulation to drill and operate a well. The oil and gas lease typically will include a pooling clause which authorizes the lessee to "pool" the leased land with other lands for development. If the lease does not contain a pooling clause, or the clause is inadequate to accomplish the necessary pooling, or acreage within the unit area is not covered by an oil and gas lease, a separate pooling agreement will be necessary to consolidate lands within the unit for development.

Typically the pooling agreement is very similar to the lease pooling clause. Persons contributing acreage to the pooled unit will share in production from the unit. Each owner's share of production, will generally be proportionate to the surface acreage area encompassed by the interest participating in the pooled unit. Production from any portion of the pooled unit will be deemed production from each separate interest included in the unit. For example: A owns the minerals in the Southwest Quarter of the Southwest Quarter of Section 30 (40 acres). Lessee X, pursuant to a pooling clause in X's lease with A, seeks to join with other acreage in Section 30 to drill for gas. Y has a lease from B covering minerals in the East Half of the Southwest Quarter (80 acres); Y's lease does not contain a pooling clause. C owns the remainder of the minerals in Section 30 (520 acres). C's land is unleased, but C is willing to put up his proportionate share of costs to permit development of Section 30.

To create the required 640-acre pooled unit to develop Section 30, X, Y, B, and C will enter into a pooling agreement. Note that A need not join in the pooling agreement, so long as the agreement does not exceed the authority granted X in the pooling clause of their oil and gas lease. A well is completed on the Southwest Quarter of the Southwest Quarter of Section 30. Assume the X/A and Y/B oil and gas leases provide for a 1/8th royalty. If each party is allocated a share of production based upon the surface acreage

area encompassed by their interest, production from Section 30 will be divided as follows:

X:	7/8 x	1/16 (40/640 acres) =	7/128 =	.0546875
A:	1/8 x	1/16 (40/640 acres) =	1/128 =	.0078125
Y:	7/8 x	2/16 (80/640 acres) =	14/128 =	.1093750
B:	1/8 x	2/16 (80/640 acres) =	2/128 =	.0156250
C:	8/8 x	13/16 (520/640 acres) =	104/128 =	.8125000
			128/128	1.0000000

Production from the Southwest Quarter of the Southwest Quarter, by the pooling agreement, will maintain both leases in effect and will maintain the pooling agreement as to C's unleased acreage.

D. Exploration Agreements

Various types of relationships are created to aid and promote the development of leased land. Exploration relationships can be divided into three general categories: (1) Joint Exploration; (2) Contribution and Support; and (3) Investor Financed. Note, however, that all three of these relationships may exist in any given development program. A lessee may decide to leverage investor financed exploration by entering into joint exploration relationships with other developers. At the same time, developers not willing to join in joint exploration may nevertheless support the developer's efforts through cash or acreage contributions.

1. Joint Exploration

The most common technique for limiting risk in the oil and gas industry is to share it with others. Joint exploration agreements are used to extend the influence of the developer's exploration budget over a wider area. If A is interested in conducting exploratory operations in an area, A may decide to seek other developers to assist in the cost, in capital and personnel, of evaluating the area. A can enter into an exploration agreement with B whereby they jointly evaluate the area and share in the costs, and benefits, of development.

Although exploration agreements are among the least uniform documents in the industry, they all tend to address similar issues. Generally, one party will be designated the primary operator responsible for conducting exploratory activities on the designated exploration area. After an exploration area is designated, each party will often assign a proportionate share of their leasehold interests to one another. The exploration area will often be designated an "area of mutual interest" and the parties will agree to offer to the other participants an opportunity to obtain a proportionate share of any new lands or leases subsequently acquired within the area of mutual interest. The parties often

agree to contribute a specified amount to an exploration budget. Exploratory drilling may be required as part of the program; if so, the parties will agree on the terms of an operating agreement as part of their exploration agreement.

2. Contribution and Support

Suppose B doesn't want to be a joint participant in conducting exploratory drilling in an area; or A wants to go it alone. However, B is interested in seeing a well drilled in the area because B owns leases on acreage near A's leased lands. B may also want access to information A obtains from its exploratory drilling. A may be willing to drill a well, on A's land, in return for a "contribution" or "support" from B in the form of a cash payment or an assignment of acreage.

B may offer to pay A a sum of money, or assign specific leases to A, if A will drill a well to a certain depth at a specified location on A's land. This arrangement is called a "bottom hole contribution agreement." As a condition to A receiving the promised cash payment or acreage assignment from B, A must drill to a stated depth and provide B with specified drilling information. Sometimes the right to the payment or assignment is conditioned upon the well being a dry hole. These are known as "dry hole agreements." Disputes sometimes occur over whether a well is a dry hole and whether the drilling party has complied with other conditions to the non-drilling party's performance.

3. Investor Financing

Many oil and gas leases are developed in Kansas through some form of "promoted" oil and gas deal. Instead of sharing the risk of development with another developer, the lease owner may seek direct financial assistance from investors. The developer sells an undivided fractional interest in the lease to investors. The developer typically retains an economic interest in the lease and also agrees to drill a well on the lease. The contract governing this investment arrangement is often oral; but should always be written.

The deal is said to be "promoted" because the developer will generally make money from the sale of interests, even though the well is a dry hole and a total loss to the investors. For example: A owns a lease. The lease cost A $1,000. A enters into a contract with a drilling company to have a well drilled on the leased land at a cost of $100,000. Other costs associated with development will require $9,000. A sells an undivided 1/32nd of the lease to each of 32 investors for $5,000 per 1/32nd. This generates $160,000; A's promotion fee is $50,000. A might also retain an overriding royalty or carried working interest in the leased land.

In addition to the investment agreement, if the investors are retaining a working interest, an operating agreement will also be required.

E. Operating Agreements

An operating agreement should be entered into whenever there is more than one person owning a working interest in a well. The operating agreement is designed to coordinate development of the property by designating an "operator" and specifying each working interest owner's rights and obligations throughout the development and production process. A division of the working interest can occur in many ways. For Example:

Situation 1. A owned the minerals in Section 30 at his death. Under A's will, the mineral interest passed to A's daughters, B and C, in equal shares. B leased to X; C leased to Y. X and Y each own the nonexclusive right to develop the minerals in Section 30.

Situation 2. A leased the minerals in the North Half of Section 30; B leased the minerals in the South Half. By agreement, the North Half and South Half of Section 30 are pooled to form a 640 acre drilling unit.

Situation 3. A owns all the working interest in Sections 29 and 30. B proposes to drill a well on Section 29 if A will assign 100% of the working interest in Section 29, and 50% of the working interest in Section 30, conditioned upon B completing the well as a commercial producer. A retains an overriding royalty in Section 29, convertible to a 50% working interest upon payout of B's well.

If B drills the required well, A and B will each have the nonexclusive right to develop Section 30. If the well on Section 29 "pays out," A and B may again each have the nonexclusive right to develop Section 29.

Anytime you have multiple ownership of the working interest, or the potential for multiple ownership, the parties owning the working interest will normally enter into a contract to coordinate development of the leased land. The contract is called an operating agreement but is also referred to as a "joint operating agreement" or merely the "JOA."

The term "operating agreement" may also refer to a separate agreement with a contract operator. Sometimes the owners of the working interest will contract with a third party, who is not a working interest owner, merely to look after the day-to-day operation of the well. Typically the contract operator will not be conducting any further development of the property but will merely produce and manage existing wells.

A common attachment to the operating agreement is the "COPAS" accounting procedures exhibit. Like the A.A.P.L. Model Form Operating Agreement, the "COPAS Accounting Procedure for Joint Operations" was designed to provide some uniformity in what developers would accept in defining the operating relationship. The COPAS form was prepared by the Council of Petroleum Accountants Societies and can be found in 1962, 1968, 1974, and 1984 versions. As the title suggests, this exhibit details the identification, calculation, and collection of joint operating costs.[28]

However, operating agreements, regardless of the form, will address: (1) Authority of the operator to act on behalf of the nonoperators; (2) Allocation of production costs and proceeds; (3) Drilling the initial well; (4) Operation of the initial well and subsequent development operations. In addition to addressing the operational aspects of the venture, the operating agreement will also act to define the relationship of the operating and nonoperating interest owners. The operating agreement plays a significant role in determining whether the participants in the venture will be subjected to liability for venture obligations beyond the value of their investment in the venture.

F. Farmout Agreements

Suppose A owns leases covering acreage that A currently has no desire to develop. Perhaps A has better prospects which require its time, and money. B, on the other hand, has time and money, but lacks a sufficient acreage position in the area to justify development. B's information might also indicate that the best place to drill in the area is on leased acreage belonging to A. B could try and purchase A's leases, but instead, B decides to try and leverage its way into the area by asking A to "farm out" some of its leased acreage to B. A's information may not be as complete as B's concerning the potential of the acreage - or perhaps A has better information and therefore is not too excited with the prospect. A's leases may be approaching their primary term, or perhaps there is a need to conduct further development to comply with implied lease covenants. In any event, A is willing to consider farming-out acreage to B.

Depending upon the bargaining position and prowess of the parties, and their respective needs, B may either covenant to drill a well on A's acreage or drilling will be made a condition to B earning the right to an assignment of A's working interest in the acreage. If A is seeking the farmout to prevent termination of a lease, or to fulfill a drilling covenant to the lessor, A will require that B covenant to drill the well. In other situations,

---

[28]See Dutton, Accounting Procedures: Contracts or Controversies, 19 **Rocky Mtn. Min. L. Inst.** 117 (1974).

A may merely make drilling the well a condition to the assignment. The farmout agreement should clearly define what B must do to earn an interest in the leased acreage. For example, most farmouts specify the depth to which the well must be drilled, tests to be performed, information that must be made available to the farmor, and whether the well must be completed as a commercial producer.[29]

For tax purposes, B will typically be entitled to earn 100% of the drill site acreage. However, A will probably retain a non-working interest, such as a 1/16th overriding royalty, until the well "pays out." Payout is the date when B has recovered all of its drilling, completion, and operating costs associated with the well. The farmout agreement will often provide that A can convert its overriding royalty to a working interest, such as an undivided 50% working interest. By retaining such a "convertible interest," A can "back in" as a working interest owner by exercising its right to convert its overriding royalty.

Therefore, A and B become cotenants of the working interest in the drill site farmout acreage. The farmout agreement usually includes an operating agreement as an exhibit. The operating agreement will govern the relationship between A and B whenever they become joint owners of the working interest.

Although B will earn acreage in the drill site, B will also negotiate for acreage outside the drill site, called "outside acreage." If A owns leases on other lands in the area, A may agree to let B earn a portion of the working interest in such acreage. The amount of acreage, and the percentage working interest B earns, is largely a function of the cost of drilling the well, the value of the acreage, the other terms of the agreement, and the special needs of the parties. Suppose A owns leases on two sections adjacent to the drill site. The agreement may provide that B can earn 50% of A's working interest in the two adjacent sections as well as 100% of A's working interest in the drill site acreage. The operating agreement will also need to cover this outside acreage since A and B may become cotenants of the working interest.[30]

---

[29]See generally Northern Natural Gas Co. v. Grounds, 292 F. Supp. 619, 627-28 (D. Kan. 1968), rev'd in part, 441 F.2d 704 (10th Cir. 1971), cert. denied, 404 U.S. 951, 1063 (1971), rehearing denied, 404 U.S. 1065 (1971).

[30]For an exhaustive treatise on the farmout agreement see J. Lowe, Analyzing Oil and Gas Farmout Agreements, 41 Sw. L. J. 759 (1987).

G. Drilling and Well Service Agreements

One of the most important contracts in the development process will be the drilling contract. Most developers, including major oil companies, do not drill their own wells. Instead, they contract with companies that specialize in providing drilling services. Drilling is an expensive and dangerous activity that requires a high degree of technical competence to avoid disaster while ensuring proper results. Therefore, much of the drilling agreement will focus on who has control over the drilling operations, and liability in the event of injury to the well or to third parties.

The drilling industry's representative, the International Association of Drilling Contractors, has prepared a form drilling contract that many drilling companies use. The producer's industry representative, the American Petroleum Institute, has also prepared a form drilling contract. However, it is common to find drilling agreements that have been fashioned by the individual drilling companies. Many times larger oil companies will develop their own form drilling agreement. Which company's terms ultimately prevail will often be a product of the current demand for drilling rigs.

Regardless of the specific terms of the drilling agreement, it will generally fall into one of three general categories: (1) Daywork Drilling Contracts; (2) Footage Drilling Contracts; or (3) Turnkey Drilling Contracts. Under a daywork contract the driller's equipment and employees are essentially leased to the developer on a per/hour or per/day basis. The developer maintains the greatest degree of control over daywork operations; the developer's potential liability for such operations is similarly expanded. Under a footage contract the driller is paid based upon the number of feet drilled. Under a turnkey contract, the driller agrees to drill to a specified depth or formation and then turns the well over to the developer. The driller assumes the risk of costs in excess of the agreed price. Since the developer's control under a turnkey contract is minimal, the developer's potential liability is also minimal.[31]

In addition to the drilling agreement, the developer will also contract with numerous well service companies. Although the process may not be as formalized as with the drilling contractor, the developer is nevertheless entering into obligations which, if not discharged, can give rise to liability, as well as statutory liens against the leasehold interest.

---

[31]For further analysis of the drilling contract see: O. Anderson, The Anatomy of an Oil and Gas Drilling Contract, 25 **Tulsa L. J.** 359 (1990); Calkins, The Drilling Contract -- Legal and Practical Considerations, 21 **Rocky Mtn. Min. L. Inst.** 285 (1975); Hoskin, Drilling and Mining Development Contracts, 18 **Rocky Mtn. Min. L. Inst.** 333 (1973).

H. Production Sales Agreements

This section addresses the various agreements associated with a sale of production, to include agreements necessary to process, market, and transport production.

1. Processing Agreements

Often, before gas can be sold, it must be treated to remove contaminants such as water (dehydration), carbon dioxide, hydrogen sulfide, and other impurities. Generally, such agreements to prepare the gas for ultimate marketing concern gas "treatment" instead of gas "processing." However, processing the gas may also result in the removal of certain contaminants. The primary goal of gas processing is to extract liquid hydrocarbons from the gas stream; the liquids and resulting "dry" gas can be marketed for more money than the "wet" unprocessed gas stream. The function of the gas processing agreement is to transfer custody of gas suitable for removing liquid hydrocarbons, remove the liquids, and return the residue gas to the producer's gas purchaser. Processing agreements contain many of the same terms found in gas sales agreements. The major difference is the processing agreement requires a number of additional calculations to allocate products and residue gas back to each producer delivering gas to the processing plant.

There are three common processing arrangements: (1) The processor purchases the gas before processing; (2) The processor agrees to process the gas in return for a share of the sales proceeds from the liquids; and (3) The processor performs the processing as a service for a fee and the liquids and residue gas are redelivered to the producer. The first arrangement is essentially a sale of the gas to the processor. The second and third arrangements require delivery of the gas stream to the processor. The processing agreement typically requires the producer's gas be tested when delivered to the processor to determine its "theoretical" liquid content. This measurement will be used to allocate the liquids and residue gas among each producer delivering gas into the plant. Calculations will also be made to determine "shrinkage" and "plant fuel" among the producers. Processing gas lowers the heating content of the gas. This reduction in heating (Btu) value is called shrinkage. The processor will use some of the gas to run the processing plant, this is called plant fuel. Testing and metering is required at every stage where the streams are commingled.

The processing agreement will also address each party's rights when the plant lacks the capacity to process all gas being delivered for processing. The producer must try to avoid a situation where they are obligated to deliver gas for processing

but the processor is not obligated, due to capacity limitations or economic considerations, to process all the gas. This situation is commonly addressed by authorizing the producer to deliver gas to other processors to the extent capacity is not available at a particular plant, or the plant operator declares processing the gas would be uneconomic.

2. Transportation Agreements

Until recently, producers didn't concern themselves with transportation. Oil is typically sold at the lease and removed by the purchaser by truck or pipeline. However, gas has presented special problems. The marketing of gas is dependent upon access to pipeline transportation. Usually transportation was a service provided by the gas purchaser and was an unspecified part of the sales transaction. If the pipeline bought your gas, they would take title at the designated delivery point and they would have to worry about getting it to Chicago, Detroit, New York, or wherever the gas would ultimately be consumed. The producer's only transportation problem would be getting the gas from the well to the delivery point designated by the purchaser in the gas sales agreement. The producer may have to enter into a "gas gathering agreement" with another producer, or purchaser, who, for a fee, will permit connection to their field gathering pipelines to transport gas to the purchasing pipelines. Gathering systems, if regulated at all, will be regulated by the state where the system is located.

Today, due to fundamental regulatory changes at the federal level, producers are gaining access to transportation and transportation-related services on interstate pipelines. Traditionally these pipelines have not functioned as common carriers; they could pick and choose who they desired to have access to their pipeline system. Producers now generally have ready access to pipeline transportation and related services. Producers can choose the services they need from a pipeline, such as transportation, storage, and backup supply. This expands the marketing opportunities, and responsibilities, of the producer. Instead of entering into a twenty year contract with a pipeline purchaser, the producer may decide to arrange a series of shorter-term sales to other pipelines, gas brokers, or end users.[32]

The function of the transportation agreement is to move gas from the delivery point to a redelivery point. There is no transfer of title, the pipeline merely functions as a bailee for a fee. Many of the contract terms will be specified by the transporting pipeline's tariff. Of primary concern is the rate

---

[32] See generally R. Pierce, Reconstituting the Natural Gas Industry from Wellhead to Burnertip, 9 **Energy L. J.** 1 (1988).

charged for the transportation service and the availability of pipeline capacity, on either a firm or interruptable basis, to move gas from the well to the ultimate purchaser. The transportation agreement will also focus on the measurement of gas entering and exiting the pipeline system and various dispatching problems that may be encountered. Dispatching problems arise when too much, or too little, gas is either delivered at the delivery point or taken out by the ultimate purchaser at the receipt point.

3. Marketing Agreements

To aid the producer in selling gas to end users, or other possible purchasers, the "gas marketer" and "gas broker" have entered the industry to provide gas marketing services. The services provided include the packaging of gas supplies, identification of gas purchasers, and arranging transportation to get the gas from the producer to the purchaser. Usually the marketer/broker will charge a per/MCF fee based upon the amount of gas it markets. If the gas is actually purchased by the marketer/broker, the transaction is essentially a sale and will be governed by a gas sales agreement.

4. Division Orders and Transfer Orders

A division order is a contract between the owner of production and a purchaser of the production. The document is typically structured as an "order" to the purchaser to take custody of production and pay the person issuing the division order in accordance with their proportionate interest stated in the order. The function of the division order is to protect the purchaser from adverse claims in the event of an improper distribution of production proceeds. Typically the producer's attorney will examine title to the production and identify all potential interest owners. If there are any defects in title, the attorney will identify them in the division order title opinion and state what must be done, the title requirements, before production proceeds can be distributed. Once title requirements are satisfied, division orders are prepared and sent to the interest owners. When they are signed and returned, production proceeds are distributed in accordance with the division orders. Even though the division of interest may be inaccurate, the purchaser will be protected in relying on the division order until they receive notice of a problem.

Division orders have obtained a bad name among royalty owners because lessees have often tried to use them to amend the oil and gas lease regarding significant payment issues, such as: calculation of how production will be valued for royalty purposes, costs deductible from royalty, warranty of title, indemnity provisions, and interest on suspended accounts. Often they purport

to ratify the lease. Some courts have refused to enforce a division order from the lessor to their lessee which amends the underlying oil and gas lease.[33]

A transfer order is merely an authorization to the purchaser to pay another person for a share of production covered by the purchaser's division order. The transfer order functions as the evidence required by the purchaser to effect a change of distribution under a division order. If a large number of interests are being transferred from one owner to another, the production purchaser may be willing to accept a "letter in lieu of" transfer orders. This is merely a letter executed by the owner of the interest (shown in the division order) and their transferee, directing the purchaser to pay production proceeds to the transferee as of a specified date. The function of the "letter" is to avoid the execution of numerous transfer orders and expedite the change of ownership to ensure the new owner starts receiving production proceeds without interruption.[34]

5. Gas Sales Agreements

Traditionally, gas sales agreements have created long-term relationships. Therefore, a substantial portion of such agreements consist of terms that try and account for future market conditions. As the torrent of take-or-pay litigation demonstrates, the parties aren't always able to adequately provide for future market developments. Traditionally the contract has been structured as an "output" contract. The purchaser will take all the gas, or a stated percentage of the gas, that the producer can deliver from the designated properties. Today the "requirements" contract is becoming more common as end user sales become more common. Under the requirements contract the producer will exercise its best efforts to provide the purchaser with the gas it requires. Output contracts are also incorporating a best efforts obligation for the purchaser in an attempt to mitigate the obligation to take gas.

Many gas purchase agreements entered into in the 1960s, 70s, and early 80s contain a take-or-pay clause which requires the gas purchaser to take a certain quantity of gas during a specified period or pay for the gas it fails to take. For example, consider

---

[33]For example, in Holmes v. Kewanee Oil Co., 233 Kan. 544, 664 P.2d 1335 (1983), a division order clause requiring payment of royalty based on the proceeds received by the lessee was held to be ineffective when the royalty clause of the oil and gas lease required payment based on the current market value of the production.

[34]See generally D. Pierce, Resolving Division Order Disputes: A Conceptual Approach, 35 **Rocky Mtn. Min. L. Inst.** 16-1 (1990).

the following take-or-pay clause:

> Subject to the other provisions of this Contract, Seller agrees to sell and deliver and Pipeline agrees to purchase and receive, or pay for if made available hereunder but not taken, a daily quantity of gas, averaged over each accounting period (contract quantity) during the term hereof, equal to seventy-five percent (75%) of the maximum quantity of gas that Seller's well/s can deliver to Pipeline . . . .

The purchaser is generally given a period of at least five years from the date the take-or-pay provision is triggered to take, as "makeup" gas, the gas for which it has paid but failed to take. Note that the take-or-pay clause begins: "Subject to the other provisions of this Contract . . . ." Other provisions of the gas sales agreement may relieve the purchaser from the obligation to take or pay for gas, or substantially reduce the quantity of gas "made available" for the purchaser to take.

The price provisions of the gas purchase agreement have traditionally consumed many pages of the contract. Typically the parties would agree upon a stated price per unit of gas delivered and then use various price adjustment formulas to try and ensure the contract price for gas would keep pace with market realities. A common technique used today to deal with future price uncertainty is to provide for frequent renegotiation of gas prices. Perhaps the most popular technique used today to account for price uncertainty is the short-term contract. A party to the contract can deal with a major price swing when they only have to endure their market miscalculation for 30, 60, or 90 days instead of 20 years. However, the long-term contract continues to play a major role in making gas a secure and stable source of energy. The long-term gas sales agreements of the 80s and 90s will reflect the two major needs of the contracting parties: (1) Guaranteed access to a gas supply (and guaranteed access to a market); and (2) A pricing mechanism that reflects the current market value of gas so neither party is severely disadvantaged in the event of price fluctuations.

VII. NEW CHALLENGES FOR LEVERAGING RISK IN OIL FIELD CONTRACTS

A. Managing Environmental "Status" Liability

Environmental considerations are becoming the "tail that wags the dog" in many commercial transactions.[35] The reason for this is quite simple: only under the environmental laws can you acquire an interest in property and run the risk of incurring unlimited financial losses. The risk of financial loss is created by several second-generation environmental laws that rely upon liability instead of regulation to achieve environmental goals.[36] For example, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)[37] attempts to deal with environmental problems by imposing liability on certain groups to "fix" an environmental problem. "Fixing" environmental problems can be a technically challenging and economically devastating proposition. The situation is aggravated by the imposition of liability based upon status instead of fault, contribution, or causation.[38] Someone unfortunate enough to achieve the status of "owner" or "operator" of a contaminated property can be held "liable" for its cleanup even though they did not cause or contribute to the problem.

Therefore, the primary goal in contemporary commercial transactions is to avoid unwittingly assuming the status of a liable party under the environmental laws. Although this has become an accepted tenet of doing business in other commercial settings, it has not been a major focus in routine oil and gas transactions which pose similar, and often greater, environmental risks. Although the sale of producing properties has received considerable attention,[39] the more routine transactions, such as

---

[35]Prior to the advent of environmental law, tax law held the distinction of driving otherwise straight-forward transactions into a labyrinth of structural machinations to achieve some tax-driven goal.

[36]See D. Pierce, The Emerging Role of "Liability-Forcing" in Environmental Protection, 30 Washburn L. J. 381-427 (1991).

[37]42 U.S.C. §§ 9601 to 9675 (1988).

[38]See, e.g., Nurad, Inc. v. William E. Hooper & Sons Co., 966 F.2d 837, 846 (4th Cir. 1992) ("The trigger to liability . . . is ownership or operation of a facility at the time of disposal, not culpability or responsibility for the contamination.").

[39]R. Goleman & D. Worrell, Producing Property Conveyances and Environmental Liabilities: A Mine Field for the Unwary, 43 Inst. on Oil & Gas L. and Tax'n 3-1 (1992); S. Lansdown, Plugging and

mineral and royalty conveyances, oil and gas leases, assignments, farm-outs, operating agreements, pooling, unitization, and service contracts, have not been the focus of much restructuring to address environmental risks.[40] This may be due to a prevalent but erroneous belief among industry participants that they are "protected" by the CERCLA "petroleum exclusion"[41] and the Resource Conservation and Recovery Act (RCRA)[42] "associated waste exemption."[43]

Abandoning Issues Encountered by Sellers and Buyers of Producing Properties: A Major's Perspective, The Landman 7 (Jan./Feb. 1992); P. Clark, Continued Liability of Seller After a Sale of Producing Oil and Gas Properties, 41 Inst. on Oil & Gas L. and Tax'n 5-1, 5-11 to 5-35 (1990); M. Grove, Acquisition and Sale of Producing Properties: Environmental Issues, (Sept. 15, 1988);

[40]But see M. Cury, Liability for Environmental Contamination and the Model Form Operating Agreement, 23 Tex. Tech L. Rev. 739 (1992); T. Cope, Environmental Liabilities of Non-Operating Parties, 37 Rocky Mtn. Min. L. Inst. 1-1 (1991).

[41]CERCLA § 101(14), 42 U.S.C. § 9601(14) (1988) defines "hazardous substance" broadly but provides:

> The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under . . . this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

[42]RCRA comprises Subchapter III--Hazardous Waste Management (42 U.S.C. §§ 6921 to 6939b (1988)) of the Solid Waste Disposal Act, 42 U.S.C. §§ 6901 to 6992k (1988).

[43]Section 3001(b)(2)(A) of RCRA provides:

> [D]rilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy shall be subject only to existing State or Federal regulatory programs in lieu of this subchapter [until the U.S. Environmental Protection Agency (EPA) completes a study on whether such wastes should be regulated as hazardous wastes].

RCRA § 3001(b)(2)(A), 42 U.S.C. § 6921(b)(2)(A) (1988). EPA completed its study and in July 1988 announced its decision to exempt several exploration, development, and production wastes from regulation as a "hazardous" waste. *Regulatory Determination for*

B. Environmental Risks in Routine Oil and Gas Transactions

The primary environmental risk in oil and gas transactions is that the client may unwittingly acquire the status of a liable party and be forced to remedy expensive environmental problems at a site.[44] Since statutes like CERCLA impose liability because of a person's "status" instead of culpability, the goal is to avoid attaining the undesirable status. This goal in part can be achieved by either refusing to acquire an interest in contaminated property, or by acquiring an interest which does not create the requisite status.

Under CERCLA, cleanup liability is imposed on persons that have a certain status with a "facility." The term "facility" is defined broadly to include "any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located . . . ."[45] The seven status categories for liability under CERCLA include the following:

(1) Current owners of the vessel or facility.[46]

(2) Current operators of the vessel or facility.[47]

Oil and Gas and Geothermal Exploration, Development and Production Wastes, 53 Fed. Reg. 25446 (July 6, 1988). The mining industry enjoys a similar exemption created by RCRA § 3001(b)(3)(ii), 42 U.S.C. § 6921(b)(3)(ii) (1988) (exempting solid waste from the "extraction, beneficiation, and processing of ores and minerals").

[44]A secondary consideration is compliance with environmental laws so that the contemplated operations can continue uninterrupted and without unanticipated expenditures.

[45]CERCLA § 101(9)(B), 42 U.S.C. § 9601(9)(B) (1988). The statute specifically includes "any building, structure, installation, equipment, pipe or pipeline . . . , well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft . . . ." CERCLA § 101(9)(A). However, the statute specifically excludes "any consumer product in consumer use or any vessel." CERCLA § 101(9)(B).

[46]CERCLA § 107(a)(1), 42 U.S.C. § 9607(a)(1) (1988).

[47]Id. Although the statute imposes liability on the current "owner and operator" of a vessel or facility, courts have held that a current owner that is not an operator can be held liable as well as a current operator that is not an owner of the facility. Any party satisfying either the owner or operator status can be liable. E.g., United States v. A & N Cleaners and Launderers, Inc., 788 F. Supp. 1317, 1331 (S.D.N.Y. 1992) ("A party need not be both an

(3) Owners of the facility "at the time of disposal[48] of any hazardous substance" at the facility.[49]

(4) Operators of the facility at the time of disposal of any hazardous substance at the facility.[50]

(5) Persons who "arranged for" the disposal, treatment, or transport for disposal or treatment, of hazardous substances at the facility.[51]

(6) Persons who created (generated) hazardous substances which have been brought to the facility for disposal or treatment.[52]

---

owner and an operator to be liable under § 107(a); either status is sufficient to establish CERCLA liability.").

[48]"Disposal" is defined broadly in CERCLA § 101(29), by incorporating the definition found in § 1004(3) of RCRA which provides:

> The term 'disposal' means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

RCRA, § 1004(3), 42 U.S.C. § 6903(3) (1988) (emphasis added). This definition has been applied broadly in a CERCLA context to hold that liability can be imposed on owners or operators of property whenever hazardous substances were 'leaking' into the property; even though the owner did not engage in any affirmative conduct resulting in the leaking. Nurad, Inc. v. William E. Hooper & Sons Co., 966 F.2d 837, 844, 846 (4th Cir. 1992).

[49]CERCLA § 107(a)(2), 42 U.S.C. § 9607(a)(2) (1988).

[50]Id.

[51]CERCLA § 107(a)(3), 42 U.S.C. § 9607(a)(3) (1988).

[52]Id. Although CERCLA § 107(a)(3) refers only to any person who "arranged for" disposal, treatment, or transport, it covers two categories of "arrangers." One category is for persons who arrange for disposal of "hazardous waste owned or possessed by such person". This category would encompass the persons who created or generated the hazardous substance. The generator might arrange to dispose of their own hazardous substances, or they might contract

(7) Persons who transported the hazardous substances to the facility--but only when the transporter selected the facility.[53]

Arguably there is an eighth potential category of liability, created by CERCLA § 101(35)(C), which provides in part:

> [I]f the defendant obtained actual knowledge of the release or threatened release of a hazardous substance at such facility when the defendant owned the real property and then subsequently transferred ownership of the property to another person without disclosing such knowledge, such defendant shall be treated as liable under section [107(a)(1)] 9607(a)(1) of this title and no defense under section [107(b)(3)] 9607(b)(3) of this title shall be available to such defendant.[54]

This section seems to impose liability on a person who would otherwise not be liable under CERCLA § 107(a)(1)-(4). For example, assume Acme Oil Company acquired property in 1950, after all active and passive disposal on the property had ceased. Also assume that during Acme's ownership no hazardous substances were disposed of on the property. In 1990 Acme sells the property to Minor Oil Company and a hazardous substance release is discovered in 1992 that related to activities on the property prior to 1950. Acme should be able to escape liability for cleanup since it is not the current owner or operator of the facility, nor was it an owner or operator "at the time of disposal" of the hazardous substance.

However, suppose one of Acme's employees obtained "actual knowledge" of a release or threatened release of a hazardous substance at the facility while Acme owned the property.[55] If Acme

---

with a third party to arrange for its disposal. In either case, the generator of the hazardous substance will be a potentially liable party with regard to any facility to which the hazardous substance is taken. The second category of arranger would encompass the third party that contracts with the generator to dispose of hazardous substances "owned or possessed . . . by any other party or entity . . . ."

[53]CERCLA § 107(a)(4), 42 U.S.C. § 9607(a)(4) (1988).

[54]CERCLA § 101(35)(C), 42 U.S.C. § 9601(35)(C) (1988) (emphasis added).

[55]Perhaps Acme's employee finds some old records that indicate that from 1941 to 1945 another company conducted a manufacturing operation on the property and routinely dumped hazardous substances into pits located on the property.

fails to disclose this information to its transferee (Minor Oil Company), § 101(35)(C) states Acme would have the same liability as a current owner or operator under § 107(a)(1). It is not clear whether the statute contemplates only a release or threatened release that occurs while Acme owns the property. However, the statute does not expressly limit when the release or threatened release could have taken place. Therefore, the release arguably could have taken place before Acme obtained the property and Acme merely became aware of the prior release during its ownership.[56]

If the "release" was discovered during Acme's ownership, Acme, as the "person in charge" of the facility, may have a reporting obligation under CERCLA § 103(a), but only if there was an actual release[57] of a hazardous substance that exceeded the applicable "reportable quantity."[58] Therefore, § 101(35)(C) includes situations where Acme would have no reporting obligation but may, nevertheless, have a disclosure obligation if the property is transferred.

Any transferor of property should carefully consider what it knows about the environmental condition of the property being

---

[56]CERCLA defines "release" to include:

> [A]ny spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant).

CERCLA § 101(22), 42 U.S.C. § 9601(22) (1988). "Environment" is defined to include "surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air . . . ." CERCLA § 101(8), 42 U.S.C. § 9601(8) (1988).

[57]As opposed to a threatened release.

[58]CERCLA § 103(a), 42 U.S.C. § 9603(a) (1988); 40 C.F.R. Part 302 (1992). It is also arguable that Acme, as the owner of the property when CERCLA was enacted, would have a reporting obligation under CERCLA § 103(c). As the owner of the property at the time the information became known to Acme, § 103(c) would require Acme to notify the EPA of the existence of hazardous substances at the facility and any "known, suspected, or likely releases" of hazardous substances from the facility. If Acme "knowingly fails" to notify the EPA that the facility exists, Acme is subject to criminal sanctions and "shall not be entitled to any limitation of liability or to any defenses to liability set out in section 107 . . . ." See infra text accompanying notes 108-114 (discussing the continuing nature of the § 103(c) reporting obligation).

transferred and decide whether disclosures are required or advisable under § 101(35)(C) to preserve the transferor's non-liability status under CERCLA. In many instances, if the transferor has knowledge of a release or threatened release of hazardous substances on the property, common law strict liability concepts, or contract language, will dictate full disclosure.[59] In any event, to protect the integrity of the contract terms and the transaction, full disclosure should be given.[60]

C. Protection Not Offered by CERCLA's Petroleum Exclusion and RCRA's Associated Waste Exemption

When considering how to structure oil and gas transactions, attorneys must employ a business planning approach to the issues as opposed to a litigation approach. For example, for litigation purposes, counsel may argue that the "associated waste" exemption under RCRA protects their client from liability under CERCLA. However, it would be foolish to rely upon such a premise for business planning purposes. Instead, under current law, counsel should assume the "associated waste" exemption will not protect their client and plan, structure, and draft the transactions accordingly.

1. CERCLA's Petroleum Exclusion

The oil industry's front-line defense to CERCLA liability has been the "petroleum exclusion" which specifically exempts certain substances from CERCLA's "hazardous substance" designation. Although CERCLA § 101(14) defines hazardous substances broadly, it also provides:

> The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance . . . and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).[61]

The petroleum exclusion has been interpreted by the U.S. Court of Appeals for the Ninth Circuit to include:

> [U]nrefined and refined gasoline even though certain of

---

[59] See infra text accompanying notes 145-172.

[60] See infra text accompany note 145.

[61] CERCLA § 101(14), 42 U.S.C. § 9601(14) (1988).

its indigenous components and certain additives during the refining process have themselves been designated as hazardous substances within the meaning of CERCLA.[62]

The scope of the exclusion becomes less clear when dealing with waste oil. For example, in Southern Pacific Transportation Co. v. California (Caltrans),[63] the court concluded that:

> [U]sed petroleum products are covered by the petroleum exclusion, provided that CERCLA-listed hazardous substances have not been added to the petroleum product during its use, nor have the concentrations of CERCLA-listed hazardous substances in the petroleum product been increased by its use.[64]

The court concluded that the petroleum exclusion would apply to a mixture of petroleum and soil that was placed on the plaintiff's property.[65]

In Cose v. Getty Oil Co.[66] the court held that the petroleum exclusion applied to crude oil "tank bottoms"[67] that had been taken to a central disposal site. However, in United States v. Western Processing Co., Inc.,[68] the court held that sludge (tank bottoms)

---

[62]Wilshire Westwood Associates v. Atlantic Richfield Corp., 881 F.2d 801, 805 (9th Cir. 1989).

[63]1991 U.S. Dist. LEXIS 18951 (C.D. Cal. 1991).

[64]Southern Pacific Transportation Co. v. California (Caltrans), 1991 U.S. Dist. LEXIS 18951, at 4 (C.D. Cal. 1991).

[65]Id.

[66]1991 U.S. Dist. LEXIS 13593 (E.D. Cal. 1991).

[67]The court noted:

> When crude oil is stored in tanks, suspended solids in the crude oil settle to the bottom of the tank. Because water is heavier than oil, it separates from the oil and also collects at the bottom of the tank. The bottom layer of the tank is known as basic sediment and water or "tank bottoms." Tank bottoms are typically drained from the crude oil storage facilities to sump facilities nearby.

Cose v. Getty Oil Co., 1991 U.S. Dist. LEXIS 13593, at 1 (E.D. Cal. 1991).

[68]761 F. Supp. 713 (W.D. Wash. 1991).

from leaded gasoline tanks, a diesel oil tank, and an unleaded gasoline tank, and the rinse water from washing out the tanks, were not covered by the CERCLA petroleum exclusion.[69] The court noted that the sludge contained "a rust-like scale of corrosion products from the oxidation of steel in the tank walls."[70] This caused various hazardous substances to be formed which are not ordinarily found in refined or unrefined petroleum. The court also noted that the "tank bottom sludge is contaminated waste product, and not a petroleum fraction, as that term is used in the statute."[71]

The petroleum exclusion will not protect against liability when there are other substances that are hazardous and mixed with petroleum. For example, if waste oil is pumped from a reserve pit which has also contained waste solvents or thread dope cans, the mixture does not qualify for the petroleum exclusion if the solvents or thread dope material adds hazardous substances to the oil. As noted by the U.S. Court of Appeals for the Third Circuit in United States v. Alcan Aluminum Corp.:[72]

> EPA has distinguished between oil that naturally contains low levels of hazardous substances and oil to which hazardous substances have been added through use. Although EPA has extended the petroleum exclusion to the former category of oily substances, it has specifically declined to extend such protection to the latter category. In EPA's words: 'EPA does not consider materials such as waste oil to which listed CERCLA

---

[69]United States v. Western Processing Co., Inc., 761 F. Supp. 713, 717 (W.D. Wash. 1991). The court observed that the waste found in tank bottoms, "including 'unrecovered product, water, sludge, scale, etc., are presumed to be hazardous,' testing being the only method to remove the presumption." Id. at 721. The court also held:

> The rinse water, being a mixture of water and sludge, would contain small concentrations of the hazardous compounds in the sludge. Since CERCLA does not impose any quantitative requirement on the term 'hazardous substance' . . . the rinse water itself should be considered a hazardous substance.

Id. at 722.

[70]United States v. Western Processing Co., Inc., 761 F. Supp. 713, 717 (W.D. Wash. 1991).

[71]Id. at 721.

[72]1992 U.S. App. LEXIS 10366 (3d Cir. 1992).

substances have been added to be within the petroleum exclusion.'[73]

In any event, the petroleum exclusion offers no protection when the material at issue is not petroleum, but instead is merely associated with the development, production, processing, or marketing of petroleum. For example, if the contents of reserve pits contain buckets with lead-based thread dope residue, the presence of the lead can satisfy the "hazardous substance" requirement.[74]

Also, other statutes may apply to fill the void left by the petroleum exclusion. For example, the Oil Pollution Act of 1990 (OPA)[75] imposes liability upon the owner or operator of a facility from which there is a discharge, or substantial threat of a discharge, of "oil" into "waters of the United States."[76] If the necessary nexus with "waters of the United States" can be established, the actual, or threatened, discharge of oil will require the facility owner or operator to clean up the affected area and pay a broad range of damages provided for by the Act.[77] However, OPA liability applies only to incidents that occur after August 18, 1990, the effective date of the Act.[78]

The relationship between the OPA and CERCLA is demonstrated by the OPA's definition of "oil":

'Oil' means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil

---

[73]United States v. Alcan Aluminum Corp., 1992 U.S. App. LEXIS 10366, at 19 (3d Cir. 1992).

[74]United States v. Hardage, Case No. CIV-86-1401-W, Slip Op. at 4-5, 7 (W.D. Okla. April 15, 1991) (liability based in part on disposal of thread dope buckets containing thread dope residue which consisted of a lithium grease base and lead).

[75]33 U.S.C.A. §§ 2701 to 2761 (West Supp. 1992).

[76]OPA § 1002(a), 33 U.S.C. § 2702(a) (West Supp. 1992).

[77]OPA § 1002(b), 33 U.S.C. § 2702(b) (West. Supp. 1992), provides for CERCLA-like cleanup costs but goes beyond CERCLA's compensation scheme and establishes a statutory basis to compensate private interests for injury to real or personal property, to include lost profits and impairment of earning capacity.

[78]OPA § 1017(e), 33 U.S.C.A. § 2717(e) (West Supp. 1992). OPA § 1020, Public Law No. 101-380, 104 Stat. 484, 506, provides: "This Act . . . shall apply to an incident occurring after the date of the enactment of this Act [August 18, 1990]."

> refuse, and oil mixed with wastes other than dredged spoil, but does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance under . . . [CERCLA] and which is subject to the provisions of that Act . . . .[79]

Therefore, if the petroleum substance falls within CERCLA's petroleum exclusion, it may be subject to the OPA's liability provisions--assuming the discharge involves an "incident" occurring after August 18, 1990 and involves "waters of the United States."

Even though the problem may escape CERCLA and OPA liability, it may be subject to action under RCRA's "imminent hazard" authority. Under RCRA § 7003[80] the Administrator of the EPA can bring suit against any "past or present" generator or transporter, or any "past or present" owner or operator of a facility, who has contributed to disposal or handling of any "solid waste or hazardous waste," which "may present an imminent and substantial endangerment to health or the environment . . . ."[81] The court is authorized "to restrain such person from such handling, storage, treatment, transportation, or disposal" and to "order such person to take such action as may be necessary."[82] Citizens have similar powers under RCRA § 7002 which provides:

> [A]ny person may commence a civil action on his own behalf . . . against any person . . . including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility, who has contributed or who is contributing to the past or present handling, storage, treatment, transportation, or disposal of any solid or hazardous waste which may present an imminent and substantial endangerment to health or the environment . . . .[83]

The efficacy of this RCRA authority is demonstrated by the case of Zands v. Nelson.[84] The defendant Nelson owned the land in question from 1961 to 1976. In 1972 Nelson hired Nachant Co. to

---

[79]OPA § 1001(23), 33 U.S.C.A. § 2701(23) (West Supp. 1992).

[80]RCRA § 7003, 42 U.S.C. § 6973 (1988).

[81]RCRA § 7003(a), 42 U.S.C. § 6873(a) (1988).

[82]Id.

[83]RCRA § 7002(a)(1)(B), 42 U.S.C. § 6972(a)(1)(B) (1988).

[84]779 F. Supp. 1254 (S.D. Cal. 1991).

connect piping and pumps to gasoline tanks for a service station. Nelson operated the service station until 1975 when they leased it to Kramer, who operated the station from 1975 to 1979. From 1976 through 1980 the real property was owned as follows:

1976-78	Tacey
1978-80	Goodwin
1980	Purchased by Zands, the plaintiffs.

Apparently the underground storage tank leaked gasoline into the soil and Zands, as the current owner of the property, was attempting to force Nelson, Nachant Co., Kramer, Tacey, and Goodwin to clean up the problem.[85]

Zands brought a "citizen suit" against the parties pursuant to RCRA § 7002(a)(1)(B). Although the remedy sought by Zands is not disclosed in the court's opinion, RCRA § 7002(a) gives the court jurisdiction in a citizen suit to enjoin the disposal or "to order such person to take such other action as may be necessary . . . ." Zands, if successful, will most likely seek an order requiring the defendants to clean up the property. The citizen suit provision does not provide for payment of damages or cleanup costs to private parties.[86] However, it does authorize the assessment of civil penalties and the recovery of attorneys fees.[87]

In Zands the court held that gasoline leaking from an underground storage tank, and the contaminated soil, constitute disposal of a solid waste. Once the gasoline ceases to be a useful product, it becomes a solid waste subject to RCRA.[88] The court also held that RCRA § 7002(a) supplements the federal underground storage tank statutes found at 42 U.S.C. §§ 6991 to 6991i (1988).[89]

---

[85]Zands v. Nelson, 779 F. Supp. 1254, 1257 (S.D. Cal. 1991).

[86]It might be argued that the court's authority under § 7002 to "order such person to take such other action as may be necessary" could include an order to reimburse a third party for cleanup expenses they have already incurred. Apparently the EPA has been successful in making a similar argument under RCRA § 7003. J. Battle and M. Lipeles, Hazardous Waste 139 (2d ed. 1993) (citing United States v. Aceto Agricultural Chemicals Corp., 872 F.2d 1373 (8th Cir. 1989).

[87]RCRA § 7002(a)(2), 42 U.S.C. § 6972(a)(2) (1988) (civil penalties) and § 7002(e), 42 U.S.C. § 6972(e) (1988) (attorney fees).

[88]Id. at 1262.

[89]Id. at 1273.

The court found that RCRA and CERCLA are distinct statutes. Therefore, CERCLA's petroleum exclusion limitations do not similarly limit RCRA's scope. As the court noted: "[W]hereas CERCLA has an explicit exclusion for petroleum, no such similar exclusion exists in RCRA."[90] The court also held that the "mere creation of solid waste, and the subsequent abandonment of it in the ground, will support a cause of action under section 6972(a)(1)(B) [RCRA § 7002(a)(1)(B)]."[91] In holding that the parties who created the waste were subject to RCRA the court stated: "The Court simply will not accept defendants' interpretation of the statute which would allow individuals to create solid waste, and avoid the requirements of RCRA by never making any attempt to clean up the mess."[92]

Before a person can be ordered to take action under § 7002, there must be a showing that the person "contributed" or "is contributing" to the past or present disposal giving rise to the suit. The court held the contribution issue is a factual issue which cannot be resolved, in this case, by summary judgment.[93] However, the court does hold that each of the defendants could be a contributor under the statute. The court observed:

> Here, the defendants are individuals who owned the land during which time the gasoline allegedly leaked, individuals who operated the pumps during which time the gasoline allegedly leaked, and individuals responsible for the installation of the piping and pumps for the gasoline tanks that allegedly leaked. None of these individuals are so far removed that it can be said that, as a matter of law, they did not contribute to the leakage.[94]

Another matter to always consider when dealing with federal environmental statutes is that they uniformly provide for more stringent state regulation. For example, CERCLA § 114(a) provides: "Nothing in this chapter shall be construed or interpreted as preempting any State from imposing any additional liability or requirements with respect to the release of hazardous substances within such State."[95] Some state remediation statutes may not

---

[90] Id.

[91] Id. at 1264.

[92] Id.

[93] Id.

[94] Id. (emphasis added).

[95] CERCLA § 114(a), 42 U.S.C. § 9614(a) (1988).

contain a "petroleum exclusion."[96] Similar considerations exist under RCRA, the OPA, and each of the other federal environmental statutes,[97] as well as state tort law.[98]

2. RCRA's Associated Waste Exemption

As noted previously, the petroleum exclusion offers no protection when the material at issue is a waste associated with the development, production, processing, or marketing of petroleum. Also, as Zands v. Nelson demonstrates, RCRA cleanup liability can exist even though the petroleum-related waste is non-hazardous.[99] However, the main thrust of RCRA is on the regulation of hazardous waste. If waste is classified as hazardous under RCRA, it must be stored, treated, and disposed of in accordance with RCRA's detailed requirements.[100] However, RCRA § 3001(b)(2)(A) provides, in part:

---

[96]For example, Mont. Code Ann. § 75-10-701(6) defines "hazardous or deleterious substance" to include CERCLA hazardous substances, RCRA hazardous wastes, and "any petroleum product." Mont. Code Ann. § 75-10-701(6)(d) (1991). "Petroleum product" includes:

> [G]asoline, crude oil (except for crude oil at production facilities . . .), fuel oil, diesel oil or fuel, lubricating oil, oil sludge or refuse, and any other petroleum-related product or waste or fraction thereof that is liquid at standard conditions of temperature and pressure (60 degrees F and 14.7 pounds per square inch absolute).

Mont. Code Ann. § 75-10-701(10) (1991).

[97]For example, in West Bay Exploration v. AIG Specialty Agencies, the dispute concerned a lessee's operation of glycol dehydrators and the release of condensed water vapor containing trace amounts of hazardous substances. Although the waste may have been "exempt" under RCRA's associated waste exemption, it nevertheless became the focus of an expensive cleanup under a Michigan state law prohibiting "waste." West Bay, 915 F.2d 1030, 1032 (6th Cir. 1990).

[98]See, e.g., Branch v. Mobil Oil Corp., 788 F. Supp. 531 (W.D. Okla. 1991) (nuisance action for pollution relating to past operation of oil and gas wells, gathering lines, tank batteries, and salt-water and waste pits).

[99]See supra text accompanying notes 54-64.

[100]See, e.g., 40 C.F.R. Part 262, Part 263, and Part 264 (1992).

> [D]rilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy shall be subject only to existing State or Federal regulatory programs in lieu of this subchapter [until EPA completes a study on whether such wastes should be regulated as hazardous wastes].[101]

Pursuant to § 3001(b)(2)(A), EPA completed its study of oil and gas wastes and in 1987 delivered to Congress its report titled: "Management of Wastes from the Exploration, Development, and Production of Crude Oil, Natural Gas and Geothermal Energy." In July, 1988 EPA issued its decision to exempt many, but not all, exploration and production wastes from RCRA's hazardous waste provisions.[102]

However, even though a waste is classified as an "exempt" waste and therefore non-hazardous under RCRA, it does not necessarily mean the waste will be considered non-hazardous under CERCLA.[103] Cases to date suggest that the exemption of wastes under RCRA will not provide protection from CERCLA cleanup liability.[104] Therefore, even though a waste can be lawfully

---

[101]RCRA § 3001(b)(2)(A), 42 U.S.C. § 6921(b)(2)(A) (1988).

[102]Regulatory Determination for Oil and Gas and Geothermal Exploration, Development and Production Wastes, 53 Fed. Reg. 25446 (July 6, 1988).

[103]Generally speaking, RCRA regulates the present handling and disposal of hazardous wastes; CERCLA seeks to clean up inactive hazardous waste sites by holding parties connected with the problem liable for cleanup costs. Although RCRA exempts certain wastes from regulation as a "hazardous waste" (such as oil and gas wastes, mining wastes, and household wastes), these wastes can still become the target of a CERCLA cleanup action. But see M. Gibson and D. young, Oil and Gas Exemptions Under RCRA and CERCLA: Are They Still "Safe Harbors" Eleven Years Later? 32 So. Tex. L. Rev. 361, 370-383 (1991) (arguing that exempt oil and gas wastes under RCRA were intended by Congress to also be exempt under CERCLA); S. Lansdown, Plugging and Abandoning Issues Encountered by Sellers and Buyers of Producing Properties: A Major's Perspective, The Landman 13 (Jan./Feb. 1992) ("The RCRA exemption for drilling fluids, etc., is applicable under CERCLA.").

[104]B.F. Goodrich Co. v. Murtha, 958 F.2d 1192, 1201-02 (2d Cir. 1992) (RCRA household waste exemption); Idaho v. Hanna Mining Co., 699 F. Supp. 827, 833 (D. Idaho 1987), *aff'd*, 882 F.2d 392 (9th Cir. 1989) (RCRA asbestos mill and mine waste exemptions); Eagle-Picher Indus. v. EPA, 759 F.2d 922, 927 (D.C. Cir. 1985) (RCRA

managed in a certain way under RCRA, it may not be an acceptable management technique when CERCLA liability is considered. An otherwise "lawful" disposal of oil and gas wastes for RCRA purposes may create, from a business planning point of view, unacceptable CERCLA risks.

D. Owner/Operator in the Oil and Gas Context

When applying CERCLA, RCRA, the OPA, and similar environmental laws to the oil and gas industry, a major concern is whether courts will adhere to the same ownership and operation niceties which form the foundation of "oil and gas law." For example, under CERCLA will an overriding royalty owner be deemed an "owner" of a facility even though they merely own a contract right to receive a share of oil or gas produced from a wellbore on the facility? Will they be considered a CERCLA "operator" if they have the right to convert their overriding royalty to a fractional working interest once a well on the facility has paid out? Courts can either apply traditional oil and gas law concepts to define the scope of CERCLA, or they can ignore them and pursue CERCLA policies they perceive as transcending state property law concepts.

With regard to the role state property law should play under CERCLA, federal environmental law may follow the same path as federal natural gas regulation. For example, in California v. Southland Royalty Co.,[105] the Court refused to permit state property law to interfere with federal natural gas policies.[106] In Southland the mineral owner, in 1925, entered into a 50-year lease with Gulf Oil Corporation. In 1951 Gulf entered into a gas contract with El Paso Natural Gas Co. and dedicated production from the leased land to interstate commerce. Gulf's lease expired in 1975 and all rights in the property reverted to the mineral owner. When the mineral owner attempted to sell gas to an intrastate purchaser, El Paso objected asserting the gas could not be diverted from interstate commerce unless an abandonment was granted by the Federal Power Commission.[107]

---

mining waste and fly ash exemptions); United States v. Hardage, Case No. CIV-86-1401-W, Slip Op. at 10-13 (W.D. Okla. April 15, 1991) (RCRA oil and gas associated waste exemption).

[105]436 U.S. 519 (1978).

[106]The Court noted: "The fundamental purpose of the Natural Gas Act is to assure an adequate and reliable supply of gas at reasonable prices." California v. Southland Royalty Co., 436 U.S. 519, 523 (1978).

[107]Southland, 436 U.S. at 521-22.

The U.S. Court of Appeals for the Fifth Circuit held:

> Under applicable Texas law, Gulf's rights were those of a tenant for a term of years; its interest was a limited one which terminated completely when title reverted to Southland at the expiration of the 50-year term. It is black letter law that a person holding a present interest in real property which is limited in duration cannot create an estate which will extend beyond the term of his interest. . . . Since Gulf never was possessed of rights in the gas under the leasehold lands which could survive the termination of its 50-year term lease, it never could create rights in a third person to that same gas.[108]

The Supreme Court, reversing the Fifth Circuit, stressed the need to prevent producers from "structuring their leasing arrangements to frustrate the aims and goals of the Natural Gas Act."[109] The Court also noted: "'A regulatory statute such as the Natural Gas Act would be hamstrung if it were tied down to technical concepts of local law.'"[110]

It is likely that a similar analysis will be employed by the Supreme Court when evaluating liability issues under CERCLA. For example, in Pennsylvania v. Union Gas Co.,[111] the Court held that Congress in CERCLA had lawfully waived the sovereign immunity of state and local governments thereby subjecting them to private party suits for response costs. In evaluating the underlying policies of CERCLA, the Court stated:

> The remedy that Congress felt it needed in CERCLA is sweeping: everyone who is potentially responsible for hazardous waste contamination may be forced to contribute to the costs of cleanup.[112]

Some courts have carried this concept one step further by adopting a general rule of CERCLA construction that those who benefit from a polluter's past activities should pay for the cleanup before

---

[108]Southland Royalty Co. v. Federal Power Comm'n, 543 F.2d 1134, 1137 (5th Cir. 1976) (emphasis added).

[109]California v. Southland Royalty Co., 436 U.S. 519, 530 (1978).

[110]Id.

[111]491 U.S. 1 (1989).

[112]Pennsylvania v. Union Gas Co., 491 U.S. 1, 6 (1989).

taxpayers are saddled with the obligation.[113]

Where the niceties of state property law tend to promote CERCLA goals, they will most likely be applied with a vengeance. For example, consider the Texas cross-conveyance theory articulated in Veal v. Thomason.[114] If each party owning a lease in a pooled unit or a fieldwide unit is deemed to have conveyed a proportionate interest in their property to all other contributors to the unit, a single lease owner could become an "owner" of an undivided interest in every lease contributed to the unit.

---

[113]See generally Smith Land & Improvement Corp. v. Celotex Corp., 851 F.2d 83, 92 (3d Cir. 1988), cert. denied, 488 U.S. 1029 (1989). Most courts have held that the two essential purposes underlying CERCLA are: (1) Giving the federal government the tools necessary to effectively respond to hazardous substance problems; and (2) "'[T]hat those responsible for problems caused by the disposal of chemical poisons bear the costs and responsibility for remedying the harmful conditions they created.'" Dedham Water Co. v. Cumberland Farms Dairy, Inc., 805 F.2d 1074, 1081 (1st Cir 1986), quoting United States v. Reilly Tar & Chemical Corp., 546 F. Supp. 1100 (D. Minn. 1982). However, the CERCLA liability scheme clearly goes beyond the scope of this statement by imposing liability on persons who are not actually "responsible" for the problem. Instead their liability is based upon their unfortunate status of "owner" or "operator".

[114]138 Tex. 341, 159 S.W.2d 472 (1942).

LEVERAGING RISK

IN

OIL FIELD CONTRACTS

1. Understanding Oil & Gas Property Interests.

2. Contracts Used to Transfer and Develop Oil & Gas Property Interests.

3. Risk Management Techniques.

4. Application to Contemporary Environmental Risks.

UNDERSTANDING OIL & GAS PROPERTY INTERESTS

* American property law permits a property owner to transfer to third parties various rights in a tract of land.

* The "bundle of sticks" approach to property ownership.

  - If I own *all* the rights in a tract of land I am said to own it in "fee simple absolute".

    I own the entire "bundle of sticks" (all the rights) associated with the tract of land.

* Among the "sticks" I own, as the owner of the land, is the right to enter the land to explore for, develop, and remove minerals--such as oil and gas.

* I can transfer this stick (right) to others.

BREAKING THE BUNDLE

* For example, A owns all of the rights in a tract of land (call it "§30").

* A conveys to B all the "oil and gas in and under § 30."

  - B now owns all the rights to explore for, develop, and remove oil and gas from § 30 (plus the right to use so much of the surface as is reasonably necessary to exercise its oil & gas rights).

  - A owns all other rights in § 30 except for the oil and gas rights.

    A owns the surface, plus all minerals not encompassed by A's grant to B.

* Document used to make the transfer is called a Mineral Deed.

* Note that after the conveyance, there are two "owners" of § 30, A & B.

  - However, they each own different interests in the property (their "sticks" are different).

OIL AND GAS OWNERSHIP IN THE UNITED STATES

* Ownership of oil and gas in the United States is fairly complex due to our recognition of:

  (1) Private property rights in minerals; and

  (2) The right to transfer varying interests in private property.

* It is not unusual to find that some or all of the "mineral rights" have been severed from the "surface rights" to property.

* Nor is it unusual to find that the rights to a mineral (or the surface right) have been divided and transferred to create even more varied interests.

  - For example, the right to oil produced from a certain depth, or from a particular underground geologic structure.

  - The surface owner might grant various leases, easements, and licenses authorizing use of the surface.

THE BASIC INTERESTS:

(1) Mineral Interest.

(2) Surface Interest.

* If someone wanted to obtain the oil and gas development rights in § 30, they would have to obtain the right from the land owner.

* However, if the oil and gas rights have been severed from the land, the person seeking development rights in § 30 would have to obtain the right from the owner of the severed oil and gas rights.

PASSIVE INCOME INTERESTS

* Can create rights in the oil and gas property interest which do not give the owner any right to develop the property.

* Merely create a right to share in the benefits of development when, and if, production is obtained from the property.

* Common types of interests which entitle owner only to a share of production from the property:

  - Royalty Interest
  - Production Payment
  - Net Profits Interests
  - Nonparticipating Mineral Interest

DEVELOPMENT REALITIES:

* Land owners and mineral owners seldom develop their minerals.

* Instead, they contract with third parties in hopes of having their minerals developed.

* The contract used to transfer oil and gas rights for development is called an Oil and Gas Lease.

THE OIL AND GAS LEASE

* Landowner (mineral owner) "leases" their oil and gas rights to developer--the oil and gas lessee.

* Common attributes of the Oil & Gas Lease:

  - Lessee given the exclusive right to develop for a specified period of time.

  - Lessee under no obligation to develop during the specified period.

    * Often must pay an annual "delay rental" to keep the lease in effect during the specified period--unless they drill on the property.

    * Usually make an upfront cash payment, called a "bonus," to induce the landowner to lease.

  - If the lessee obtains production from the property, the lease will continue in effect so long as oil or gas is produced in paying quantities.

    * Agree to pay the landowner a cost-free share of production (traditionally 1/8th) in the event production is obtained from the leased land.

TRANSFERS OF OIL AND GAS LEASE RIGHTS

THE ASSIGNMENT

* Lessees often transfer all or part of their rights in oil and gas leases to third parties.

* The document used to transfer lease rights is called an "Assignment."

* Interests in lease may be assigned to share the risk of a dry hole.

* Sometimes, a lessee who is not interested in developing a lease they own may enter into a "Farmout Agreement".

  - Permits a third party (the farmee) to come onto the leased area and drill a well.

  - If the farmee does what is required by the Farmout Agreement, the farmee will earn an Assignment of some of the lessee's (farmor's) rights in the oil and gas lease.

THE OPERATING AGREEMENT

* Any time more than one party owns an interest in an oil and gas lease, or there is more than one lease covering the minimum area required for a drilling permit, there will usually be some sort of agreement to coordinate development of the leased land or the drilling permit area.

* The agreement used to coordinate development of multiple leasehold interests in an area is called the Operating Agreement (or Joint Operating Agreement or "JOA").

* The Operating Agreement specifies:

  - What each party's share of costs and production will be from the contract area.

  - Who will serve as "Operator" and conduct day-to-day operations on the contract area.

  - How various risks and liabilities will be allocated among the parties.

  - A mechanism for making major development and operational decisions.

POOLING AGREEMENTS AND POOLING ORDERS

* State law specifies the minimum area needed to obtain a permit to drill a well.

  - Minimum area called the "spacing unit" or "drilling unit."

  - For example, the state law may provide for a spacing unit of one well per 10-acre tract of land.

* If the leased area is not as big as the spacing unit (for example, the lease covers only 5 acres and state law requires a minimum of 10 acres to obtain a drilling permit), the mineral interest owners and lessees in the spacing unit area (10-acre area) can agree to "pool" their interests to form the requisite spacing unit.

* If the parties cannot agree to pool their interests, state law may provide for "forced" or "compulsory" pooling to form the requisite spacing unit.

DRILLING CONTRACT

* Lessees typically do not drill their own wells.

  - Instead, they enter into drilling contracts with drilling contractors.

  - Depending upon how the drilling contract is structured, the lessee may, or may not, have extensive control over (and liability for) the drilling contractor's activities.

* Three common types of drilling contracts:

  - Daywork

  - Footage

  - Turnkey

* The extent to which the drilling contractor will be considered an "independent" contractor varies depending upon the type of contract, and associated control over operations, retained by the lessee/operator.

COMMON TYPES OF DRILLING CONTRACTS

* ***Daywork***

  Drilling contractor paid an agreed daily rate for supplying their equipment and crew.

  Operator or lessee is often in charge of the drilling operations.

* ***Footage***

  Drilling contractor paid an agreed per-foot rate for each foot drilled.

  Drilling contractor has greater control over operations.

  Under specified circumstances, the basis for drilling may shift from a footage to a daywork basis.

* ***Turnkey***

  Drilling contractor paid a stipulated price for drilling a well to a specific depth or formation.

  Drilling contractor assumes risk associated with drilling to the specified depth.

  Drilling contractor has maximum control over operations.

UNITIZATION AGREEMENTS AND UNITIZATION ORDERS

* After an area has been extensively developed, lessees in the oil and gas field may desire to conduct various forms of enhanced recovery; typically water flooding operations.

* Before they can safely inject water into the reservoir, they need to obtain the agreement of all parties who will be impacted.

* Impacted parties generally agree to accept a proportionate share of production from any well producing from within the unit area in return for giving up their right to conduct independent operations on their leased land.

* Parties who can agree on the unitization terms enter into a Unitization Agreement.

* Parties who refuse to agree may, in some states, be forced to participate through a state-issued Unitization Order.

THE DEVELOPMENT PROCESS:

(1) Landowner or Mineral Interest Owner Enters into Oil and Gas Lease.

(2) Oil and Gas Lessee Assigns Various Interests or Obtains Various Assignments to Gain Control Over the Target Area.

(3) Owners of Oil and Gas Rights in Spacing Area Enter into Pooling Agreements or Obtain a Pooling Order.

(4) Oil and Gas Lessees Covering the Target Area Enter into Operating Agreement.

(5) Oil and Gas Operator Enters into Drilling Contract with Drilling Contractor.

(6) Oil and Gas Operator Enters into Various Service Contracts with Contractors.

(7) Owners of Oil and Gas Rights in the Contract Area Enter into Fieldwide Unitization Agreements to Support Enhanced Recovery Operations.

RISK MANAGEMENT TECHNIQUES

* Avoid Risk

  - Identify and structure transaction to avoid risks.

  - Identify risks and manage activities to avoid them (contracting, administration, training).

* Minimize Risk

  - Identify and structure transaction to minimize risks.

  - Identify risks and manage activities to minimize them (contracting, administration, training).

  - Sharing

  - Shifting

    (1) Allocation among the contracting parties (indemnity).

    (2) Allocation to third parties (insurance).

TYPES OF RISK

* Investment Risks.
  - Dry Hole.
  - Avoid by taking a passive income interest.
  - Leverage by sharing with others.

* Liability Risks.
  - Injury to third parties.
  - Created by contract, tort, or statute.

LIABILITY CONCEPTS

* Every Person is Liable for their Own Acts

  - Tort

  - Contract

  - Statutory Liability

* Every Person is Liable for the Acts of their Employees Performed within the Scope of their Employment.

  - May be able to avoid liability if the acts were performed by an "Independent Contractor" instead of an "Employee."

* Every Person is Liable for Contractual Obligations Created by their Agents Acting within the Scope of their Authority.

* Partnership, joint venture, mining partnership: All parties with an interest in the enterprise can be held liable for the torts, contracts, and statutory obligations of the enterprise.

  - Corporation can be used to insulate investors from personal liability arising out of corporate transactions.

LEVERAGING LIABILITY: CONTRACT TECHNIQUES

* Identify the Risks
  - Disclosure
  - Inspection
  - Evaluation
* Allocate Liability by Agreement
* Representations and Warranties
  - Obtain Whenever Possible
  - Refrain from Giving Whenever Possible
* Indemnities
  - Obtain Whenever Possible
  - Refrain from Giving Whenever Possible
* Administer Agreements and Relationships
  - Monitor Risks
  - Identify Problems
  - Develop Procedures
  - Train

EXAMPLE

1. A represents and warrants that there are no unplugged wells on § 30, except for the Pierce 1-30 Well in the SE 1/4 of the SE 1/4.

   * Prior to closing, a second well is discovered in the NE 1/4 of the SE 1/4. (A has misrepresented this fact and breached its promise [warranty] that such a well did not exist).

2. A agrees to assume all liability associated with the existence of any unplugged well(s) located on § 30.

3. A will defend, indemnify, and hold B harmless against and claim, demand, liability, injunctive action, fine, penalty, or other loss B may suffer due to the existence of any unplugged well(s) located on § 30.

NEW RISKS--OLD TECHNIQUES

The New Risk:

* "Status" Liability to Fix Environmental Problems
  - Liability not based upon fault, contribution, or causation.
  - Liability not based upon "violation" of any law; lawful conduct can give rise to liability.
  - Liability based upon "status" as an owner or operator of property, generator of disposed substances, disposer of substances, or transporter of substances.
  - Liability means you must spend whatever it costs to fix (remedy) the environmental problem.

Old Techniques:

* Avoid the Risk by Avoiding the Status.
* Minimize the Risk by Defining and Leveraging the Risk.

"SUPERFUND" IN THE OIL AND GAS CONTEXT

CERCLA -- Comprehensive Environmental Response, Compensation and Liability Act

Applies When There Is A:

1. Release or Threatened Release,
2. Of a Hazardous Substance,
3. Into the Environment,
4. From a Facility,
5. Causing someone to incur Cleanup Costs.

Goal: Ensure that certain defined parties pay for remedying environmental problems associated with past, present, and future use of hazardous substances.

THE PETROLEUM EXCLUSION

CERCLA only applies when there is a release, or threatened release, of a "hazardous substance."

CERCLA § 101(14) provides:

> "The term [hazardous substance] does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance . . . and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel . . . . "

One court has defined this petroleum exclusion to include:

> "[U]nrefined and refined gasoline even though certain of its indigenous components and certain additives during the refining process have themselves been designated as hazardous substances within the meaning of CERCLA."

Wilshire Westwood Associates v. Atlantic Richfield Corp., 881 F.2d 801, 805 (9th Cir. 1989).

OTHER WAYS TO REACH PETROLEUM

Under CERCLA:

1. Exclusion does not apply when the petroleum is mixed with other hazardous substances outside of the refining process.

2. Does not apply to non-petroleum wastes associated with the exploration, production, or refining of petroleum.

Under RCRA (Resource Conservation and Recovery Act):

EPA and Citizens can sue to abate an "imminent and substantial endangerment to health or the environment."

* Applies to hazardous and non-hazardous substances--including petroleum.

RCRA also has special statutes that apply to the owners and operators of underground storage tanks that contain(ed) petroleum.

Under OPA (Oil Pollution Act of 1990):

Can recover damages caused by a discharge of petroleum into Waters of the United States.

* Must impact "Waters of the United States."

* Must relate to an "incident" occurring after August 18, 1990.

Under CWA (Clean Water Act):

EPA can order a cleanup caused by a discharge of petroleum into Waters of the United States.

* Must impact "Waters of the United States."

State Statutes:

May not contain a petroleum exclusion, or as broad an exclusion, as found in CERCLA.

Underground storage tank statutes.

State Common Law:

Nuisance, negligence, strict liability, and trespass.