AN OVERVIEW OF CALIFORNIA OIL & GAS LAW

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Introduction

In recent years, oil & gas producers based in the Gulf Coast, Mid-Continent and Rocky Mountain regions have shown a renewed interest in California oil & gas exploration and production. Many of these companies and their counsel find they have no one with direct experience in California matters in their organizations and have only general, anecdotal awareness of California oil & gas law or of the business, quasi-legal and legal issues involved in operating in California. Various stereotypes come to mind and some companies still have a "never-in-California" policy when they look at new deals. Despite the sometimes unfavorable impressions of the state held by some, others have concluded that the opportunities in California are such that a substantial investment is warranted.

The purpose of this paper is two-fold: First, to give the reader an overview of the history of the E&P business in California and some of the fundamental features of California oil & gas law, and second, to describe some of the current or developing issues or trends in the oil & gas industry in California. The second area is of interest, of course, to those whose clients are becoming involved in California transactions, but also because some of the developments may become more established in California and find their way to other states, such as Texas.

Of course, with such a wide-ranging scope, this paper can only skim along the surface of each of its topics. A number of the issues are appropriately subjects for a separate paper or even a separate seminar. Nevertheless, the goal of the paper is to introduce concepts and present an overview, with the expectation that the discussion will be only a starting point for those seeking to thoroughly investigate a particular subject.

I. California's Historic Role in U.S. Oil & Gas Business

A. Pre-World War II

1. Early Days

The earliest oil & gas production activities began in California in the 1860's and 1870's.[2] By the 1890's there was significant oil production. Around the turn of the century, after the Kern River Field near Bakersfield was discovered, California became the top oil-producing state in the nation, producing approximately 24.4 million barrels that year.[3]

Small independents were leaders in the early days of the California oilpatch, but many companies that are recognized today, such as Union Oil Company of California, Shell Oil Company, Standard Oil Company of California and Richfield Oil Corporation, had prominent roles in the development of California's oil and gas industry as well.

The stories of the early explorationists in California, their wheeling and dealing and of unregulated operations in the field are similar to those in Texas and other major oil producing states. Inevitably, the abuses arising from the unrestrained application of the Rule of Capture that occurred in an unregulated setting led to efforts at state regulation and to the adoption of more scientifically-based approaches to conservation and the prevention of waste.[4]

During World War I, California, still the country's biggest producer, continued to develop its oil and gas reserves. In 1912, President Taft had created the Naval Petroleum Reserve No.1 at Elk Hills in Kern County, and in 1918, Standard Oil Company completed the discovery well, proving up that field.[5] In 1914, the state was producing approximately 300,000 barrels of oil per day.[6]

2. Between the World Wars

In the 1920's, the discovery and development of the Long Beach Field at Signal Hill and nearby large fields in the Los Angeles Basin increased statewide production dramatically, retaining the state's position as the largest oil producing state in the country.[7] By the time the Great Depression began in 1929, a number of other significant fields had been discovered. The state was producing 801,120 barrels of oil per day, with additional shut-in production capability of 190,985 barrels per day.[8]

In 1929, the "Gas Act" was passed by the legislature to deal with the problem of blowouts and the waste of natural gas.[9] In 1931, bonding and spacing requirements were first imposed by statute.[10] The 1931 spacing statute required well setbacks and one (1) acre spacing.[11] (Not until 1978 did the state's conservation commission impose anything other than one acre spacing.[12])

Throughout the 1930's, significant discoveries continued and gas fields were developed in the northern part of the state. In 1932, Union Oil Company of California's Rio Bravo well was the deepest producing well in the world, and in 1938, Continental Oil Company completed the first well in the world below 15,000 feet in the Wasco Field.[13] By the end of the decade, however, California had been surpassed by Texas, by a large margin, as the number one producing state.[14]

B. Post World War II

California continued to develop additional fields during the years of World War II, with annual production rising from 229.7 million barrels in 1941, to 328.3 million barrels in 1945.[15] In the 1950's and 60's, exploration and development drilling continued to expand the state's producing reserves. One million barrels per day of statewide production was first achieved in 1953. In 1964, the Wilmington Field became the second field in the country (after the East Texas Field) to produce one billion barrels.[16]

C. Offshore

Oil and gas exploration and production in the waters off of California's coast has generated controversy for years. It continues to be a topic in local, regional and national politics. A review of some notable and notorious events gives a flavor for the public debate.

1. Early Days

The first offshore well in the United States was drilled in the Summerland field near Santa Barbara around 1897.[17] The well was drilled from a wooden pier. By 1915, two million barrels of oil had been produced from the Summerland field, and many of the wells were offshore.[18] Drilling and producing from wooden piers was apparently common for many years, and some wells were located as far as 2,300 feet from the shoreline.[19] In 1932, the first offshore drilling and production "platform" was built in 38 feet of water. Three wells were completed, but the platform was destroyed in a storm a few years later.[20]

In 1938, the legislature passed the State Lands Act which, among other things, permitted the development of oil & gas reserves on state tidelands, but only to prevent drainage.[21] Directional drilling became more common and onshore wells successfully produced from offshore reservoirs. In 1952, an artificial, offshore "island" was constructed in 42 feet of water, one and one-half miles offshore from Seal Beach.[22] Eventually, 41 wells were completed from "Monterey Island."[23] In the 1950's, initial drilling from ships was conducted and the growing body of scientific data suggested that there were significant offshore reserves to be exploited.[24] In order to permit such development, the Cunningham-Shell Tidelands Act of 1955[25] authorized the State Lands Commission to lease the state-owned tidelands, irrespective of any threat of drainage. The first state lease issued under such act — offshore of the Summerland field — was awarded in 1957, to Standard Oil Company of California and Humble Oil & Refining Company who won with a competitive bid bonus of more than $7 million.[26] The initial well proved up the field.

Compared to the Gulf Coast, there are relatively few offshore platforms off of the California coast, either in state or federal waters. Plats prepared by the Division of Oil, Gas, and Geothermal Resources ("DOGGR") — California's conservation commission — showing the approximate locations of the various offshore platforms and islands offshore California as of early 1995 are included as Attachment 1.[27]

2. OCS Leases — Santa Barbara Channel

In 1966, the first federal leases were granted in offshore California waters. The fifth well drilled in the Santa Barbara Channel from Platform A blew out in 1969 and was not brought under control until ten days later.[28] Aside from the litigation and regulatory measures that resulted involving those particular parties and that particular site, arguably this event was a

turning point for the modern oil & gas industry in California.

Approximately 77,000 barrels of crude oil were released as a result of the blowout. The spill spread from the shoreline of Santa Barbara and Ventura counties to the Channel Islands.[29] The cost of the cleanup was $120 million in 1992 dollars.[30] The spill "inundated the media with images of dying, oil-soaked birds."[31] Partly as a result of the Santa Barbara blowout, California became an innovator in environmental protection regulation, and as one writer noted, "the mover and shaker for the rest of the nation and even the world on the environmental front."[32]

The 1969 Santa Barbara blowout influenced Congress in its consideration of a number of legislative measures. First, Congress placed a moratorium on leasing and development in federal waters off the California coast. State and federal moratoria have taken different forms and covered different geographic areas over the years since then, but still remain as a formidable obstacle to further development of offshore California reserves. Second, Congress passed the National Environmental Policy Act ("NEPA"), which was later used by states and environmental groups to challenge OCS lease sales.[33] Congress later enacted the Coastal Zone Management Act ("CZMA") in 1972 and extensive amendments to Outer Continental Shelf Lands Act ("OCSLA") in 1978.[34] California has also enacted its own very strict coastal development regime which represents an additional layer of regulatory barriers to further offshore development.

The spill had a significant impact on emerging theories of liability by polluters. In Union Oil Co. v. Oppen,[35] the court allowed commercial fishermen to recover their economic losses resulting from the 1969 spill. The court found that there was a "special relationship" between the defendant (the oil company) and plaintiffs, this relationship giving rise to a duty of care.[36] The court further found that the defendant had breached its duty of care.[37] This reasoning was later recognized by courts in Virginia and Alaska.[38] These courts allowed recovery for economic losses sustained by commercial fishermen as a result of water pollution.[39]

Perhaps just as significant as the changes in the legal framework for offshore oil & gas exploration and production, was the impact on the public image of the oil business. Even today, decades later, references will appear in the popular press comparing some recent occurrence to the 1969 spill. In many ways, the public relations damage to the industry has been more severe than the legal constraints which resulted from the 1969 blowout.

3. Point Arguello

The modern day cautionary tale of the offshore California oil & gas business is the saga of Point Arguello, which continues to unfold even today. The Point Arguello field platforms are located in federal waters in the Santa Barbara Channel.

Point Arguello has been an expensive project. Chevron and its partners invested more than $2.5 billion in the development of the field. The interest expense alone during months of delay in bringing the field into production was reported to be $500,000 per day. Among other things, the working interest owners paid $750 million in lease bonus to the federal government; $20 million to Santa Barbara County to build a desalination plant; $23 million to relocate a school; millions to preserve rare butterflies and the endangered Gaviota tarweed.[40]

Chevron and other non-operating working interest owners acquired the underlying leases in 1979. After years of permitting and development work, the platforms had been constructed and wells had been drilled and completed by the late 1980's.[41] Production did not begin immediately, however. The operator needed a variety of permits and approvals to transport the crude oil to shore, treat it and then to ship it to Los Angeles area refineries. A tortured regulatory process through various governmental agencies caused months and months of delay. Production finally came on stream in 1991, but subject to restrictions which caused the producers to operate in a way which limited production and ran up costs.[42]

The main issues causing the delay in producing the field related to post-production processing and transportation of the oil. The original plan was to ship oil by tanker to Los Angeles area refineries since the producers were unable to arrange for pipeline transportation on satisfactory economic terms. But Santa Barbara County prohibited Chevron from tankering directly to Los Angeles. Instead, Chevron was required to ship most of the production by pipeline to Bakersfield and then north hundreds of miles to San Francisco Bay, to be loaded on ships with the oil then returning to the south by tanker along the coastline to Chevron's El Segundo refinery in the Los Angeles area. Some oil was shipped via pipeline to Bakersfield, then through Texaco's pipeline to Martinez (in the Bay area), and then back to Los Angeles.[43]

The apparent solution to the transportation problem came in the form of the Pacific Pipeline, a new pipeline first proposed in 1991. Once constructed, the pipeline would allow Point Arguello production to be shipped directly to Los Angeles, thereby satisfying both

the environmental and economic concerns of the parties. In 1992, the Resources Agency and Governor Wilson suggested a transition plan which would allow Chevron to tanker oil directly to Los Angeles for three years during the pipeline's construction. Local environmentalists were opposed to the interim plan. But Santa Barbara County authorities announced that they would approve the plan in exchange for Chevron's firm commitment to use the future pipeline. Chevron was opposed, however, to some conditions and "milestones" proposed in the County's proposed plan.[44]

In August of 1992, the Santa Barbara County Board of Supervisors approved a plan (Chevron's third application since 1989 for tanker permit) that allowed Chevron to ship oil from Point Arguello. Chevron, in turn, rejected the plan as uneconomic. The County wanted Chevron to sign a binding commitment to use the pipeline prior to allowing Chevron to start its tankering operations. Chevron wanted to start tankering before making any commitments to the future use of the pipeline.[45] Several rounds of litigation took place. Solutions that appeased one agency were unacceptable to another.

Eventually, the California Coastal Commission granted Chevron an interim tankering permit that imposed stringent conditions. The interim permit had an expiration date of January 1, 1996. The Coastal Commission's approval did, however, allow Chevron to boost production to 85,000 barrels per day.[46] But the permit was conditioned on Chevron signing, by February 1, 1994, a throughput agreement with any pipeline holding the required permits.[47] That deadline arrived, and Chevron — having not yet signed a throughput agreement — lost its permit in early 1994. In May of 1994, however, Chevron committed to send an average 110,000 b/d for 10 years through the Pacific Pipeline.[48] The current status of the Pacific Pipeline permitting process is described below.

D. Recent High-Visibility Projects or Developments

The four projects or developments described in this section are examples of the political and economic climate in which California producers operate. While none of them is typical of the day-to-day experience of California operators, they are representative of the forces with which the E&P industry must contend.

1. Pacific Pipeline Project

The Pacific Pipeline is a crude oil pipeline proposed to be constructed by the Pacific Pipeline System, Inc., a joint venture of the Southern Pacific Railroad, Chevron, Texaco, and Exxon.[49] The original plan was to build a 170 mile pipeline from Point Arguello to Los Angeles County refineries. The pipeline would carry 130,000 barrels a day and would cost around $200,000,000.[50] Over time, the project was scaled back somewhat and is now planned to be 132 miles long, with capacity of 130,000 barrels a day, and a cost of $170 million.[51]

The Pacific Pipeline seemingly had a better political chance of success than previous pipeline plans because 90% of its route would be within the existing Southern Pacific Railroad right of way.[52] Two original routes, proposed by the Pacific Pipeline organizers, were generally opposed by the Sierra Club and the Coalition Against the Pipeline ("CAP").[53] One of the routes (the Santa Clarita route) was specifically opposed by the members of Chumash Nation's Owl Clan. Another (the Ventura route) was opposed by the Friends of Ventura River, an organization dedicated to preservation of wetlands.[54] Environmental interest groups were divided on the subject; the Pacific Pipeline was strongly supported by the Environmental Defense Center, a lobbying group opposed the use of tankers by Chevron.[55] The real fight for the project started in April of 1993, when the first negative environmental report relating to the Pacific Pipeline was issued.[56] The Los Angeles City Council adopted a resolution opposing the pipeline.[57] After the City Council resolution, the California Public Utility Commission ("PUC"), which supports the project, started a series of workshops explaining its, mostly favorable, environmental report.[58]

The public relations battle also heated up. Opponents of the planned route, including the CAP, were placing posters in supermarkets, handing out flyers, holding strategy meetings and rallies, and preparing for litigation. The project sponsor mailed 12,000 letters explaining the project to those who owned the property within 300 feet of the proposed route. The company also hired two public relations firms to promote the pipeline to businesses, elected officials and residents. Trade and business organizations started a campaign of support, arguing that the project would reduce unemployment.[59] At the first of a number of public hearings conducted by PUC in central Los Angeles, 25 out of 40 people spoke against the pipeline. Union members applauded the project while the residents opposed it.[60]

At the same time, Chevron and its partners signed an agreement to ship certain volumes produced from Point Arguello on the existing All America Pipeline.[61] This development reportedly caused Pacific Pipelines to delay its project until 1998.[62] But permitting work on the new pipeline went forward, partly because of the support from PUC, which called it

"environmentally superior."[63] Eventually, as a result of the 1994 Northridge earthquake and the damage it did to certain other pipelines, Chevron reportedly committed to send an average 110,000 b/d for 10 years through the pipeline.[64]

In 1996, the public debate about the pipeline heated up again between the labor and business proponents of the pipeline and residents along the intended route opposing the project. Another element of the recent debate is earthquake risk. After the 1994 Northridge earthquake, an environmental report suggested that, if the Pacific Pipeline ruptured like some other pipelines had during that earthquake, 75% of the water in Los Angeles would be contaminated.[65] (By special statute, the Pacific Pipeline will have absolute liability without fault for certain discharges or leaks and must demonstrate "sufficient financial responsibility to respond to" such liabilities of up to $100 million.[66])

In March 1996, the Los Angeles City Council ordered its lawyers to challenge the project if it were approved by the state regulators.[67] On April 11, 1996, the PUC gave a preliminary approval, and the Los Angeles City officials vowed to sue. Additionally, the city may be expected to deny franchise agreements to the operator of the pipeline that are needed where the pipeline crosses streets and other city property. (If a city refuses to grant a franchise, the pipeline operator could use its powers of eminent domain to condemn an easement, although in this case the City of Los Angeles may challenge these powers in court.)

While it is premature to predict the outcome of the public and political debate about the Pacific Pipeline, there are powerful arguments for preferring pipeline transportation of crude oil from Santa Barbara County to Los Angeles area refineries, and such arguments ought to win out in the end.

2. The Clearview Project

In order to overcome environmental and aesthetic objections to new offshore platforms and drilling, several operators have recently proposed drilling projects in which offshore reservoirs would be produced from onshore drillsites using extended reach horizontal drilling technology.[68] State agencies have indicated the state's willingness to pursue such projects and one may yet be undertaken, but an initial, highly-publicized effort by Mobil — the Clearview Project — was unsuccessful.

The Clearview Project was a $1.8 billion endeavor initiated by Mobil to conduct extended reach drilling from the Santa Barbara shore utilizing modern horizontal drilling technology. The project originally called for drilling as many as 60 wells, storing and processing oil and gas at the drillsites, and transporting the product to refineries via an onshore pipeline.

The project was to generate 170 permanent jobs and about $12 million/year in taxes and royalties to the state and county governments.[69] In June of 1995, however, the University of California at Santa Barbara ("UCSB"), rejected Mobil's plan to set up its onshore drilling operations at the company's 17 acre site located near proposed university housing. UCSB decided that Mobil's facility would be a hazard and "incompatible with surrounding land uses, both current and proposed."[70]

On February 22, 1996, faced with opposition from its lessor and from certain environmental protection interests, Mobil announced it was abandoning the project. The concept has inherent appeal, however, and, with the right surface location, such projects would seem to be worth pursuing.

3. Alaskan North Slope Production and Exports

Another component of the E&P story in present-day California does not directly involve reserves located in the state but nevertheless has a great impact on the oil & gas business in the state. Today, much of the crude oil produced from the Alaskan North Slope ("ANS") is shipped by tanker to California and other West Coast destinations for refining and sale. Thus, California producers must sell their oil production into a market heavily influenced by higher-quality Alaskan crude. A 1994 Department of Energy report concluded that California crudes are sold to California refiners at prices which range from $.90 to $2.50 per barrel lower than its refined value relative to ANS crude.[71]

In November 1995, President Clinton signed into law S.395 which amends the Mineral Leasing Act of 1920 to permit, under certain circumstances, the exporting of oil produced in Alaska. Such export had been prohibited by law since 1973, when the Trans-Alaska Pipeline Authorization Act was passed.[72] Recently, parties have announced tentative or prospective arrangements for such exports.[73] Although it is too soon to tell if this development will have a big impact in California markets, some producers believe it will eventually lead to higher wellhead prices for California crude since some of the current refinery supply will be diverted to foreign markets, thereby raising demand, and presumably prices, for California crudes.

4. Elk Hills

The proposal by the federal government to sell the Elk Hills Naval Petroleum Reserves has generated a great deal of interest, political and otherwise.[74] The Elk Hills Naval Petroleum Reserves were created in 1912. In 1995, the Elk Hills Field was the fourth highest oil producer in the state, with estimated production of 22.6 million barrels and ranks as the 11th largest U.S. field.[75] The field also produces a substantial amount of gas. Recently, the operation of the federal government's interest has been criticized as being inefficient compared to other producers.[76] On February 10, 1996, President Clinton signed a bill authorizing the sale, which has been called the "largest federal government divestiture since the sale of Conrail to the public in 1987."[77] Investment bankers and a reservoir engineering firm have been hired by the government to assist with the sale; the eventual sales price has been estimated to be in excess of $2.5 billion.

E. Current Events & Facts

In 1994, California was the fourth largest oil producing state in the country, behind Texas, Alaska and Louisiana.[78] For the year, 344.5 million barrels of oil were produced from more than 44,000 wells in California.[79] Approximately 311 BCF of gas was produced during 1994 from 1,261 gas wells. As of 1994, there were approximately 26,000 shut-in oil wells and 662 shut-in gas wells.[80] In 1994, more than 1,300 wells were drilled in California, the overwhelming majority of them being development wells.[81]

In 1995, statewide California oil production was estimated to have *increased* to approximately 351 million barrels, with declines from on-shore fields more than offset by a 23.2% increase from federal offshore leases.[82] A statistical summary of other 1995 activity in California is included as Attachment 2.

A significant trend in the past few years in California's exploration and production business has been the sale by major oil companies of large portfolios of California properties. Perhaps the most visible of those sales was the disposition by Unocal in April 1996, of substantially all of its California producing properties, and there also have been a number of significant transactions involving other parties. While this general trend has been present in many states throughout the oilpatch, it is especially significant in California where majors have controlled the land position in much of Southern California. Independents — some based in California but many from out of state — are buying properties, taking new leases, reevaluating the mature fields throughout the state and developing the newer fields.[83]

II. Traditional E&P Topics

California's oil & gas law will be familiar to most oilpatch lawyers. While much of the case law is older, it forms a legal framework which is similar to other major producing states. California, compared to other states, has more statutory coverage of some topics.[84]

A. Ownership Theories

With respect to the theory of ownership of minerals, California is a non-ownership or "qualified ownership" state.[85] A traditional California oil and gas lease creates a determinable fee interest in the lessee. The leasehold estate has been said to be in the nature of a *profit á prendre*.[86] Leases containing "and so long thereafter" -type *habendum* clauses convey an interest (a) for a definite term for exploration, and (b) for an indefinite term for production. Oil and gas leases containing "thereafter" clauses create interests in real property.[87] Only when the lease is for a fixed number of years, it is considered to be "chattel real," i.e. personal property.[88] Interests in royalties are also interests in real property.[89] Therefore, they are recorded generally like "grants of real property."[90]

B. Lease Form

The California oil and gas lease looks different from those found in the Gulf Coast, Mid-Continent or Rocky Mountain regions. Examples of a major oil company lease form and of the State Lands Commission offshore lease form are included as Attachment 3. Even printed form leases tend to be long and typewritten, "lessor-friendly" lease forms 20 to 30 pages long are not unheard of. Royalties tend to be higher than some other regions, but perhaps not too much different than from rates found in other geographic areas with established production.[91]

Historically, there has not been a "typical" California lease form, although many leases contain an "or" drilling clause, requiring the lessee during the primary term to drill or pay rentals. The "unless" lease form more common elsewhere provides that the lease terminates unless the lessee commences a well or pays rentals within the prescribed period. Thus, failure to timely pay delay rentals under an "or" lease would not automatically terminate the lease, but give the lessor a cause of action for damages for breach of the covenant.[92]

In some areas of the state, leases are typically not recorded; rather a memorandum giving notice of the lease is recorded with the county recorder. County recorders in some counties are very demanding with

respect to the form and contents of documents presented for recording.[93] With respect to legal descriptions, the practice of incorporation by reference is permitted.[94] Thus, it is not necessary to set forth in a deed or other conveyance the legal description or some other term if such term is found in another recorded document and referred to in the current document. The practice has an unusual application in the case of "fictitious oil and gas leases" and "fictitious deeds of trust," but the principal is the same as is found in many other states.[95] Oil and gas leases are not enforceable after 99 years from the commencement of the term thereof.[96] The termination of all or part of any oil and gas lease is usually evidenced of record by a quitclaim, not a release or partial release that are commonly used elsewhere.[97]

C. Implied Covenants

The law of most oil and gas producing states provides that there are implied in each oil and gas lease certain covenants deemed made by the lessee. California recognizes implied covenants.[98] Many California oil and gas lease forms contain a provision negating the existence of implied covenants, but courts have also held that the negation of one kind of implied covenant does not necessarily negate all such covenants.[99] For example, an express development covenant may negate the implied covenant of further development, but did not prevent a lessee from being obligated to drill a protection well to counteract drainage.[100] So, although an express covenant found in the lease will not always negate an otherwise implied covenant, the argument can be made with somewhat greater force with a California lease containing expansive and thorough provisions, than might be the case with a two page, "Producers 88" lease form from the local printing company.

While California follows the general rule that the oil & gas lessee has the right to use so much of the surface estate as is reasonably necessary and convenient for the enjoyment of its rights, there is a statutory mechanism for forcing the lessee to release certain portions of the surface in some urban areas.[101]

D. Lease Maintenance

Historically, California production has been sold at wellhead prices which are low compared to other regions of the country. In the last ten years particularly, California producers have struggled with operating profitably in the older, smaller fields. California follows the general rule of most producing states that, in the absence of lease savings clauses, the lessee must have actual production in paying quantities after the expiration of the primary term in order to perpetuate the lease.[102] California's case law on how "paying quantities" is to be calculated is similar to other major producing states. In general, an oil and gas lease terminates if oil or gas is not produced in "paying quantities."[103]

When "paying quantities" appears in the *habendum* clause of the lease, it means production in a quantity sufficient to yield a return in excess of operating and marketing costs (the drilling and equipment costs are not added to this equation).[104] If "paying quantities" appears in the development provisions of a lease, however, it operates primarily for the benefit of the lessee as a limitation on his obligation to drill additional wells.[105] In that case a "paying quantity" is such a quantity as would lead to an expectation of a substantial profit after accounting for drilling and completion costs.

With many wells shut-in or temporarily abandoned because of low prices and high operating costs, concerns about the contamination of fresh water supplies have caused regulators to focus on idle wells. A further discussion of idle wells appears below.

E. Other Miscellaneous Items

The following is a collection of miscellaneous points of interest to practitioners involved with California properties:

- Documentary Transfer Taxes. A grant or transfer of an oil & gas interest is usually subject to a documentary transfer tax. The tax has a county component (currently $1.10 of tax per $1,000 of value) and, in some places, a city component. The tax must be paid at the time the document is recorded. A documentary transfer tax is imposed on "realty sold."[106] While many "leases" generally are not considered "sales", long term leases are.[107] In Thrifty Corp. v. County of Los Angeles, the court held that, under Sections 11911 and 61 of the Revenue & Taxation Code, a lease lasting more than 35 years from the date of grant or a transfer constitutes "change of ownership" and therefore a "sale."[108]

Section 61(a) of the Revenue and Taxation Code states that a creation, renewal, sublease, assignment or other transfer of the right to produce or extract oil, gas or other minerals is considered to be "change in ownership" "regardless of the period during which the right may be exercised."[109] "A mineral lease, regardless of its duration, is a separate taxable estate in real property. The transfer of such an interest is obviously a change of ownership of the mineral estate...."[110] Since, under the Thrifty case, the definition of "sale" is tied to the definition of "change

in ownership," any grant or a transfer of an interest is subject to the documentary transfer tax.

This general rule is subject to few exemptions. Section 11911 exempts from the tax any conveyances of interests whose value (and consequently consideration paid) do not exceed $100.[111] No tax is imposed when a conveyance occurs to secure a debt.[112] It is not imposed when the property is foreclosed by a mortgagee.[113]

- Other Taxes. There is severance tax.[114] *Ad valorem* taxes are assessed separately on the mineral estate.[115]

- Oil & Gas Lien Act. California's oilfield mechanic's lien statute follows a general scheme familiar to most oilpatch lawyers.[116] Some features of California statute that might be different from the systems established in other states are that the operator of the well is arguably entitled to the statutory lien as well as third party suppliers and laborers, the entire leasehold appears to be subject to the lien, and upon proper notice, the purchaser of production is required to suspend payment of production revenues attributable to the affected interest.

- Recording Practices In most counties, recordings occur only twice per day, unless arrangements for a "special recording" have been made with the County Recorder's office.[117] Unlike many other states, the sequence of recording is not necessarily determinative of the intended priority among documents which are recorded "contemporaneously." A Preliminary Change of Ownership Report should be filed with the county in connection with a conveyance.[118] The recording statute is a "race-notice" type statute.[119] The execution of deeds (which term would include assignments of oil and gas leases) and certain other instruments before a California notary now requires the respective thumbprints of the signatories be placed in the notary's journal.[120]

III. Some Differences

While much of California oil & gas law would be familiar to practitioners from other producing states, there are a number of practices in California that will be somewhat unfamiliar.

A. Title Insurance v. Title Opinions

In most states, parties seeking to determine record title to a tract of land or the mineral or leasehold rights underlying such land would retain a title lawyer. The title lawyer examines title as disclosed by the public records and renders an opinion, giving his or her conclusions, and presents a list of comments and requirements. For many years in California, title insurance companies routinely wrote title insurance polices covering the surface, mineral and leasehold estates and parties relied on those insurance policies in lieu of opinions. Examples of such policies are included as Attachment 4. Although title insurers are less and less able and willing to issue new policies, in those counties with a significant history of production, title companies still have the capability to insure mineral titles. Even today, properties are drilled, financed and sold based on title insurance policies covering the drillsite tract. In practice, the protection afforded by the two alternatives may not be distinguishable to the layman, but title insurance seems less desirable than a good title opinion for several reasons: (1) the customer may not know who at the title company is doing the actual work and is unable to judge whether the examiner and his/her work is reliable; (2) insurance companies do not regard exceptions to title in the same way that mineral title lawyers do — sometimes exceptions to title are shown in policies which would not be shown in a good title opinion and vice versa (stated another way, the underwriter at the title company is in the business of assessing and managing claims risk in the context of the body of law governing insurance policies; the standards followed by a title lawyer and the goals and purposes of a mineral title opinion are different); (3) similarly, a title company only shows the *existence* of an exception to marketable title whereas a good title opinion discloses not only the problem or issue, but should also offer suggestions about the *curative* needed to satisfy the requirement and give the reader some sense of the relative importance of the exception; (4) often only the drillsite tract, not the entire unit, is covered by the policy; and (5) the amount of insurance (often purchased prior to completion of the well) bears no relationship to the value of the well if it is successful.

One by-product of the historical practice of relying on title insurance and the fact that title has not often changed hands in many of the major producing fields in the southern part of the state is that there are relatively few experienced title examiners.

B. Conservation Commission Practice — Spacing & Pooling

DOGGR has had a less prominent role than one might expect in the history of the development of reservoirs and fields because of the statewide one acre well spacing statute.[121] Historically, DOGGR has not been a significant administrative forum (either as a barrier to what an operator wants to do or as a place to seek relief from what that operator wants to do),

compared, for example, to the highly-refined Rule 37 practice before the Texas Railroad Commission.

C. Division Orders

In most states, if a well is completed as a producer and commercial production commences, the operator engages the title examiner to produce a division order title opinion and from that document, the operator prepares division orders. The division orders are signed by each party entitled to share in production from that well.

As described above, title opinions are not always obtained in California. Accordingly, particularly in older fields, there is often no division order title opinion or division order for a property. Non-lawyers, working from whatever information is available to them, calculate the division of interest and pay accordingly. This makes due diligence in acquisitions somewhat more difficult in that one cannot compare record title to the division of interest shown in a division order or division order title opinion. Nor does one have the benefit of whatever protections a well-written division order might offer in the way of payees warranting title or the right to receive and retain revenues attributable to the stated interest.

D. Secured Financing is Generally Recourse to Property Only

Financing of the oil & gas properties is generally covered by California's version of the Uniform Commercial Code ("Commercial Code") and by laws pertaining to the granting of liens against real property. The Commercial Code became effective on January 1, 1965.[122] Under the Commercial Code, the creditor's interest, created prior to the extraction of minerals (including oil and gas), attaches upon extraction.[123] The security interest is subject to the law of the jurisdiction where the wells are located.[124]

Generally, description of collateral under the Commercial Code does not have to be technical as long as it is sufficiently descriptive.[125] Financing statements filed with the Secretary of State to perfect interests in oil or gas (a) must indicate that they cover oil, gas, or accounts resulting from the sale of oil or gas at the wellhead; (b) must recite that they are to be recorded in the real estate records; (c) must contain a description of the real estate sufficient, if it were contained in a mortgage of the real estate, to give constructive notice of the mortgage; (d) must provide the name of the owner of the real estate if the debtor has no interest of record in the real estate.[126]

In addition to the filing of a financing statement under the Commercial Code, lenders also require that a deed of trust be recorded in the real estate records of the county in which the property is located. California, like a handful of other Western states, has a complex set of debtor-protection laws pertaining to real property secured loans. The general effect of these rules — usually referred to as the "one-action rule" and the "anti-deficiency rules" — is to make loans secured by real property non-recourse to the mortgagor in most cases. Thus, a typical production loan in which a working interest owner borrows money from a bank and mortgages its working interest to secure the loan is subject to those laws and the lender's rights and remedies are limited accordingly. In one sense, this may seem a beneficial feature of California law from a producer's standpoint, but the net effect is to make financings secured by California production somewhat more complex and expensive since lenders must take extra measures to obtain a legal position similar to their position in other states.

California Code of Civil Procedure § 726(a) states that there shall be but "one form of action for the recovery of any debt or the enforcement of any right secured by mortgage upon real property. . . .," and it shall be for foreclosure. Both non-judicial and judicial foreclosures of deeds of trust and mortgages are permitted, but the creditor's choice of one over the other involves certain trade-off's and limitations. The companion statutes, usually involved in any analysis of borrower's and lender's respective rights, are the anti-deficiency rules.[127] Between them, the one action rule and the anti-deficiency rules make for a mystifying maze of illogical outcomes and general uncertainty for lenders and their lawyers leading, at various times, to the loss of the collateral, the loss of the right to obtain a deficiency judgment or both. When your client proposes a financing secured by California oil and gas properties, be prepared for an interesting intellectual experience.

IV. Current Developments & Trends

This section of the paper describes several areas of change in California law affecting oil & gas producers. Some of these changes are similar to trends seen in other producing states, and some are more unique to California.

A. Idle & Orphan Wells

Commercial production of oil in California started in 1876.[128] Like many states with a long history of production, California has a problem with idle and orphan wells.[129] As of 1990, California had more than

70,000 completed oil or gas wells of which 40% were reportedly idle.[130]

By statute, an idle well subject to special treatment is one which has not produced oil or natural gas or been used for fluid injection for a continuous six month period at any time during a consecutive five-year period.[131] (For purposes of determining whether a well is "idle" or producing, DOGGR has informally indicated that it uses two barrels of oil or 10,000 cubic feet of gas per day for a six month period as the cut-off for "commercial production;" this standard does not necessarily supplant the traditional "paying quantities" analysis with respect to lease preservation.) An idle well is defined by the applicable regulations as "a well, other than a suspended well, that has not been officially abandoned but on which the operator has ceased all activity, including but not limited to drilling, production, or injection." A "suspended well" is a well which is temporarily abandoned pursuant to the specific abandonment requirements imposed by DOGGR and tailored to reflect the unique conditions of individual wells or oilfields.[132] If a well is idle for a period of six months or more, a city or a state may initiate proceedings to order its abandonment.[133]

Using the statutory definition, as of 1990, there were approximately 30,000 idle wells in California. Of that number, approximately 14,000 had been idle for five years and approximately 9,000 wells had been idle for at least ten years.[134] Presently, there are approximately 5,000 15-year-idle-wells, out of which 3,000 are located in areas with fresh surface waters.[135] In Orange County alone, 40% of 3,000 wells are idle. Approximately 100 wells per year are plugged and abandoned in Orange County.[136]

A well is considered to be "deserted" in California when six months passes after a "suspension of drilling operations and removal of drilling machinery."[137] An operator of the "deserted" well is subject to a significant bond and a less significant annual fee.[138]

While "orphan well" is apparently not defined under California law, DOGGR seems to have accepted the BLM definition of an orphan well. Under an agreement recently signed by BLM and DOGGR, an "orphan well" is a well for which the operator is deceased, defunct, bankrupt, or otherwise inaccessible, there is no or insufficient bond coverage and the well has not been plugged and abandoned.[139]

B. Current Proposals for Idle/Orphan Wells

In 1994, California had 44,098 producing wells. The number has been declining slowly but steadily from the 1985 peak of 55,079. The number of wells plugged and abandoned each year rose from 1986 to 1990 but has been slowly declining since then. (In 1990, 3,064 wells were plugged and abandoned. In 1994, 2,069 wells were plugged and abandoned.[140])

The issues arising from idle and orphaned wells are being discussed in industry and regulatory circles. Enlightened observers and participants generally believe that it is in the industry's best interests to take steps to deal with the issues presented by idle and orphan wells rather than to wait until public outcry or environmental activism produces a less thoughtful and workable result.[141]

One current proposal to deal with California idle wells was offered by DOGGR on January 18, 1996. The proposal addresses more than 5,000 wells located in California that have been idle for at least 15 years. Specifically, DOGGR intends to require:

a. A pressure test of the casing from the top, open perforation to the surface, and a casing inspection log, which measures minimum inner casing diameter from Effective Depth to the surface;

b. All 15-year-idle wells located in "Base of Fresh Water" areas (3,000 wells) will have a casing inspection log run showing the remaining casing wall thickness and the extent of outer casing wall corrosion in the casing from a DOGGR-approved depth to the surface;

c. Test results for wells idle for 15 years or more will be accompanied by a detailed written engineering evaluation of the current condition of the well; production costs; specific zones with recompletion potential; and how the well integrates into the overall production plan for the reservoir; and

d. The evaluation plan will also include the year the well was idled, and a specific plan and timetable for abandonment or returning the well to active status.

Wells will be excused from such testing if the operator voluntarily files a Notice of Intention to Abandon.[142]

By way of comparison, reports from the State of Kansas indicate that there are about 9,000 orphaned wells in that state which need to be P&A'd by the state; appropriations from the state's general fund are apparently being used to help with abandonment costs.[143]

While not involving idle or orphaned wells, there will be several celebrated well abandonments this

summer. Earlier this year, Chevron received permission from the Santa Barbara County Air Pollution Control District ("APCD") to abandon a number of oldest offshore oil platforms. Platform Hazel was built in 1957; Hilda — in 1960; Hope — in 1964; Heidi — in 1965. After these four platforms are removed, only four producing platforms will remain in California state waters: Holly off Santa Barbara and Eve, Esther, and Emmy off Huntington Beach and Seal Beach. (While Mobil originally planned to retire Holly as a part of the Clearview Project, it abandoned these plans after the project was terminated.[144])

C. Regulatory Reform

California has a reputation as a high-cost place to do business. Several years ago, DOGGR released a preliminary evaluation of the incremental costs incurred by California producers in complying with regulatory requirements deemed by industry to be unduly burdensome. The report was part of a proposal to restructure and streamline various state agencies.[145] Although the restructuring has not yet occurred, the draft report was viewed by producers as a step in the right direction and may yet produce some positive changes in the way the state agencies operate.

A positive development in recent months involves DOGGR signing a Memorandum of Understanding ("MOU") with the U.S. Bureau of Land Management ("BLM"). The MOU became effective March 15, 1996. The MOU is intended to clarify and simplify permitting and regulatory processes for federal lease operators. Under the terms of the MOU, permit applications for wells located on so-called "split estate" tracts (typically federal minerals and fee owned surface) and other situations where there is concurrent state and federal jurisdiction, will have to be filed only with one agency, subject to few exceptions. The new guidelines are applied to down-hole well permits; drilling; reworking; abandoning; surface operations; underground injection control; idle/orphan wells and bonding.[146] If the program is successfully implemented, other states may consider similar measures. A copy of the MOU is included as Attachment 5.

D. Tort-Based Environmental Developments

The E&P business is subject to ever-stricter governmental and private measures designed to safeguard the environment from pollution. With respect to federal laws, of course, the regulatory framework and the statutory remedies available to the government and private parties for violation of environmental protection laws are basically the same in California as elsewhere in the oilpatch. State and local regulation in California, however, has been perceived as being somewhat tougher on industry than in other states. This is the case not so much because the oil and gas production industry has been singled out for especially harsh treatment, but rather as a natural result of tighter regulation of all activities which could result in pollution. Some years ago, California led the nation in adopting tougher environmental statutes and government policies. California operators have learned to live with most of them. More recently, however, tort claims have been utilized by landowners and others with some success in environmental contamination cases.

Long before environmental protection measures were a matter for pervasive government regulation, traditional tort law was used to compensate those injured by oil field pollution. Those theories — some with broader application than previously thought — are alive and well in California. Here are applications of some of those theories:

- Fraud — Fraud was the central theme of a highly-publicized case involving the transfer of an old oil field in the Los Angeles area in the late 1970's and early 1980's. According to the plaintiffs' trial brief, the buyer paid $2.3 million for the property (the buyer was also the successor-in-interest to the lessor of the land and part of the lease was surrendered to the land owner in consideration of a payment of $60,000). In late 1993, the transferees obtained a jury verdict awarding actual damages of $41 million dollars and punitive damages of $144 million against the seller, a major oil company.[147] The plaintiffs claimed that the property was transferred to them with various hidden defects and undisclosed conditions and that they would incur substantial remediation costs for the clean-up of oil field wastes and improperly abandoned wells. They claimed the proper measure of damages for their injury was the cost of repair and restoration, both past and future. The plaintiffs claimed that fraud was involved because, although apparently the seller's representatives involved in the transaction personally had no knowledge of the conditions, the seller had "corporate knowledge."

According to the seller's trial brief, the purchase and sale agreement contained disclaimers, among others, to the effect that the properties were being sold "as is, where is" and also contained undertakings and indemnities purporting to make the buyer liable for all post-closing cleanup and restoration. Apparently the buyers conducted their own investigation prior to the closing and agreed to rely "solely" on their investigations. Nevertheless, the jury verdict went against the seller and in favor of the buyers.

■ Trespass — In the context of oil and gas lease arrangements, "where one has permission to use land for a particular purpose and proceeds to abuse the privilege, or commits any act hostile to the interests of the lessor, he becomes a trespasser." Cassinos v. Union Oil Company of California.[148] Where a defendant injected offsite waste water into a well to maintain production of oil on other (offsite) wells constituted a trespass.[149] In the context of drilling, a trespass may ripen into a prescriptive right. Injunctive relief may be granted against such a trespass without showing any damage.[150]

When a plaintiff seeks damages for loss of use of the property as a result of a toxic contamination, the plaintiff must establish that the contamination constituted a permanent trespass or nuisance. Mangini v. Aerojet-General Corp.[151] A trespass may be considered a permanent or continuing injury depending on nature and extent of contamination.[152] The crucial test of the permanency of a trespass or nuisance is whether the trespass or nuisance can be discontinued or abated.[153] "Abatable" means that the nuisance can be remedied at a reasonable cost by reasonable means.[154] A trespass or nuisance can be seen as abatable only after plaintiffs present some certain evidence showing the extent of contamination.[155]

(Slant well drilling has a long history in California jurisprudence. In an action to enjoin one trespassing by the means of "crooked-hole drilling," plaintiff may obtain a permit to inspect the defendant's well. The correctness of the results of the survey is a question of fact and left to the court's discretion.[156] California has a special statute of limitations with respect to particular forms of subsurface trespass. Section 349 3/4 (a) of the Code of Civil Procedure, imposes a one-hundred and eighty day statute of limitation for underground trespass.[157])

■ Nuisance — The common law of nuisance has been statutorily altered in California. For example, certain idle, deserted, and hazardous wells are public nuisances by statute.[158] The well spacing statute declares improperly spaced wells to be public nuisances.[159] The leaving behind of various oilfield wastes has been held to be a nuisance.[160] The usual remedy for nuisance is the cost of abating the nuisance. Deterioration in market value of property is the proper measure for continuing nuisance which cannot be abated.[161]

In addition, negligence, negligence per se, breach of contract, unjust enrichment, excessive use of surface and claims for punitive damages are among the other causes of action typically asserted in litigation by landowners against oil & gas lessees.

Although not all regulatory statutes confer a private right of action on the landowner, violations of various permits, regulations or statutes are often cited by plaintiff-landowners as independent causes of action, or, at least as instances of negligence per se or violations of the prudent operator standard.

E. Regulatory Environmental Developments

Of course, operators must be concerned with specific statutory and regulatory requirements in addition to the somewhat more vague standards imposed by tort law. This paper does not attempt to cover recent developments in California's environmental protection laws. Instead, several general areas are discussed, as examples of the types of issues producers must deal with in operating in California, rather than a checklist of current developments.

1. Groundwater

A well-known recent case involved the undetected, sub-surface leakage over many years of a diluent. (Diluent is blended with heavier grades of crude to make the oil easier to transport and process.) In 1992, California Department of Fish and Game officials received unconfirmed reports of oil leakage at the Guadalupe Beach area of the Guadalupe Oilfield in San Luis Obispo County, California. The leaks at Unocal's operation at Guadalupe turned out to be among the largest in California history.[162]

Prosecutors could not confirm these reports until later. No action for felony oil spill was commenced within one year of the informer's report. A court later ruled that the statute of limitations began to run on the date of the first confidential report and not on the date of the actual discovery of violation by the Department. The court therefore dismissed the action.[163] The operator's problems were far from over.

On August 23, 1994, California Coastal Commission issued an emergency permit with special conditions ("CDP") to Unocal for oil spill site cleanup work in the Guadalupe Beach area. Unocal asked for the permit on July 1, 1994, to prevent hydrocarbon (diluent) contamination caused by subsurface pipeline leakage from seeping into the ocean. Unocal's action followed its agreement to pay $1.5 million to resolve criminal charges brought by the County. Under the permit, Unocal had to install a temporary sheetpile coffer dam on the beach and remove the diluent-contaminated sand and mobile diluent from inside the coffer dam; to install a temporary high-density polyethylene retaining wall to prevent recontamination of the remediation area; and to return clean sand to the

beach, remove the coffer dam, and restore the site to its natural state.[164]

Unocal's cleanup continued past the October 15, 1994, deadline permitted by the emergency CDP. Unocal requested an increase in the level of contaminant allowed to remain in the "clean" sand and permission to transfer sand from nearby dunes to fill in the excavated area and install the underground barrier. The Coastal Commission opposed both of these requests.[165]

By February, 1995, Unocal had completed the cleanup.[166] At that time, it faced several lawsuits. In the state criminal action,[167] Unocal pled no contest to three misdemeanor violations and agreed to pay $1.5 million to the California Department of Fish and Game, the County of San Luis Obispo, and local environmental projects. Unocal was criminally charged with failing to report the leaks of diluent, in violation of the state Water Code.

On March 23, 1995, the state also filed a civil complaint against Unocal[168] charging it with numerous violations of several state environmental regulations. The amount of civil penalties and damages sought was not specified, but the maximum allowable fines total over $200 million. The litigation is still pending.[169]

Largely as a result of the Guadalupe leaks, DOGGR has been given additional authority to regulate certain pipelines and is expected to promulgate regulations in the future.[170]

a. Surface Water

California crude oil produced from the San Joaquin Valley ("SJV") and processed at San Francisco Bay area refineries has particularly high levels of selenium. The refining process removes selenium from the oil to varying degrees, partially depending upon the type of product manufactured. Making lighter products such as gasoline, particularly the new "clean fuels," will tend to result in higher selenium discharges.[171] In 1991, refineries in the Bay area processed a total of around 200,000 barrels per day of SJV crude, approximately one third of the 673,000 barrels per day output.[172]

Processing the SJV oil has posed some risk for the major oil refiners. In 1993, Exxon and Unocal allegedly violated the Clean Water Act by releasing about 2,110 pounds of selenium into the waters of Northern California.[173] In February 1995, Shell agreed to pay $2.2 million in fines for excessive discharges of selenium.[174] The state, environmental groups and a commercial fishing organization filed the lawsuit to protect fish and wildlife from birth defects shown to be caused by large doses of selenium.[175]

Northern California authorities have looked for alternatives to SJV oil to reduce the selenium discharges. It was estimated that crude switching could potentially reduce the discharges by a maximum of 50% if all the oil from SJV were replaced by the ANS crude.

While these environmental concerns would favor switching, its costs would also be high. Refineries would have to change their processes to accommodate a substantially different type of crude. Tankering oil from Alaska would increase the tanker traffic. In Exxon's estimates, crude switching would cost the state economy about $150 million in addition to costs to the refineries themselves.[176]

Finally, note that the exporting of ANS crude may reduce ANS oil as a percentage of total refinery throughput in California refineries.

2. Air Quality

Air quality in the Los Angeles Basin has been a source of great concern, legislation, regulation and litigation for many years. The generally poor quality of the air in Los Angeles, however, has been steadily improving and is much better than it was 20 years ago.

Less well known, however, are the air quality problems elsewhere in the state. For regulatory purposes, the state is divided into "air basins." Los Angeles County lies partly in the South Coast Air Basin and partly in the Southeast Desert Air Basin.[177] The California Air Resource Board ("CARB") has the authority to classify each air basin as an attainment or a non-attainment area with respect to any state ambient air quality standard. The identification is made on a pollutant-by-pollutant basis. If the data is insufficient, CARB identifies the area as unclassified.[178]

For example, with respect to carbon monoxide pollution, San Joaquin County is in attainment; the part of Los Angeles County belonging to the Southeast Desert Air Basin is in attainment; the part of Los Angeles County belonging to the South Coast Air Basin is in non-attainment; Sacramento County is not classified as either in attainment or non-attainment.[179] Designations made by CARB are reviewed annually and updated as new information becomes available.[180]

The 1990 amendments to the Clean Air Act required states to develop state implementation plans ("SIP") to combat excessive levels of ozone. California failed to develop a SIP which prompted a federal court

to order EPA to prepare and impose on California a federal implementation plan ("FIP").[181]

In response, on November 1994, California approved a SIP to achieve national ozone standards throughout the state and specifically in each of six major ozone non-attainment areas of the state (San Diego, Sacramento, the San Joaquin Valley, the South Coast Air Basin, the Southeast Desert, and Ventura).[182]

The classification as a non-attainment area means that further improvements are required in air quality in the western part of the Los Angeles Basin. As the largest gasoline market in the world, however, Los Angeles requires a substantial amount of gasoline to be produced for delivery and sale in the area. Los Angeles area refineries are natural markets for Santa Barbara county oil.[183]

As a result, various studies attempted to figure out a way to reduce the oil and gas consumption in the Basin. One study claimed that the environmental benefits of substituting electricity for natural gas or fuel oil in many applications would offset the investment costs in areas with serious air quality problems such as the Los Angeles Basin.[184]

In 1992, the South Coast Air Quality Management District ("SCAQMD") adopted the Regional Clean Air Incentives Market ("RECLAIM"), a transferable discharge permit program designed to control nitrogen oxide, reactive organic gas, and sulphur oxide emissions in the Los Angeles Basin.[185]

The net effect of this complex maze of regulation is to cause oil & gas operators to re-evaluate all aspects of their operations which contribute to a degradation of air quality. For example, the practice of using gas or liquids produced from the lease to power internal combustion engines on pumps and compressors involves exhaust emissions which the regulators are seeking to minimize. Another example is the choice of fuel to be used in the generation of steam to be injected into Kern County's heavy oil reservoirs. California operations personnel work with those sorts of issues and constraints on a regular basis. As is the case with most governmental regulation, dialogue between the regulator and the regulated is helpful in revising and "fine-tuning" rules in order to impose the least operational and administrative burden on the affected party.

3. Soil Remediation

A difficult, but interesting set of legal issues is found in the context of plugging, abandonment and site restoration/rehabilitation activities in old oilfields. The actual plugging and abandonment of wells is similar to such activities elsewhere. Soil remediation is a particularly knotty issue in urban areas. The level of hydrocarbons permitted to remain in the soil following the abandonment of an oilfield is dependent on the intended future use of the property. For example, if the site of an abandoned oilfield is to be used for industrial purposes, the soil need not be cleaned of hydrocarbons and other regulated substances to the same extent as if, for example, it were to become a residential area or the site of a childcare center. A problem sometimes arises because, at the time of abandonment of a field, the next use of the property has not necessarily been decided. The operator wants to clean-up the site only once and is understandably unwilling to spend sometimes enormous sums of money to remediate to the highest possible standard permitted by the then existing zoning classification. On the other side, the landowner is uninterested in having to spend its own money at some later time to bring the property up to a standard which is then considered acceptable to the succeeding owner or the appropriate regulatory authorities.[186]

The best solutions to those problems occur if the next use of the lease or field can be identified prior to the abandonment of the field. Irrespective of the lease's terms, California law will require the proper plugging and abandonment of the wells and decommissioning of other oilfield equipment and facilities. If the landowner, the regulatory agencies and the next user of the surface can agree on a redevelopment plan, then the oil and gas operator can tailor the soil remediation program and the filling and grading program to meet those requirements that the permitting agencies will later impose on the landowner/developer in connection with the construction of new improvements on the tract. While this process is "much easier said than done," it is surely in the operator's best interests to anticipate and begin to plan for these activities long before the lease reaches the end of its economic life.

The Los Angeles Regional Water Quality Control Board (the "Water Board") has promulgated general guidelines for soil remediation in order to clarify the general standard applicable to P&A and soil remediation activities within its jurisdiction. A copy of the Water Board's Order No. 90-148 is included as Attachment 6. This general order, supplemented by a specific order for each particular site, deals in a routine manner with the bioremediation down to a certain level, within a period of 365 days, of hydrocarbon contaminated soil for jobs involving 100,000 cubic yards or less of contaminated soil. Orders such as this one give some certainty and predictability to the task of estimating the time and expense of soil remediation measures needed in plugging and abandoning wells and

fields. Each site, however, involves reaching some resolution with the operator, the landowner and the regulatory authorities.

4. Electricity Deregulation

California consumers of electricity have historically paid high prices for electricity and the PUC and the legislature are considering various proposals to deregulate the electricity business in California. By some measures, the price of electricity is 50% higher than elsewhere in the country. Accordingly, California producers — who are encouraged to use electricity as a lease fuel rather than hydrocarbons produced from the field because of air quality concerns — are keenly interested in the deregulation of the electricity generating and transmission industry. Whether such deregulation occurs in California and what shape it will finally take are open to debate, but lower prices to the consumer of electricity is one of the intended results. Deregulation of electricity markets is being discussed elsewhere in the country as well. Operators may have a greater interest in the subject in California because of the relatively high price of electricity, but the issues will confront producers in each location where deregulation is implemented.

Conclusion

California has an interesting spot in oilpatch history. Its unique geography, geology and demographics will make it a "one-of-a-kind" place in the future as well. Our clients can successfully explore for, develop and produce oil & gas in California. While conventional oil & gas property law provides a generally familiar framework for the E&P business, California will also continue to be a leader in the developments of solutions to economic and regulatory problems which face our industry.

End Notes

[1] This paper was originally presented at the 9th Annual Oil & Gas Law Institute, sponsored by the South Texas College, Houston, Texas, on August 15-16, 1996. The author acknowledges the valuable contributions to the preparation of this paper made by Mark Rabinovich, a student at the University of California at Berkeley - School of Law (Boalt Hall).

[2] WILLIAM RINTOUL, DRILLING THROUGH TIME 4,5 (California Department of Conservation ed., 1990).

[3] Ohio was second with approximately 20.5 million barrels and Texas was third with approximately 18 million barrels. *Id.* at 12-13.

[4] The State Mining Bureau exercised some jurisdiction initially. In 1915, the Department of Petroleum and Gas was established by legislation. *See id.* at 25-59.

[5] *Id.* at 35.

[6] *Id.* at 41.

[7] In 1923, California was producing 812,000 barrels per day. *Id.* at 47.

[8] *Id.* at 55.

[9] *See* CAL. PUB. RES. CODE § 3300 (West 1996).

[10] RINTOUL, *supra* note 1, at 62.

[11] *See* CAL. PUB. RES. CODE § 3600 (West. Supp. 1996) (requiring surface locations of wells be set back 100 feet from outer boundaries of parcels or roads and 150 feet from other wells), § 3608 (tracts smaller than one acre in size can be included in lease covering lands surrounding such tract) and § 3609 (allowing compulsory pooling in connection with well spacing for new fields).

[12] The Cal. Canal Field, discovered by Occidental Petroleum Corporation in 1977, was the subject of a 40 acre spacing order. RINTOUL, *supra* note 1, at 62. *See also* CAL. PUB. RES. CODE §§ 3600 and 3609 (West Supp. 1996).

[13] RINTOUL, *supra* note 1, at 67.

[14] During the 1930's, California produced 2.08 billion barrels, compared to Texas' 4.01 billion barrels. *Id.* at 68.

[15] *Id.* at 79.

[16] *Id.* at 93. California now has six fields with cumulative production in excess of one billion barrels -- Wilmington and Midway-Sunset (each with more than two billion barrels), Kern River, Huntington Beach, Elk Hills and South Belridge.

[17] *Id.* at 97.

[18] *Id.* at 97.

[19] *Id.* at 100.

[20] *Id.* at 100.

[21] The 1938 State Lands Act was later incorporated into the Public Resources Code. *See* CAL. PUB. RES. CODE § 6801 (Deering 1993). *See generally*, R. Krueger, *State Tidelands Leasing in California*, 5 U.C.L.A. L. REV. 427 (1958).

[22] RINTOUL, *supra* note 1, at 104.

[23] *Id.* at 105.

[24] *Id.* at 105-106.

[25] CAL. PUB. RES. CODE § 6801 (Deering 1993). The 1955 act was the last comprehensive revision to the state offshore leasing statutes.

[26] RINTOUL, *supra* note 1, at 107.

[27] DOGGR is a part of the Department of Conservation, which is, in turn, part of the Resources Agency.

[28] RINTOUL, *supra* note 1, at 144.

[29] Kenneth R. Weiss, *Cleanup Crews Attack Pipeline Spill, Now 5 Miles Long*, L.A. TIMES, May 12, 1991, at B1.

[30] William W. Enders, *The Oil Pollution Act of 1990: The Financial Responsibility Requirement -- Questioning Congressional Intent And The Minerals Management Service Interpretation of "Offshore Facility,"* 14 VA. ENVTL. L.J. 455, 464 n. 58 (1995), *available in* WESTLAW, VAESJL Database.

[31] M. David Kurtz, *Managing Alaska's Coastal Development: State Review of Federal Oil and Gas Lease Sales*, 11 ALASKA L. REV. 377, 378 (1994).

[32] *Federal/State Air Reg Turf War Coming To Head In California*, 5/30/94 OIL & GAS J. 23. *See generally*, Baldwin, *The Santa Barbara Oil Spill*, 42 COLO. L. REV. 33 (1970).

[33] 42 U.S.C. § 4321 (1995). The state counterpart to NEPA is the California Environmental Quality Act, CAL. PUB. RES. CODE § 21000 (Deering 1993).

[34] Robert B. Wiygul, *The Structure Of Environmental Regulation On The Outer Continental Shelf: Sources, Problems And The Opportunity For Change*, 12 J. ENERGY NAT. RESOURCES & ENVTL. L. 75, 81-83 (1992).

[35] 501 F.2d 558 (9th Cir. 1974).

[36] *Id.* at 568.

[37] *Id.*

[38] *See* Pruitt v. Allied Chemical Corp., 523 F. Supp. 975 (E.D. Va 1981); In re The Exxon Valdez, 767 F. Supp. 1509 (D. Alaska 1991).

[39] Thomas W. Kinnane, *Recovery For Economic Loss Following The Exxon Valdez Oil Spill*, 4 U. BALT. J. ENVTL. L. 86 (1994). Pruitt, 523 F. Supp. at 978-979; In re The Exxon Valdez, 767 F. Supp. at 1516-1517.

[40] Michael Parrish, *Chevron Balks at Tanker Deal Requiring Pledge on Pipeline*, L.A. TIMES, August 19, 1992, at D1.

[41] Bob Williams, *California Offshore Oil Transport Tiff Spurs Worsening Regulatory Outlook*, 12/18/89 OIL AND GAS J. 14 (1989).

[42] Michael Parrish, *supra* note 39, at D1.

[43] *Id.*

[44] Joanna M. Miller, *State Proposes Using Tankers To Move Oil; Environment; Santa Barbara Officials and Activists Say the Interim Plan to Ship Crude Along the Ventura Coast During Construction of a Pipeline is Risky*, L.A. TIMES, April 1, 1992, at B1.

[45] Parrish, *supra* note 39, at D1.

[46] *Direct Tankering of Arguello Oil Begins*, 8/2/93 OIL & GAS J. 38 (1993).

[47] *Chevron to Loose Tanker Permit?* 1/24/94 OIL & GAS J. 27 (1994).

[48] *Transport Woes Threaten California Production*, 5/23/94 OIL & GAS J. 34 (1994).

[49] Tina Daunt, *Pipeline Links L.A. With Point Arguello*, L.A. TIMES, January 24, 1992, at B3; George Hatch, *Oil Firms Plan Pipeline From Santa Barbara; Energy; A 170-Mile Conduit Would Bring 130,000 Barrels a Day from Offshore Platforms To Refineries*, L.A. TIMES, February 8, 1991, at D1.

[50] George Hatch, *supra* note 48, at B3.

[51] *Valley Briefing: Pipeline Controversy*," LOS ANGELES TIMES, March 31, 1996, at B2.

[52] Hatch, *supra* note 48, at B3.

[53] *Id.*

[54] Patrick McCartney, *Pipeline Raises Concerns Over Indian Sites, Wetlands; Environment; The Proposed 170-Mile Conduit From Santa Barbara County Would Transport Oil Through The Valley To Refineries*, L.A. TIMES, February 6, 1992, at B7.

[55] *Impact Report Is Initial Hurdle For Proposed Oil Pipeline*, L.A. TIMES, March 14, 1993, at B1.

[56] Stephanie Simon, *Report Criticizes Impact of New Pipeline Route; Environment; The Study Urges That Existing Overland Lines Be Used To Move Oil From Santa Barbara Offshore Fields To L.A.*, L.A. TIMES, April 27, 1993, at B1.

[57] Hugo Martin, *County Wide Focus: L.A. Council Opposes Oil Pipeline Plan*, L.A. TIMES, May 5, 1993, at B2.

[58] Jeff Meyers, *Experts Favor Building New Pipeline To Move Oil To L.A.*, LOS ANGELES TIMES, May 11, 1993, at B1.

[59] Lucille Renwick, Ted Johnson, *Anxiety In the Pipeline; Some South Bay Residents Object To Proposal To Build Another Underground Oil Line To Refineries*, L.A. TIMES, June 13, 1993, at B3.

[60] Lucille Renwick, *Residents Jeer, Union Cheers Pipeline Plan; Public Hearings; Neighbors Fear Oil Spills And Other Environmental Hazards. Labor Organization Officials Say Jobs Should Be Main Concern*, L.A. TIMES, June 18 1993, at B3.

[61] Jeff Meyers, *Oil Firms' Deal Clouds Pipeline Plan; Petroleum; Major Companies Approve An Agreement To Move Crude From Bakersfield By Using An Existing Line*, L.A. TIMES, August 19, 1993, at B1.

[62] *County Wide Focus; Pipeline Works Delayed For 5 Years*, L.A. TIMES, October 1993, at B1.

[63] Jeff Meyers, *Proposed Pipeline A Positive, Says PUC,* LOS ANGELES TIMES, September 14, 1993, at B3.

[64] *Transport Woes Threaten California Production*, *supra* note 47, at 34.

[65] Hugo Martin, *Council Votes To Prepare For Lawsuit Over Pipeline,* L.A. TIMES, January 26, 1996, at B3.

[66] The Oil Pipeline Responsibility Act of 1995 also purports to cover certain other new or relocated pipelines. CAL. CIV. CODE § 3333.4 (Deering 1993).

[67] Richard Alarcon, *Controversy Over Oil Pipeline*, LOS ANGELES TIMES, March 31, 1996, at B2.

[68] *See e.g.*, Richard C. Paddock, *Drilling Advance Rekindles Santa Barbara Oil Wars*, L.A. TIMES, December 5, 1994, at A1.

[69] *Mobil Pushes Extended Reach Project Off California,* 7/3/93 OIL & GAS J. 20.

[70] *Mobil Rebuffed In Extended Reach Drilling Project*, 7/3/95 OIL & GAS J. 30 (1995).

[71] *Exporting Alaskan North Slope Crude Oil - Benefits and Costs*, U.S. DEPARTMENT OF ENERGY, June 1994, at 5 (hereinafter, "ANS Export Study").

[72] *Id.* at 21.

[73] A South Korean company, Hyundai Oil Refining Co., announced that it has signed a contract with British Petroleum to import 630,000 barrels of ANS crude to its new refinery in August 1996. WALL STREET JOURNAL, June 17, 1996, *available in* WESTLAW, 1996 WL-WSJ 3107000.

[74] In early 1996, the 1995 Defense Authorization Act became law PL 104-106, 1996, § 1124 (*also available in* WESTLAW, 110 Stat. 186). The statute requires the sale of the Elk Hills Naval Petroleum Reserves by 1998. Independents have been concerned about the sale process and the identity of the eventual purchaser because they use the lighter crude from Elk Hills to blend with their heavier crudes, thereby avoiding the otherwise required use of a heated line to move their crudes to Los Angeles area refineries. Independents have long complained that lack of access to pipelines controlled by majors held down the price of their crude. In 1991, the Office of Inspector General of the U.S. Department of the Interior concluded that six of the seven intrastate trunk crude oil pipelines in California were being operated as private carriers, even though they cross federal lands and, pursuant to the Mineral Leasing Act of 1920, as amended, such pipelines are obliged to provide common carrier access. *See* AUDIT REPORT, ENFORCEMENT OF COMMON CARRIER STATUTES FOR PIPELINES CROSSING FEDERAL LANDS IN CALIFORNIA, Report No. 91-I-503. The Bureau of Land Management took the position, in commenting on the report, that it had no statutory authority to regulate pipelines holding such permits to cross federal lands.

[75] 1995 Preliminary Report of the California Oil and Gas Production Statistics, California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, at 1 (January 1996) (hereinafter, "1995 Report").

[76] *Elk Hills and the Budget*, 1/8/96 OIL & GAS J. 15 (1996).

[77] THE MONDAY MORNING REPORT (California Independent Petroleum Association ed., February 26, 1996).

[78] 1994 Report of the State Oil & Gas Supervisor, California Department of Conservation, Division of Oil, Gas and Geothermal Resources, 1995, at 3 (hereinafter, "1994 Report"). The 1994 Report contains the most recent full-year statistics that have been officially published by DOGGR.

[79] *Id.* Of the 44,000 active oil wells, around 30,000 of them are located in Kern County. *Id.*

[80] *Id.* at 6.

[81] *Id.* at 8

[82] 1995 Report, *supra* note 74, at 1.

[83] *See generally*, *California*, 16 OIL AND GAS INVESTOR 22, June 1996.

[84] *See e.g.* CAL. BUS. & PROF. CODE § 10503 (Deering 1993) -- brokers of oil and gas properties are required to have a mineral, oil & gas license. In addition to unexpected statutory coverage of various oil and gas subjects, California's legislature has enacted other statutes which may surprise and perhaps amuse the reader. For example, by statute an easement may be granted conveying "the right of a seat in church." CAL. CIV. CODE § 801. Among the author's personal favorites are: "A thing continues to exist as long as is usual with things of that nature" (Cal. Civ. Code § 3547); "Superfluity does not vitiate" (Cal. Civ. Code § 3537); "That which does not appear to exist is to be regarded as if it did not exist" (Cal. Civ. Code § 3530); and "Things happen according to the ordinary course of nature and the ordinary habits of life" (Cal. Civ. Code § 3546).

[85] *See* 1 WILLIAMS & MEYERS, OIL AND GAS LAW § 203.1; Gerhard v. Stephens, 68 Cal. 2d 864, 878-879; 442 P.2d 692 (1968).

[86] 47 CAL. JUR. 3D § 23 (1979); Callahan v. Martin, 3 Cal.2d 110, 118, 43 P.2d 788 (1935).

[87] Dabney v. Edwards, 5 Cal. 2d 1, 11, 53 P.2d 962 (1936).

[88] *Id.*; McGreevy v. Constitution Life Ins. Co., 238 Cal. App. 2d 364, 368, 47 Cal. Rptr. 711 (1965).

[89] Weiner v. Mullaney, 59 Cal. App. 620, 632-633, 140 P.2d 704 (1943); Callahan v. Martin, 3 Cal. 2d 110, 43 P. 2d 788 (1935); 1 WILLIAMS & MEYERS, *supra* note 84, § 214.

[90] CAL. CIV. CODE § 1219 (Deering 1993).

[91] "For many years the `usual' royalty in California has been one-sixth rather than one-eighth." 6 WILLIAMS & MEYERS, *supra* note 84, § 942, n.2.

[92] *See generally* 3 WILLIAMS & MEYERS, *supra* note 84, § 605.3; Walston v. Flintridge Oil Co., 133 Cal. App. 2d 660, 284 P.2d 895 (1955).

[93] The County Recorders' Association of California publishes a Recorders' Document Reference Manual which describes those instruments which are entitled to be recorded in the Official Records and contains examples, forms and other useful information to landmen, lawyers and others who may have occasion to record instruments that might be unfamiliar to Recorder's office personnel.

[94] Generally, reference in a recorded instrument to an unrecorded document is constructive notice of the unrecorded document. *See* 3 MILLER AND STARR, CALIFORNIA REAL ESTATE 2D § 8:46 (1989).

[95] CAL. CIV. CODE § 1219 (Deering 1993).

[96] CAL. CIV. CODE § 718f (Deering 1993).

[97] CAL. PUB. RES. CODE § 3608.1 (Deering 1993) (quitclaim required as to termination of lease on pooled tract).

[98] Hartman Ranch Co. v. Associated Oil Co., 10 Cal. 2d 232, 73 P. 2d 1163 (1937); R.R. Bush Oil Co. v. Beverly-Lincoln Land Co., 69 Cal. App. 2d 246, 158 P.2d 754 (1945).

[99] *See generally*, 4 WILLIAMS & MEYERS, *supra* note 84, § 671.1.

[100] Hartman Ranch Co. v. Associated Oil Co., 10 Cal. 2d 232, 73 P. 2d 1163 (1937).

[101] Callahan v. Martin, 3 Cal. 2d 110, 43 P. 2d 788 (1935); CAL. CIV. PROC. CODE § 772.010.

[102] *See* cases cited in Kevin L. Shaw, *California `Paying Quantities' Law and Current Statutory Law Affecting Idle Oil or Gas Wells*, REAL PROPERTY LAW JOURNAL, STATE BAR OF CALIFORNIA, at 33 (1992).

[103] Transport Oil Co. v. Exeter Oil Co., 84 Cal. App. 2d 616, 621, 191 P.2d 129 (1948).

[104] Renner v. Huntington-Hawthorne Oil & Gas Co., 39 Cal. 2d 93, 98-99, 244 P.2d 895 (1952); Lough v. Coal Oil Inc., 217 Cal. App. 3d 1518, 1528, 266 Cal. Rptr. 61 (1990); Shaw, *supra* note 101, at 34.

[105] 47 CAL. JUR. 3D § 133 (1979); Renner v. Huntington-Hawthorne Oil & Gas Co., 39 Cal. 2d 93, 99, 244 P.2d 895 (1952).

[106] CAL. REV. & TAX. CODE § 11911 (Deering 1993).

[107] Thrifty Corp. v. County of Los Angeles, 210 Cal. App. 3d 881, 884-885, 258 Cal. Rptr. 585 (1989).

[108] *Id.*

[109] CAL. REV. & TAX. CODE § 61(a) (Deering 1993).

[110] Howard v. County of Amador, 220 Cal. App. 3d 962, 976, 269 Cal. Rptr. 807 (1990).

[111] CAL. REV. & TAX. CODE § 11911(a) (Deering 1993).

[112] CAL. REV. & TAX. CODE § 11921 (Deering 1993).

[113] CAL. REV. & TAX. CODE § 11924 (Deering 1993).

[114] Cal. Pub. Res. Code §§ 3402 and 3403.

[115] One writer recently observed that "when state and local taxes per barrel of oil -- including severance, corporate, property and sales taxes -- are added together, California taxes production less than states like Texas and Louisiana." *California*, 16 OIL AND GAS INVESTOR 26, June 1996.

[116] CAL. CIV. PROC. CODE § 1203.50 (Deering 1993).

[117] The Real Property Law Section of the State Bar of California has published a *California Closing Practices Handbook* which contains very useful information about the practices followed in each of California's 58 counties.

[118] CAL REV. & TAX CODE § 480.3 (Deering 1993).

[119] CAL. CIV. CODE § 1214 (Deering 1993); *see generally* 3 MILLER AND STARR, *supra* note 93, § 8:3.

[120] CAL. GOV'T. CODE § 8206 (Deering 1993).

[121] *See* CAL. PUB. RES. CODE § 3600 (Deering 1993); CAL. CODE REGS., tit. 14 § 1721.1 (1996).

[122] 57 CAL. JUR. 3D § 1 (1980).

[123] 57 CAL. JUR. 3D § 18 (1980).

[124] CAL. COM. CODE § 9103(5) (Deering 1993).

[125] 57 CAL. JUR. 3D § 97; CAL. COM. CODE § 9110 (Deering 1993).

[126] CAL. COM. CODE § 9402(5) (Deering 1993).

[127] CAL. CIV. PROC. CODE §§ 580a, 580b and 580d (Deering 1993).

[128] Interesting Facts About Oil & Gas, Home Page of California Department of Conservation, http://www.ca.gov/dog/index.html

[129] *See*, Memorandum of Understanding Between The California State Office U.S. Bureau of Land Management And California Department of Conservation Division of Oil, Gas, And Geothermal Resources (March 15, 1996) (on file with author) (hereinafter, "Memorandum of Understanding").

[130] Mike Krensavage, *Regional Report; Oil Field Resurrection; Energy; The Mideast Crisis Presents An Opportunity For Smaller, Independent Firms To Regain Share, Many Once-Capped Operations Are Pumping Again*, L.A. TIMES, August 27, 1990, at D1.

[131] Cal. Pub. Res. Code § 3206.

[132] CAL. ADMIN. CODE, tit. 14, § 1920.1(s). DOGGR chooses its specific requirements from the list of general requirements contained in the CAL. ADMIN. CODE, tit. 14, §§ 1980, 1981, 1981.1, 1981.2.

[133] 14 Cal. Admin. Code § 1920(l). Cal. Pub. Res. Code §§ 3206, 3206.5.

[134] Shaw, *supra* note 101, at 34.

[135] THE MONDAY MORNING REPORT, (California Independent Petroleum Association ed. January 29, 1996).

[136] *Black Gold; An Occasional Look At Orange County Issues*, L.A. TIMES, May 12, 1996, at B1.

[137] CAL. PUB. RES. CODE § 3237 (Deering 1993).

[138] An operator of any well that does not produce oil or gas for a continuous six month period during any consecutive five- year period prior to or after January 1, 1991, is subject to an indemnity or cash bond in the sum of $5,000.00 for each well; or a blanket indemnity or cash bond in the sum of §100,000.00 for all wells; and an additional $100.00 annual fee for each well. CAL. PUB. RES. CODE § 3206 (Deering 1993).

[139] *See* Memorandum of Understanding, *supra* note 128.

[140] 1994 Report, *supra* note 77, at 3-7.

[141] For example, the California Independent Petroleum Association has formed an Idle/Orphan Well Committee which is reviewing and commenting on the DOGGR's "Schedule and Guidelines for Testing Idle Wells" with a view towards responsibly managing the problem.

[142] THE MONDAY MORNING REPORT (California Independent Petroleum Association ed. January 29, 1996).

[143] *State Dips Into General Fund to Plug Orphan Wells*, THE AMERICAN OIL & GAS REPORTER, June 1996, at 128.

[144] *Historic California Platforms Slated For Removal*, 4/1/1996 OIL & GAS J. 83 (1996).

[145] Governor's Reorganization Plan No. 2 of 1995 did not become effective due to opposition in the state legislature.

[146] THE MONDAY MORNING REPORT (California Independent Petroleum Association ed. April 1, 1996).

[147] Dominguez Energy L.P. v. Shell Oil Company, Case No. C-736-891, Superior Court, Los Angeles County, California.

[148] 14 Cal. App. 4th 1770, 1780, 18 Cal. Rptr. 2d 574 (1993). *See, generally*, William R. Keffer, *Drilling for Damages: Common Law Relief in Oilfield Pollution Cases*, 47 SMU L. REV. 523 (1994).

[149] *Id.* at 1781.

[150] 47 CAL. JUR. 3D. at 406.

[151] 12 Cal. 4th 1087, 1103, 51 Cal. Rptr. 2d 272 (1996).

[152] *Id.* at 1097.

[153] *Id.*

[154] *Id.* at 1103.

[155] *Id.*

[156] 47 CAL. JUR. 3D at 407.

[157] *See* The Travelers Indemnity Company of Illinois v. City of Redondo Beach, 28 Cal. App. 4th 1432, 1441, 24 Cal. Rptr. 2d 337 (1994).

[158] CAL. PUB. RES. CODE § 3250 (Deering 1993).

[159] CAL. PUB. RES. CODE § 3600 (Deering 1993).

[160] *See e.g.*, Mangini v. Aerojet-General Corp., 230 Cal. App. 3d 1125, 1145-1146, 281 Cal. Rptr. 827 (1991), affirmed in 12 Cal. 4th 1087, 51 Cal. Rptr.2d 272 (1996).

[161] Cassinos v. Union Oil Company of California, 14 Cal. App. 4th 1770, 1785, 18 Cal. Rptr. 2d 574 (1993).

[162] Richard Paddock, *Unocal Admits Spillage into Ocean; Guilty Plea Expected*, L.A. TIMES, March 12, 1993, A1.

[163] Chris J. Ore, *Environmental Protection; Oil Spills -- Felony Violations*, 26 PAC. L.J. 559 (1995). In response, California legislature passed Chapter 613 which established a three year statute of limitations starting to run on the date of the actual discovery of a violation. Cal. Gov't Code § 8670.59.

[164] P. Dennehy and R. Thompson, *California Coastal Commission*, 14-FALL, CAL. REG. L. REP. 167, 168 (1994).

[165] P. Dennehy and R. Thompson, *California Coastal Commission*, 15-WTR, CAL. REG. L. REP. 143, 145-146 (1995).

[166] P. Dennehy and R. Thompson, *California Coastal Commission*, 15-SUM CAL. REG. L. REP. 158, 161-162 (1995).

[167] California v. Unocal Corp., No. CV 075157 (San Luis Obispo County Superior Court).

[168] California v. Union Oil Company of California, No. CV 75194 (San Luis Obispo County Superior Court).

[169] In addition to this action, over 200 surfers have filed Surfers' Environmental Alliance v. Union Oil Co. of California, No. CV 07205 (San Luis Obispo County Superior Court), a class action against Unocal.

[170] CAL. PUB. RES. CODE § 3106 was amended in 1994.

[171] Alexandra Teitz, *Assessing Point Source Discharge Permit Trading: Case Study in Controlling Selenium Discharges To the San Francisco Bay Estuary*, Comment, 21 ECOLOGY L.Q. 79, 100 (1994).

[172] *Id.* at 162 n. 208.

[173] Lisa Alcalay Klug, *Oil Giants Sued Over S.F. Bay Pollution*, SACRAMENTO BEE, March 3, 1994, *available in* WESTLAW, 1994 WL 5247759.

[174] Reynolds Holding, *Shell Will Pay Big Fine, Cut Selenium Discharges*, SAN FRANCISCO CHRONICLE, February 8, 1995, *available in* WESTLAW, 1995 WL 5262958.

[175] *Id.*

[176] *Id.* at 114 -115.

[177] CAL. ENVT'L HEALTH & SAFETY REG. § 60202 (1996).

[178] CAL. HEALTH & SAFETY CODE § 39608(a) (Deering 1993).

[179] CAL. ENVT'L HEALTH & SAFETY REG. § 60202 (1996).

[180] CAL. HEALTH & SAFETY CODE § 39608(c) (Deering 1993).

[181] K. Dwinnels, H. Hutchinson, and E. D'Angelo, *Department of Pesticide Regulation*, 14-FALL CAL. REG. L. REP. 154, 155 (1994).

[182] R. Moore, *Air Resources Board*, 15-SUM CAL. REG. L. REP. 132, 133 (1995).

[183] Charles B. Renfrew, *Intercompetitor Cooperation in the Petroleum Industry*, 61 ANTITRUST L.J. 559, 561 (1993).

[184] Lawrence D. Hamlin, *Electric Utility Research and Development in a New Competitive Environment*, 123 PUBLIC UTILITIES QUARTERLY 25 (June 1989).

[185] Evan Goldenberg, *The Design of an Emission Permit Market For RECLAIM: a Holistic Approach*, 11 UCLA J. ENVTL. L. & POL'Y 297 (1993).

[186] *See* CAL. PUB. RES. CODE § 3208.1, § 3259 (Deering 1993) (pertaining to the responsibility for the re-abandonment of wells later found to be hazardous).