

Notes from the Chair



Lawrence Schnapf, Chair

Committee on Environmental, Energy and Natural Resources Law
ABA Business Law Section

I was going to devote this column to welcoming the return of our committee newsletter and reviewing the various changes and the ambitious projects that our committee has slated for 2009. However, on May 4th the United States Supreme Court issued an important ruling governing the liability of generators under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). *Burlington N. & Santa Fe R. Co. v. United States*, 129 S. Ct. 1870 (2009). To ensure that our newsletter provides members with timely information, I will summarize the decision.

The decision involved two consolidated cases: *Burlington N. & Santa Fe R. Co. v. United States* (No. 07-1601) and *Shell Oil Co. v. United States* (No. 07-1607). In an 8-1 opinion written by Justice Stevens, the Court ruled that Shell was not liable for the contamination at an agricultural chemical distribution center in Arvin, California. However, the Court left in place a lower court determination that two railroads must bear their share of the cleanup costs.

In this case, Brown & Bryant, Inc (B&B) operated an agricultural chemical distribution center for 28 years that was partially located on a parcel that was leased from petitioners Burlington Northern and Santa Fe Railway Company and Union Pacific Railroad Company (collectively BNSF). B&B purchased and stored various hazardous chemicals, including a pesticide purchased from petitioner Shell Oil Company. Numerous spills occurred during transfers and deliveries of products as well as from a variety of equipment failures. After investigations by the California Department of Toxic Substances Control (DTSC) and federal Environmental Protection Agency (EPA) revealed significant soil and ground water contamination, the site was placed on the National Priorities List (NPL). DTSC and EPA incurred over \$8 million in response costs and filed a cost recovery action against Shell and BNSF.

The District Court found Shell liable because it had arranged for the disposal of hazardous substances and BNSF liable as the owner of part of the NPL site. The District Court also apportioned liability, holding BNSF liable for nine percent of the response costs while Shell was allocated responsibility for six percent of the total response costs.

On appeal, the United States Court of Appeals for the Ninth Circuit affirmed the imposition of arranger liability on Shell. However, the Ninth Circuit said that while the harm was theoretically capable of apportionment, it found the record insufficient to support apportionment, and therefore held Shell and BNSF jointly and severally liable for the cleanup costs.

In finding that Shell was not liable as an arranger, the Court noted that CERCLA did not have a specific definition of "arranger" and therefore the term is to be given its ordinary meaning. The Court said the ordinary meaning of that term involved issues of "intent" and the subjective determination of whether the potentially responsible party (PRP) intended for disposal to occur. While evidence showed that Shell was aware that minor and accidental spills occurred during transfer from the common carrier to the facility's storage tanks after the product had come under B&B's stewardship, the Court said that mere knowledge of spillage was not enough to impose arranger liability. Instead, there had to be evidence of taking "intentional steps" to arrange for the disposal of hazardous substances. Moreover, the Court noted that Shell took numerous steps to encourage its distributors to reduce the likelihood of spills.

Another important factor was that Shell Oil Company had transferred title to its chemicals to its customer. This distinguished this case from the line of arranger cases involving formulation arrangements where manufacturers would provide raw materials to a facility to mix or formulate a product that was returned to the original manufacturer. In these formulation arrangements, the original manufacturer retains

title to the raw materials and the contracts contemplated some spillage.

The other significant aspect of the ruling was the conclusion that there was evidence of a "reasonable basis" for apportioning liability, and therefore the joint liability would not be imposed on the defendants. Here, the district court had apportioned liability based on the percentage of land surface area owned or operated by B&B and BNSF, the duration of the ownership period relative to the overall duration of time during which spills and leaks occurred, and the volume of hazardous substances disposed on the parcels compared to the entire site.

The practical import of the decision will be to give trial courts greater discretion in apportioning liability where in the past the courts might have imposed joint liability. This should create an incentive for defendants to generate information on relative liability and challenge liability allocations. With the possibility that joint liability may not be imposed, some defendants and plaintiffs might have to reevaluate the math or

analysis they have used in the past to determine whether to settle the liability or reconsider litigation strategies at a non-owned site.

As I wrote at the beginning of this column, our committee has embarked on a number of interesting initiatives. We have replaced the old subcommittees, which were not very active, with a new structure that focuses on committee activities such as the newsletter and programming. We also will be publishing a book covering environmental issues in business transactions.

For many of you, the newsletter is your primary exposure to our committee. I am excited that we have an energetic newsletter committee that is looking to publish a number of issues each year. I encourage those of you who are not active in committee activities to consider becoming more involved and contacting the chairs of the subcommittees that you find interesting. I particularly want to encourage young attorneys to get involved. The committee can be an excellent vehicle for you to get exposure and develop important networking opportunities.

Featured Articles

The Rise of Biofuel and Fall of Ethanol?

By **Matthew D. Penny**, Cokinos, Bosien & Young

A funny thing happened on the way to the New Energy revolution: the movement's leader lost its way. For years, corn and soy-based ethanol reigned as the alternative energy establishment's fuel of choice to replace gasoline and other liquid combustibles in the American energy portfolio. Ethanol was thought to be a viable domestic substitute to foreign oil, producing less adverse environmental effects and being largely compatible with the nation's existing vehicle fleet and driving habits. Perhaps most importantly, ethanol was seen as politically expedient, dovetailing the interests of the nation's farmers with environmental advocates. Industry and political leaders were singing ethanol's praises and crafting national policy to encourage ethanol's growth.

Over time, the ethanol market became flooded with cash from government subsidies and tax breaks that encouraged entrepreneurs. Federal law soon mandated that commercial gasoline be mixed with ethanol at increasingly higher percentages, creating a mechanism by which ethanol could be introduced into American cars and society. These factors spurred investors, and the relative ease in obtaining funding led to a surge in the number of independent ethanol producers backed by various types of capital.

Large numbers of ethanol producers came online, even before the technology found a niche, and even as the fuel began to face harsher criticisms from environmentalists who downplayed or dismissed its beneficial effects.

Ultimately, though, the surge in supply, unreliability of federal tax credits and subsidies, and growing environmental criticisms came crashing down on the ethanol industry. 2008 and 2009 have seen a rash of bankruptcies as oil prices - a leading indicator for ethanol prices - swooned, squeezing margins for ethanol producers. The heavy debt financing obtained by many ethanol start-ups eventually dragged down companies who faced declining revenue, even as the federal government continued to require ethanol blending into commercial gasoline. Recently, the industry has seen the bankruptcies of some of its biggest names, including VeraSun, five production units of Pacific Ethanol, and more than a dozen other companies.¹ Further complicating the industry's problems (whether justly or not), ethanol production took the brunt of public criticism for rising food and commodity prices in 2008, as critics attacked the use of traditional farm land for the production of ethanol feedstock. All the while, the environmental movement's opinion regarding ethanol continued to

deteriorate following new studies questioning the fuel's effects on climate change. Now, ethanol's future place in the renewable fuels world appears at best uncertain.

Meanwhile, the outlook appears very different for biofuel enthusiasts. The term "biofuel" encompasses the broad and somewhat varied world of alternative energy production through non-food biological feedstocks, biological waste, and biological processes. Ethanol continues to be an end-product created by some biofuel technologies; however, these ventures use feedstocks other than corn or soy. So-called cellulosic ethanol utilizes existing biomaterial (such as wood chips, hay, and corn stover) for the distillation of the fuel, thereby reducing the competition between energy and food for the use of corn and soy beans. Other cutting edge companies are exploring a variety of processes to create non-ethanol biofuels. Both cellulosic ethanol and non-ethanol biofuels have the potential for addressing many of corn and soy-based ethanol's shortcomings. The goal is to create advanced biofuels that can produce energy at a higher rate per gallon of fuel, while not competing directly with the American food supply and achieving net gains in the fight against climate change.

Some cutting edge biofuel processes, such as the cultivation of algae for biofuel production, appear poised to be industry-changing in a way ethanol promised during its early years. Industry pioneers like Jonathan Gal, President of Texas Clean Fuels, which produces a critical component in the algae-to-fuel process, notes that algae could be a panacea for the current criticisms of alternative fuels.² Algae is not a food product, Mr. Gal notes, and its growth requires significantly less land than corn or soy beans. Further, algae can be raised in semi-arid regions unsuited to the production of other crops. Its cultivation requires less water and can be used for the sequestration of carbon dioxide, which algae processes in its creation of biofuel. Finally, the biofuel produced has characteristics that solve several logistical problems that plague ethanol, including that it can be safely conveyed via pipelines that corn and soy ethanol cannot.

Perhaps recognizing the shifting industry forces, the Obama administration has taken steps to encourage biofuel development - separate and distinct steps from the ethanol mandate currently in place. The American Recovery and Reinvestment Act ("ARRA") devotes \$78.6 million to accelerate advanced biofuels and research and development, and to provide additional funding for commercial-scale bio-refinery demonstration projects. ARRA also provides for an ex-

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tension of the renewable energy production credit for biomass projects through December 31, 2013. However, according to the Department of Energy's press release announcing the funding of biofuels research, only \$20 million is specifically planned for continuing ethanol research. EPA Administrator Lisa Jackson told reporters that "corn-based ethanol is a bridge" to next generation fuels, further suggesting that ethanol is less of an administration priority than other alternative energy strategies.³ The move away from ethanol and towards biofuel production appears to be accelerating.

Questions remain, though, as to whether the nascent biofuels industry represents the logical next step following the country's ethanol experiment, or if it is facing a repeat of the boom and bust cycle seen for corn and soy-based fuel. The potential for algae and other biofuel production seems great, and cutting edge biofuel technologies appear impervious to many of the complaints regarding ethanol. However, big businesses, especially Big Oil, appear to be less convinced of biofuel's superiority. A number of industry players, like Archer Daniels Midland and Valero, have been buying up ethanol industry assets at rock-bottom prices following the recent slew of bankruptcies.⁴ The companies, which have ample funding and strong political connections, are betting on ethanol's expansion. Meanwhile, biofuel research has yet to hit the mainstream. Further, or perhaps as a consequence, there are mixed political signals emanating from Washington about the next step in the march towards widespread use of alternative fuels.

Ethanol advocates recently petitioned the EPA to increase the mandate for the percentage of ethanol blended into commercial gasoline up to 15%. Agriculture Secretary Tom Vilsack recently supported such a move, even discussing a greater increase up to 20%.⁵ Such a mandate would no doubt encourage continued focus on the ethanol creation process, and likely expand the refining of corn and soy beans. Backed by federal mandates, the funding for ethanol production could continue and perhaps increase, possibly crowding out investors for the newer biofuels technologies. Big Oil's involvement, with its obvious competitive concerns and significant political sway, could tip the scales even more in ethanol's favor. An ethanol-based gasoline additive may be seen as less of a commercial threat to Big Oil's fuel monopoly than a wholesale change to a new technology. These politically powerful owners of ethanol assets could encourage an ethanol-driven energy policy at the expense of biofuels.

The implications of this market and policy competition for deal-makers (and, potentially, their attorneys) are legion. The ethanol industry suffered from the uncertainty of tax credits on which many of its investors relied as incentives. An Administration emphasis on ethanol, with its ready market for blending with commercial gasoline, threatens to raise further questions for investors and entrepreneurs regarding future federal support for the biofuels industry. Further, the political pressure from an ethanol industry uniting farmer-friendly corn and soy-based ethanol advocates with corporate America threatens to derail biofuels research and stave off both venture capital and government funding opportunities.

Deal-makers structuring investments in the ethanol or biofuels industry must consider the potential ramifications of these policy changes when making business decisions, and could expect counsel to craft documents that accommodate changing political concerns. A company's equity capitalization, its level of debt, whether to issue preferred or common shares to investors (or whether such investors should accept such

classes), and tax planning for both the individual and the company, could all be influenced by the market and political dynamics between ethanol and biofuel. Ethanol start-ups and investors risk falling victim to the pressures that led to the 2008 and 2009 bankruptcies. Meanwhile, the mixed messages regarding ethanol's future could doom the biofuel industry's attempts to get off the ground. Investors and start-ups alike must position themselves to weather a wide variety of potential market storms. Attorneys, accordingly, could benefit from identifying and understanding the business concerns facing their clients.

Companies and investors in the industry should pay continued attention to the EPA's ethanol mandate, as well as future actions taken by the Department of Energy's Biomass Program. Administration efforts and market dynamics should guide forward-looking strategies for businesses and investors in these fields. The potential in both the ethanol and biofuel industries appears great. However, the competition technologies could leave one set of investors wondering what went wrong.

1 See "More details emerge on VeraSun bankruptcy; current shareholders facing wipeout," Biofuels Digest Online, <http://biofuelsdigest.com/blog2/2008/11/04/more-details-emerge-on-verasun-bankruptcy-current-shareholders-facing-wipeout/>, last visited 7/21/09; see "Pacific Ethanol units file bankruptcy," Portland Business Journal, www.bizjournals.com/portland/stories/2009/05/18/daily9.html, last visited 7/21/09.

2 E-mail from Jonathan Gal, President of Texas Clean Fuels, to Matthew Penny, Cokinon, Bosien & Young (May 2009) (on file with author).

3 See Reuters, "EPA issues rule to lower CO2 output from biofuels," Reuters AlertNet, <http://www.alertnet.org/thenews/newsdesk/N05476101.htm>, last visited 7/21/09.

4 See Max Schultz, "The Ethanol Bubble Pops in Iowa," The Wall Street Journal Online, <http://online.wsj.com/article/SB124000832377530477.html>, last visited 5/1/2009.

5 See Associated Press, "U.S. Should Boost Ethanol Production in Gasoline, Vilsack Says," The Wall Street Journal Online, <http://online.wsj.com/article/SB123661267686771979.html>, last visited 3/9/2009.

Obama's Push for Renewable Energies: How to Negotiate a Wind Energy Lease Agreement on Behalf of Private Landowners **By Cari Rincker, Esq.,** Rincker Law, **and Brandon L. Jensen, Esq.,** Budd-Falen Law Offices, LLC

Wind energy is currently one of the fastest growing forms of electricity generation in the United States. In light of the recent economic stimulus plan, the American Recovery and Reinvestment Act ("ARRA"), and the Obama Administration's push for green jobs and renewable energies, landowners from coast-to-coast, especially farmers and ranchers, are tempted to lease their private properties to a wind energy company. Attorneys can play an instrumental role in this process—from organizing landowners to negotiating terms in the wind lease.

Getting Started: Location, Location, Location

The first question that every landowner should ask is whether the property is suitable for a wind farm. Naturally, wind speed is one of the most relevant factors when assessing a property's potential for wind development. Wind speed data is available through the National Renewable Energy Laboratory.¹ However, wind speed is just one factor in determining whether your land is marketable to wind developers. For example, albeit windy, land with a rocky, moun-

tainous terrain is typically not ideal, while protected forests and parks or densely populated areas serve as geographical constraints. Proximity to transmission lines can make a property more marketable.

Moreover, location also determines the federal, state, and local legal framework that would regulate the wind farm. Some localities have zoning regulations that are not conducive for wind development. Furthermore, tax incentives can play a significant role in the economic feasibility of the project. In fact, only 26 states currently offer property tax incentives for wind projects.² Therefore, regulations and economic incentives in a particular region can affect the marketability of a piece of property.

Collective Bargaining

Once an area is determined to be suitable for wind development, neighboring landowners should form associations with one another to increase their collective bargaining power with wind companies. The larger the parcel of the property, the more potentially lucrative the project may become for both the landowner and the developer. Word of mouth and farm radio can serve as helpful ways to form landowner groups. However, since over 34 states have Wind Working Groups, that group should first be contacted to help organize landowners.³

Landowners engaged in collective bargaining may own greater leverage to obtain higher compensation and better terms from a wind developer. Such arrangements may be beneficial to the wind developer as well: fewer landowners with whom to negotiate, less time spent in negotiations, reduced attorneys' fees, and increased uniformity in wind lease terms across thousands of acres.

Importantly, while a single landowner may not be able to afford to retain counsel to thoroughly negotiate wind lease terms, attorneys' fees are more affordable when spread across a group of landowners. Finally, cooperation among several landowners helps improve transparency ensuring all landowners get the best possible terms in their lease.

Four Major Stages of Wind Development

Wind developers typically seek access to the land by means of either a lease or an easement. Wind developers generally seek to negotiate for short-term rights for an initial exploration of the feasibility of their project while preserving the right to enter into more long-term arrangements later. When negotiating a wind lease agreement, there are typically four major stages of

wind development: (i) development period, (ii) construction period, (iii) operational period, and (iv) termination period. The duration of each of the stages should be narrowly defined in the lease.

Development Period. The development period is the initial stage of wind development. In this initial stage, the wind company evaluates the property for its potential by completing the following activities—wind assessments, environmental review, economic modeling, permitting, and securing financing. During this stage, other than installing a meteorological tower on the property to measure the wind, the wind developer typically makes little use of the property itself.

Construction Period. As the name implies, during the construction period wind turbine generators, steel towers, foundations, concrete pads, anchors, fences, and other fixtures will be installed on the property. If construction does not commence within the specified time, the lease should terminate automatically. Otherwise, the wind developer may tie-up the land for forty or more years without constructing a wind farm.

Operational Period. During the operational period, wind energy is being generated on the property, transmitted to available markets, and sold for profit. The operational period may last up to sixty years with possible extensions.

Termination Period. Finally, during the termination period, the wind developer wind production has terminated, and the developer is obligated to remove its equipment from the landowners' property (commonly referred to as "decommissioning"). Decommissioning may be limited to a few months, while remediation may take several years to adequately complete.

Commercial Terms

This is arguably the most acrimonious, yet most important, section of the wind lease agreement. Landowners are not advised to tie up their land for forty or more years unless adequate compensation is received. The Department of Energy suggests that landowners may earn approximately \$2,000 to \$5,000 per wind turbine that is constructed on their property.⁴ However, compensation is usually not this straightforward.

Compensation is relative to a landowner's particular market in terms of geographic location, total acreage, wind speed, terrain, proximity to transmission lines, and economic incentives in that particular region, state, or county. Due to this inherent complexity, it is difficult to under-

stand fair market value in any one geographical location. Because of the unknowns in the market and the possibility that a wind developer may not develop a property, the landowner should try to secure as much money as possible up front.

There are several types of financial compensation for the landowner. They include the following terms:

Annual Minimum Rent. Property owners should ideally negotiate for an annual minimum rental payment that periodically increases each year during the development period. This ensures a guaranteed amount of money each year for the landowner, regardless of fluctuations in the market for renewable sources of electricity, fluctuations in the amount of wind in any given year, or if the turbines fail to function properly or become damaged for whatever reason.

Construction Bonus. Once construction begins, landowners can expect to receive the annual rental payment and a "construction bonus" for each wind turbine installed on the property.

Royalties. After the wind turbines become operational and generate electricity for sale by the wind developer, the landowner can expect to receive an annual royalty—typically a percentage of the gross revenues received by the wind developer for the sale of the electricity. The royalty should periodically increase as well and include a percentage of any money received by the wind developer in lieu of the sale of electricity.

Legal fees. Landowners should ask for payment or partial payment of attorneys' fees required during the negotiation phase and litigation expenses that should arise from the lease.

Termination fee. The landowner should receive a "termination fee" if the wind developer terminates the lease prior to construction.

Finally, landowners should negotiate payment for the following: roads, transmission lines, substations, meteorological towers, and payments for access to in-holdings if the land includes a large amount of federal or state land within its boundaries.

Legal Terms

After fair compensation is determined, there are several legal issues that should be considered. They include the following:

Reservation of Property Rights. The lease agreement should not only identify the uses for

the wind developer, but it should also reserve ^{Document ID: 58154551} ¹⁵⁵⁴⁵¹⁰⁸⁷⁷¹⁸ ^{http://www.thepropertylaw.com/landowner/landowner.html} other uses to the landowner. For example, the agreement should reserve all rights to mineral exploration and development to the landowner, as well as all water, hunting, and fishing rights. Furthermore, the landowner may wish to protect part of the property from development, such as the riparian areas, irrigation ditches, or boulder formations.

Liability. It is not uncommon for most lease agreements to include an indemnification provision requiring both parties to defend and hold each other harmless from claims for any future loss or damage arising from the various uses of the property. While such a provision may appear reasonable, it could present significant concerns and should be carefully addressed. Any loss to the landowner arising from the wind developer's use and occupation of the land may total in the thousands of dollars, or perhaps tens of thousands of dollars while any loss to the wind developer arising from the landowner's use and occupation of his own land may total in the millions of dollars, or perhaps tens of millions of dollars. Thus, landowners should limit their potential liability as much as possible—for example, to the receipt of insurance proceeds, or some other specified amount.

Taxes and Utilities. Wind farm development should inherently increase the property value of the land. The lease agreement should consider assignment of any increase in property taxes to the wind developer. Otherwise, any increase in property taxes may be the responsibility of the landowner. In addition, any utilities necessary for the construction or operation of the wind farm should be the responsibility of the wind developer.

Assignment of Rights. The lease agreement will undoubtedly specify whether the landowner and the wind developer may assign the contractual rights and obligations to third parties. Wind developers will almost always seek broad rights to sublease, assign, and mortgage their rights, without the consent of the landowner. Such broad rights may be necessary for the wind developer to obtain financing; however, landowners should demand to be notified of every such transfer in order to keep track of who is ultimately responsible for any default of the lease agreement.

Liens. Importantly, the lease agreement must require the wind developer to keep the land free and clear of all liens related to the wind farm. It should be the responsibility of the wind developer, not the landowner, to contract and make payment for all labor and materials related to

the construction of the wind farm. Additionally, the landowner should not be held responsible in the event the wind developer cannot fulfill his obligations to pay for labor and materials.

Default and Termination. One of the most important provisions of any contract is the default and termination clause. While the wind developer will likely request the ability to terminate the project at any time and for any reason, the landowner may only be permitted to terminate the agreement under very limited circumstances. To help rectify this, the landowner should attempt to negotiate the ability to terminate the lease if the wind developer fails to pay rent, fails to maintain adequate insurance, commits abandonment, fails to pay taxes, goes bankrupt, or fails or neglects to perform any obligation set forth under the contract.

Decommissioning. In the event of default, or termination of the lease, the landowner should specify how much time the wind developer is permitted to remove the wind turbines from the land and how much the landowner will be paid. To prevent the wind developer from simply "walking away" from the project, the landowner must demand a "decommissioning security," to be established as soon as the wind turbines become operational.

Reclamation. Designating proper reclamation provisions is a key aspect of the wind lease agreement. Reclamation is necessary during construction, operation, repairs, and after the project has been removed from the land. Reclamation measures should identify the means to keep track of the original condition of the property, either through photographs or an assessment prepared by a range professional. Moreover, other reclamation measures should discuss the following issues: (i) identification of improvements that should be removed, (ii) instructions on depth of soil removal, (iii) description of stockpiling of topsoil and storage during construction, (iv) decompaction of the soil, (v) reclamation of roads, (vi) revegetation, (vii) erosion, (viii) seeding, (ix) protection of revegetation, (x) noxious weeds, (xi) dust control, and (xii) trash removal.

Miscellaneous Provisions. There are several issues that a wind lease should address, including, but not limited to, compliance with applicable law, a forum selection clause, arbitration clause, condemnation, and what happens to land included in a conservation reserve program or any other governmental program. Each of these topics should be discussed on a case-by-case basis.

Final Thoughts

The Obama Administration's push for renewable energy and green jobs has sparked excitement for wind energy development in the United States. Many landowners all over the country would like to take advantage of the economic incentives in the recent stimulus package and negotiate a wind lease on their property. If a landowner's property is suitable for wind development, collective bargaining eliminates the need for a middleman broker and can help ensure that more attractive commercial and legal terms can be negotiated. Attorneys can play a key role in facilitating these transactions and in helping to ensure that the landowner receives a fair handshake by ensuring that the above wind lease issues are properly considered to protect both the landowner and his or her generations to come.

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1. Some landowners choose to hire an environmental consultant. In a recent article published in a livestock trade publication, a rancher in Colorado hired a Certified Environmental Professional ("CEP") to measure the ranch's electricity usages and costs over a multiyear period while looking at the wind speed data based on the National Renewable Energy Laboratory. See Phillip Bring, Harvesting the Wind, *ANGUS JOURNAL* (April 2009).
2. See National Conference of State Legislators, Property Tax Incentives, www.ncsl.org/programs/energy/propertytaxFS.htm (last visited April 19, 2009); see Database of State Incentives for Renewable Energy ("DSIRE"), Federal Incentives, www.dsireusa.org (last visited April 19, 2009).
3. See Tom Doran, Wind power ensures sustainable energy future, *AGRINEWS ONLINE* (Saturday, April 11, 2009), <http://www.agrinenews-pubs.com/articles/news/latest-news> (last visited April 11, 2009).
4. See U.S. Department of Energy, Energy Efficiency and Renewable Energy, Wind Energy Development and the Agriculture Community, available at www.windpoweringamerica.gov (last visited April 12, 2009).



Paul Dickerson

Clean Tech Practice Group Haynes and Boone, LLP

Paul Dickerson launched Haynes and Boone's Clean Tech practice group in 2009. He focuses on helping clients develop products and businesses in the Clean Tech arena in the U.S. and abroad. Prior to rejoining Haynes and Boone in Houston, Dickerson served as Chief Operating Officer of the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE) for three years. At EERE, he helped move alternative and renewable energy technologies from the "vision" stage to real-world development.

Q: Why Houston?

PD: Today, Texas isn't just a world leader in oil and gas—it's a world leader in wind energy, biofuels, and energy efficiency. Now the state is getting ready for a big push into solar. When you consider that Texas had virtually no developed renewable energy resources just 10 years ago, and today it's the No. 1 state in the land for wind power—it's just staggering. And the beauty of this transformation is that Texas seems to be connecting the dots to profitability along the way—something few states have been able to replicate.

But Texas's biggest opportunity lies before it. The state has unrivaled resources when it comes to two prerequisites for growth in the renewables sector: capital and energy expertise. Small VC-backed energy companies in San Francisco and Boston are graduating to the world's energy stage, and they need partners with deep pockets who know the ropes. Enter the oil and gas industry. We're going to see a lot of deals over the next few years with traditional energy companies teaming up with emerging players in biofuels, offshore wind, and geothermal exploration, to name a few.

In fact, we're already starting to see some movement here. Valero Energy, the country's largest independent refiner, recently agreed to buy seven ethanol plants from bankrupt VeraSun Energy in a deal that will give it about half of the ethanol the company needs to fulfill new federal mandates for renewable fuels.

Q: So do you see federal mandates and regulations driving investments in this space going forward?

PD: Policy definitely has its place. My time at DOE saw the passage of meaningful federal mandates to spur investment in clean technologies. The Energy Independence and Security Act, for example, increased vehicle

fuel efficiency standards for the first time in more than three decades. It also mandated the addition of 36 billion gallons of renewable fuels to our energy mix by 2022.

Of course, just because the federal government ordains something doesn't mean it will automatically come to pass. We need to recognize that this sector relies on a three-legged stool of support, and policy is just one leg. The other two are capital and markets. The federal government can hit industry as much as it wants with the stick, but it has to supplement that strategy by offering the private sector enough carrots to induce investment and commercialize these technologies.

Q: What kinds of "carrots" are you talking about?

PD: Tax incentives, for one. One of the key provisions of the American Recovery and Reinvestment Act extended the renewable electricity production tax credit, for instance. This is a big deal for industry—countless CEOs came to me during my time at DOE explaining how their projects were being held up by banks waiting to see if Congress would renew the unreliable PTCs. Industry needs long-term, durable, tax policies—and that is exactly what we now have with this multiyear extension.

But we also have to be more inventive when it comes to partnering with the private sector. Over the last three years, we implemented a number of innovative ventures with industry partners in which we would share in the cost of the program. The DOE's USAutoPARTS partnership with the state of Michigan and the auto supplier industry is one example. We pooled our resources to tackle research and development of efficiency advances like lightweighting and engine combustion, and the results are being used by auto manufacturers to speed the development of plug-in hybrids.

Q: In your mind, what is the biggest near-term hurdle for this industry to overcome?

PD: Clearly it's access to capital. If this period has taught us anything, it's that the cost of capital is as important as the cost of oil when it comes to clean energy's expansion. Clean technology entrepreneurs, like their counterparts in so many other industries, are taking it on the chin during this downturn. Lenders are very reluctant to put additional capital to work, particularly on such a nascent industry. As a result, each passing week seems to bring news of another company unable to secure much-needed expansion capital.

This funding paralysis is leading many companies to take themselves out of the game, meaning they're sitting on their hands—cutting jobs and spending—while they wait for the markets to right themselves or federal financial support to come to the rescue.

Q: So what is your advice to these companies?

PD: Find a better path forward. Nobody knows when the economy is going to fully turn the

corner. And as someone who was inside the federal bureaucracy, I can say that the system isn't set up to expedite the kinds of funding that the ARRA authorized. That money will make a big difference to some companies, but others are going to expire before help arrives.

Companies need to take matters into their own hands in the short term by examining their strategic options. There are any number of alternatives companies can choose not just to survive in this environment, but to set themselves up to thrive once conditions improve. I'm talking about joint ventures, licensing agreements, and strategic acquisitions. And I'm talking about exploring untapped markets for future growth, both here and abroad.

The federal government, for example, isn't just a source of handouts—it's the largest single customer in the nation, and it has a long shopping list of renewable energy and energy efficiency technologies to make federal buildings and other sites more environmentally friendly.

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