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Securing Rights-of-Way to CO_2 Pipeline Corridors in the United States

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Background

In the previous article in this series The Future of Carbon Dioxide Injection EOR in the United States, we discussed the sources and cost of CO_2 supply for enhanced oil recovery ("EOR") in the United States and the benefits that CO_2EOR technology can bring to an otherwise mature oil reservoir that has reached its useful productive life.

This article examines the U.S. pipeline system and the regulatory regime for the transportation of CO_2 across public and private land and some of the potential means of securing rights-of-way to the land where construction of a new pipeline corridor is planned.

In order to transport CO_2 necessary for CO_2EOR operations, U.S.-based oil producers rely on a network of over 50 privately held pipelines spanning some 7,200km in length across the U.S.[1] Of this, Texas boasts the largest network, which includes 1,200km of pipelines centered along the Gulf Coast (namely Mississippi, Louisiana and eastern Texas). An additional 4,100km of pipeline primarily serves the Permian Basin in West Texas and New Mexico and is fed with CO_2 from nearby sources in New Mexico and Colorado. The remaining sizeable portion of the U.S. CO_2 pipeline network is in the Rocky Mountains, with 1,150km operating in northern Colorado, Wyoming and Montana.[2]

Given the extensive existing network, siting a route through which a new pipeline corridor can be constructed is generally no easy task. Significant capital outlays, numerous regulatory consents and rights-of-way approvals over public and/or private land necessitate thorough siting and planning of a CO_2 pipeline, particularly so where the source of the CO_2 supply and the location of the EOR operations are at some distance from each other. Minimizing the capital expenditure involved in constructing a new CO_2

[1] Nat'l Energy Tech. Lab., A Review of the CO_2 Pipeline Infrastructure in the U.S., 3 (Apr. 21, 2015) (these figures include various sizes of pipeline, including larger-diameter trunk-lines which carry combined volume from two or more sources, direct lines that supply an exclusive supplier and an exclusive user, and feeder lines that provide CO_2 for each type of pipeline segment along the CO_2 transportation chain).

[2] *Id.*

pipeline and securing title (typically in the form of rights-of-way) to the land which the pipeline will run is critical to the success of any CO_2EOR project. The capital expenditure for the proposed Lobos pipeline which is to supply CO_2 from the southwestern U.S. to Permian Basin oil fields in Texas is, for example, expected to exceed $300 million.[3]

Unlike natural gas pipelines crossing one or more U.S. states, which are regulated by the Federal Energy Regulatory Commission ("FERC"),[4] there is no federal government agency authorized to oversee the routing of proposed new CO_2 pipeline corridors in the U.S. and no federal authorization exists to condemn privately-owned land for a CO_2 corridor.[5] Rather, the construction and transportation of CO_2 and acquisition of public and private land across which a new pipeline corridor is to be constructed necessitate an examination of both federal and state regulations. This article will also focus specifically on the legal tools that may be availed by pipeline owners to assist them to secure the legal rights to construct a CO_2 pipeline corridor over public and private land in the U.S.

How are CO_2 pipelines sited on publicly-owned lands?

Multiple levels of government, namely municipal, county, state and/or (as applicable) federal, control the ownership of public land in the U.S. over which a pipeline owner may propose to site a new CO_2 pipeline corridor.

The federal government manages significant tracts of public land in the U.S., owning some 47 percent of the land in the western U.S.[6] and is the majority landowner in a number of states, for example, Nevada (where it owns 85 percent), Utah (where it owns 65 percent) and Oregon (where it owns 53 percent).[7] However, federally controlled land is not held or managed by one single federal agency, and a pipeline developer/owner must apply for a right-of-way from each federal agency that controls a parcel of public land along the proposed pipeline corridor.[8]

Each such federal agency is required to administer the land it controls consistent with multiple authorizing statutes. For example, the Federal Land Policy and Management Act ("FLPMA") prescribes how the U.S. Bureau of Land Management ("BLM") must deal with a variety of lands under its administration. BLM is also the principal administrator of the Mineral Leasing Act ("MLA") which sets out a framework for the provision of rights-of-way for the construction of CO_2 pipelines in the U.S.[9]

An application for rights-of-way over BLM lands requires the pipeline owner to submit a development plan detailing the purpose and need for the pipeline, its proposed route, design, safety permitting details, operational plans, and ultimate decommissioning and land rehabilitation strategy. An application is then

[3] Lobos Pipeline Project FAQ, Kinder Morgan, http://www.kindermorgan.com/content/docs/lobos_faq.pdf (construction is currently suspended due to the drop in oil prices), *see* Nicole Maxwell, *Kinder Morgan withdraws CO_2 pipeline application*, Albuquerque Journal (Jan. 23, 2015) https://www.abqjournal.com/530879/kinder-morgan-withdraws-co2-pipeline-application.html.

[4] 15 U.S.C. 717f(e), (h) allow a natural gas pipeline developer to seek a U.S. district court order to condemn land if the developer cannot privately agree a sale with the landowner, provided that the developer holds a Certificate of Public Convenience and Necessity from FERC.

[5] Nat'l Energy Tech. Lab., at 31-32.

[6] The "western U.S." refers to the 11 western-most states, excluding Alaska and Hawaii.

[7] Carol Hardy Vincent et al., Cong. Research Serv., R42346, Federal Land Ownership: Overview and Data, 4-5, 20 (2014).

[8] However, 30 U.S.C. § 185(c)(2) authorizes the U.S. Secretary of the Interior to grant a right-of-way through lands administered by multiple federal agencies.

[9] *In Exxon Corp. v. Lujan*, 730 F.Supp. 1535, 1543 (D.Wyo 1990), the U.S. District Court of Wyoming ruled that it was not unreasonable for BLM to regulate CO_2 pipeline corridors under the MLA rather than FLPMA (BLM was free to regulate under either statute). By siting this particular CO_2 pipeline under the MLA, BLM required that the pipeline be operated as a common carrier. *See also* 43 CFR § 2885.11 (b)(16).

evaluated by BLM in accordance with the MLA and BLM's own regulations, and ultimately with overall land management needs in mind. BLM can, for example, propose alternative corridors for a CO_2 pipeline where the proposed route may result in serious environmental consequences that cannot be mitigated or may not be in the public interest or in conformity with land use plans.

While right-of-way application processes vary across U.S. federal agencies, what makes the process, and ultimately permitting approval, uncertain and time-consuming for pipeline owners is the environmental review that each federal executive agency is required to undertake pursuant to the guidance prescribed under the National Environmental Policy Act ("NEPA").[10]

NEPA stipulates that each federal executive agency (including BLM) must evaluate the environmental effects of certain proposed government actions as part of its procedural decision making, such as whether to approve a CO_2 pipeline project.[11] If the decision to grant one or more rights-of-way for a proposed pipeline qualifies as a major federal action, and is not in a category excluded from NEPA, NEPA review requires either the preparation of a thorough Environmental Impact Statement or, where the project's impacts are less than significant, a more limited Environmental Assessment.[12]

A failure to comply with the NEPA procedures may lead to legal challenges by third-party project opponents seeking to invalidate a federal agency's right-of-way approval. Pipeline owners are therefore naturally desirous of ensuring that a NEPA review has been conducted pursuant to NEPA protocols so that it is not open to challenge later on.

Before the final grant of a right-of-way, the federal executive agency involved will determine what financial assurances are required of the pipeline owner. With the BLM, for example, owners are generally obliged to provide a performance bond to cover loss and/or damage caused to individuals and/or the environment as a result of the construction of the proposed pipeline and occupancy of the right-of-way.[13] If the pipeline owner is successful in obtaining the rights-of-way over the desired BLM lands, BLM will charge the pipeline owner annual rent per acre for the use of these rights-of-way.[14] Such annual rental is calculated by reference to a statutory rent schedule, adjusted by BLM on an annual basis for inflation, with each local county being allocated into a specific pricing zone.[15] The per acre price in each zone is based on 80 percent of the average land and building value as measured by the National Agricultural Statistics Service, with the pricing zones being updated by BLM every 10 years.[16]

To the extent a CO_2 pipeline crosses state and/or local government administered land, applicable state and local government laws and regulations also need to be borne in mind. As many as half of all U.S. states have enacted some form of environmental review program not dissimilar – but in addition – to

[10] Whilst the U.S. government does not collect regular data on the timeframe to complete NEPA reviews, the Government Accountability Office found that Environmental Impact Statements which were completed in 2012 took, on average, 4.6 years to prepare. In a survey of executive agencies, Environmental Assessments took, on average, up to 1.5 years to prepare, depending on the agency. U.S. Govt. Accountability Office, GAO-14-369, *National Environmental Policy Act-Little Information Exists on NEPA Analyses*, 7, 13-14 (Apr. 2014).

[11] 42 U.S.C. §4331(a).

[12] 40 C.F.R. 1502.4, 1508.18, 1508.25 (NEPA regulations consider the decision in context and in the severity of impact, weighing such factors as impact on public health and safety, characteristics of the land, effects on the quality of the human environment, cumulative impacts on the environment and compliance with environmental law).

[13] 43 C.F.R. § 2885.11(b)(7).

[14] 43 C.F.R. § 2806.12.

[15] 43 C.F.R. §§ 2806.20.

[16] 43 C.F.R. §§ 2806.21-22. Other federal land-owning agencies have their own rental rates and appraisal guidelines, as do state lands offices such as Arizona and New Mexico.

NEPA, meaning that acquiring the rights-of-way to public land, be it federal, state or locally administered land, can be a timely and costly process for constructing a CO_2 pipeline in the U.S.[17]

How CO_2 pipelines are sited on privately-owned land: the Texas example.

As we have seen, public land transactions in the U.S. are governed by a variety of federal, municipal, state and/or local laws. Private land, on the other hand, is generally governed by the laws of the individual state.

In this section, we focus on Texas, being the leading oil producing state in the U.S. and having the most active number of CO_2EOR projects utilizing a substantial share of the existing U.S. CO_2 pipeline network.

Like the laws of several other U.S. oil producing states, Texas law provides CO_2 pipeline owners, in certain limited circumstances, with the legal authority to force a private landowner to grant a right-of-way for the construction of a CO_2 pipeline in exchange for just compensation.

Generally speaking, Texas law differentiates between private pipelines and "common carrier" pipelines. Private pipelines are constructed at the expense of, and for the benefit of, the pipeline owner and therefore the owner may freely choose its route and customers. This is, however, subject to successful negotiation of rights-of-way with individual land owners across the intended pipeline corridor and can involve an expensive capital outlay. It is not uncommon for private land owners to resist a reasonable offer and/or to collectively group together in an attempt to drive up the land price where acquisition of rights-of-way to private land is essential to the proposed pipeline development.

A pipeline owner may also acquire longitudinal rights, being the right to site a pipeline along an existing right-of-way owned by a utility or a railroad, for example. What constitutes just compensation for the benefit of such a right-of-way will generally depend on an evaluation of the land "across the fence" from the proposed pipeline corridor. Often a premium is charged for the value of such a pre-assembled corridor.[18] These premiums, called "corridor factors" or "enhancement factors", in turn depend on the density of development through which the pipeline corridor passes. Corridor factors are higher in urban areas, but lower to non-existent in rural areas. Similarly, corridor factors in eastern markets are typically higher than those in less densely populated western markets.

To the extent that negotiations for rights-of-way from private land owners prove difficult or prohibitively costly, in the State of Texas, at least, pipeline owners may consider an alternative means of securing access to private land through the process of self-designation of the pipeline as a "common carrier".[19] Under the Texas Natural Resources Code, a "common carrier" is a pipeline which intends to transport CO_2

[17] Richard Lazarus, *The National Environmental Policy Act in the U.S. Supreme Court: A Reappraisal and a Peek Behind the Curtains*, 100 Geo. L.J. 1507, 1510 (2012); *see also* Council for Environmental Quality, States and Local Jurisdictions with NEPA-like Environmental Planning Requirements, https://ceq.doe.gov/state_information/states.html.

[18] Where, however, the rights acquired are a simple crossing of an existing right-of-way, these are sometimes priced on a fixed transactional basis as opposed to being land value-based, and therefore will not attract "across the fence" type premiums. Similarly, several states have begun to adopt legislation regulating the costs to acquire a right-of-way that crosses an existing corridor owned by a public or quasi-public utility. In such cases, the regulated price for just compensation is typically nominal.

[19] While Texas law requires a pipeline owner to qualify as a common carrier in order to enjoy the right of eminent domain or condemnation authority, legal requirements vary across U.S. states. For example, Louisiana law grants condemnation authority for CO_2 pipelines (LA. REV. STAT. ANN. § 30:1108); Mississippi grants condemnation authority for CO_2 pipelines in connection with secondary or tertiary oil and gas recovery (MISS. CODE ANN. § 11-27-47); and New Mexico grants condemnation authority for CO_2 trunk pipelines (N.M. STAT. ANN. § 70-3-5). Pipeline owners need to be familiar with the precise legal requirements and flexibilities available to them in the relevant states.

to or for the public for hire without discrimination as to the customer or price (essentially allowing third parties the right to use the pipeline for transportation of CO_2 at uniform rates).[20]

The common carrier designation is a useful tool for pipeline owners as it grants them the legal authority to compel a landowner in Texas to grant a right-of-way over its private land necessary for the "construction, maintenance, or operation of the common carrier pipeline."[21]

Subject to court scrutiny only to the extent of legal challenge, the common carrier self-designation is an election made by a pipeline owner when applying for a permit to operate a CO_2 pipeline (called a T-4 permit). T-4 permits are issued by the Texas Railroad Commission. The Railroad Commission does not, however, have statutory authority to adjudicate whether a pipeline owner truly is a common carrier with the right to condemn private land. Naturally this has led to legal uncertainty as to what constitutes a valid designation as a common carrier.

Besides the statutory definition of a "common carrier", Texas courts have not, until 2009, fully considered the criteria for determining whether a CO_2 pipeline is operating as a common carrier and therefore has the legal authority to condemn private property. Challenges to recent Texas case law may, however, clarify the requirements for self-declaration as a "common carrier" for pipeline owners going forward. We will now look at the background to the Texas Rice-Denbury Green decision and the current issues before the Texas Supreme Court.[22]

How has a recent Texas Supreme Court decision changed the authority of a pipeline owner to condemn private land?

In Texas, private landowners affected by the development of CO_2 pipelines have challenged the basis on which pipeline owners have declared themselves to be a "common carrier" and have sought to exercise eminent domain to acquire private land for pipeline construction.

The principle and purpose behind eminent domain in Texas is that it allows private pipeline companies to condemn private property, provided that such pipeline companies are common carriers. As we have seen above, Texas statutes define a "common carrier" to be a person who "owns, operates, or manages … pipelines for the transportation of carbon dioxide…in whatever form to the public."[23]

In 2009, a landowner, Texas Rice Land Partners, Ltd. and its lessee (together, "Texas Rice"), challenged the basis on which a CO_2 pipeline owner, Denbury Green Pipeline-Texas, LLC ("Denbury"), declared itself a common carrier and purported to exercise legal authority to condemn private property for the construction of an extension to an existing pipeline to run from the Texas/Louisiana border through to the Hastings and Oyster Bayou fields in the Brazoria and Galveston counties where Denbury affiliated CO_2EOR operations were situated.[24]

[20] TEX. NAT. RES. CODE §§ 111.002(6), 111.015-17.

[21] TEX. NAT. RES. CODE § 111.019. TEX. PROP. CODE §§ 21.041-42 provide that the amount due a landowner for condemned property shall be based on evidence of the value of the property being condemned, the injury to the property, any benefit to the landowner, and use of the condemned property.

[22] *Texas Rice Land Partners, Ltd. v. Denbury Green Pipeline-Texas, LLC,* No. 150-0225 (Tex. argued Sept. 15, 2016).

[23] TEX. NAT. RES. CODE § 111.0192.

[24] *Denbury Green Pipeline-Texas, LLC v. Texas Rice Land Partners, Ltd.*, No. E-181,923, 2009 WL 8729428 (Tex. Dist. 172d, Jan. 5, 2009), *rev'd.* 296 S.W.3d 877 (Tex. App.—Beaumont 2009), rev'd, 363 S.W.3d 192 (Tex. 2012).

The dispute arose initially in a Texas State district court in Jefferson County.[25] Before initiating construction of its planned CO_2 pipeline, Denbury had filed a T-4 application with the Texas Railroad Commission for a permit to construct and operate the CO_2 pipeline as a common carrier (involving a self-declaration, as outlined above). The application was approved, and Denbury subsequently began survey activities in anticipation of construction of the CO_2 pipeline. The dispute arose around this time when Denbury sought access to Texas Rice's land for furtherance of surveys and ultimately construction activities, but was refused entry. Denbury therefore sought to avail itself of the legal authority of a common carrier to condemn private property in Texas, and this is how the dispute began.

Texas Rice sought, through legal challenge, a determination as to whether Denbury was indeed a "common carrier", as prescribed under the Texas Natural Resources Code, conferring on it the legal authority to condemn private property. At issue for the Texas State district court therefore was whether or not there were sufficient factual grounds and evidence to conclude that the Denbury pipeline was intended to transport CO_2 for public use or hire. If it was, then Denbury would qualify as a common carrier and could exercise the right of eminent domain. This required the Court to consider who were the proposed customers of the CO_2 pipeline and whether or not the pipeline would serve the interests of the broader public as a common carrier.

The Texas State district court found that Denbury qualified as a "common carrier" and therefore had corresponding legal authority to condemn private land.[26] This decision was subsequently affirmed by an intermediary Texas State court of appeal.[27] Texas Rice later appealed this decision to the Texas State Supreme Court.[28]

In its 2012 opinion, the Texas Supreme Court reaffirmed the legal authority set out in the Texas Natural Resources Code that a common carrier CO_2 pipeline owner may condemn private property,[29] but held that the owner must demonstrate a "reasonable probability"[30] that the pipeline will transport CO_2 on behalf of, or will sell CO_2 to, "parties other than the carrier."[31] The court emphasized the need for special scrutiny when a landowner might be forced to sell private land to a pipeline owner given the "substantial but constitutionally circumscribed" power of condemnation, and noted in its decision the protections afforded to property owners in the Texas Constitution, namely the need for adequate compensation to be provided, and that land condemnation may not be for private use.[32] As is customary in the U.S. judicial system, the Court then referred the matter back to the Texas State District Court with this guidance for a full hearing.

After hearings at the district and intermediary appeals courts, the parties sought further clarification on the criteria needed to satisfy the "reasonable probability" public use test.[33]

On appeal, the issues that industry and project participants await clarity on include: (1) when determining whether or not the "reasonable probability" public use test has been met, is the subjective belief or intention of the pipeline owner to serve the public interest relevant or not, (2) what other factors and

[25] *Id.*

[26] *Texas Rice Land Partners, Ltd. v. Denbury Green Pipeline-Texas, LLC*, 363 S.W.3d 192, 195 (Tex. 2012).

[27] *Texas Rice Land Partners, Ltd. v. Denbury Green Pipeline-Texas LLC*, 296 S.W.3d 877, 878 (Tex. App.—Beaumont 2009), rev'd, 363 S.W.3d 192 (Tex. 2012).

[28] *Texas Rice Land Partners, Ltd. v. Denbury Green Pipeline-Texas LLC*, 363 S.W.3d 192, 195-97 (Tex. 2012).

[29] *Id.* at 197.

[30] In its decision, the court defined "reasonable probability" as "one that is more likely than not."

[31] *Texas Rice* 363 S.W.3d 192, 202 (Tex. 2012).

[32] *Id.* at 197-198.

[33] *Texas Rice Land Partners, Ltd. v. Denbury Green Pipeline-Texas, LLC,* 457 S.W.3d 115, 117 (Tex. App. —Beaumont 2009), review granted (Apr. 1, 2016).

evidence are likely to be taken into account when the court considers the "reasonable probability" public use test. For example, will the court look favorably on the entry into of transportation agreements with third parties as an indication of the intention of the pipeline owner to serve the public interest, and (3) whether the court may introduce a threshold for verifying the "public use" element of the "reasonable probability" public use test in order to address the present uncertainty as to what may demonstrate "public use".[34]

The final opinion of the Texas Supreme Court on these matters is currently pending. In a subsequent article in this series, we will examine the outcome of this decision and likely implications for CO_2 pipeline owners looking to designate themselves as common carriers in the State of Texas in the future.

Conclusion

Careful and thorough due diligence of the source of CO_2 supply, the existing CO_2 pipeline network, and the location of a proposed CO_2EOR operation will be critical to ensuring the economic and practical success of a CO_2EOR project.

Strategic local community outreach can also assist pipeline owners to get out in front of the permitting process by meeting with local stakeholders in each of the communities through which a planned pipeline will pass to head off opposition and generate good will and support for a project.

Regardless of the outcome of the Texas Rice-Denbury case, pipeline owners and project sponsors of a CO_2EOR project dependent on the siting and construction of a CO_2 pipeline corridor need to be alert to the potential difficulties in securing rights-of-way to both public and private land in the U.S., and need to anticipate potential legal challenges like those outlined above and familiarize themselves with applicable federal, state and/or local statutes and case law applicable to the exercise of eminent domain.

Project participants will also want to decide whether a declaration as a common carrier is the desired approach given that, as a practical matter, it requires a pipeline owner to provide third parties open access to its pipeline.

If you have any questions about the content of this alert, please contact the Pillsbury attorney with whom you regularly work, or the attorneys below.

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[34] Brief on the Merits for Petitioner at 10-13, *Denbury Green Pipeline-Texas, LLC v. Texas Rice Land Partners, Ltd.*, No. 15-0025 (filed Nov. 9, 2015); Brief on the Merits for Respondent at 22, 25, 27, *Denbury Green Pipeline-Texas, LLC v. Texas Rice Land Partners, Ltd.*, No. 15-0025 (filed Dec. 23, 2015).