THE NEW FUEL FRONTIER: BIOMASS CONTRACTING*

L. PAUL GOERINGER**, DR. H.L. GOODWIN***, AND DR. MICHAEL POPP****

I. INTRODUCTION

In the 2006 State of the Union address, former President George W. Bush announced a plan to fund research into the production of ethanol from sources other than corn, including switchgrass, wood chips, and stalks from food crops.[1] Most ethanol is derived from corn, but corn alone cannot supply enough ethanol to fully meet the United States' energy needs.[2] New techniques are able to produce ethanol from plant cellulose, which is found in the cellular walls of all forms of plant life.[3] There are many sources of suitable cellulose for ethanol production collectively called "biomass."[4]

At the time of the speech, there was no commercial-scale production of cellulosic ethanol taking place in the United States.[5] To meet the President's challenge, Congress passed the Energy Independence Security Act of 2007 (EISA), which set annual targets for the domestic production of cellulosic ethanol, increasing from one billion gallons in 2013 to sixteen billion gallons in 2022.[6] EISA provides grants and other financial

* The authors would like to thank Jodi Endres of the University of Illinois, Dr. Ira Altman of the Southern Illinois University, Timothy Slating, Dr. Francis Epplin of Oklahoma State University, Brooke Schumm, and Phil Kunkel for answering various questions on contracting issues, cellulosic ethanol production, and bankruptcy issues. The views in this article reflect only the views of the authors and are not those of the University of Arkansas, the Department of Agricultural Economics and Agribusiness, the University of Maryland, the Center for Agricultural and Natural Resource Policy, or the Department of Agricultural and Resource Economics.

** Mr. Goeringer is a research associate with the Center for Agricultural and Natural Resources Policy in the Department of Agricultural and Resource Economics at the University of Maryland, College Park. This article was developed during his time as a graduate assistant for Dr. H.L. Goodwin at the University of Arkansas's Department of Agricultural Economics and Agribusiness.

*** Dr. Goodwin is a Professor of Agricultural Economics and Agribusiness with the University of Arkansas's Department of Agricultural Economics and Agribusiness.

**** Dr. Michael Popp is a Professor of Agricultural Economics and Agribusiness with the University of Arkansas's Department of Agricultural Economics and Agribusiness.

[1] George W. Bush, State of the Union Address, 109th Cong., 2d Sess. (Jan. 31, 2006), *available at* http://www.washingtonpost.com/wp-dyn/content/article/2006/01/31/AR2006013101468.html.

[2] Vincent Barbera, Comment, *Tomorrow Today? Cellulosic Ethanol: How It's Done, Who's Getting it Done, and Its Environmental Impact*, 20 VILL. ENVTL. L.J. 27, 29 (2009).

[3] *Id.* at 30.

[4] *Id.*

[5] *Id.* at 31.

[6] 42 U.S.C.A. § 7545(o)(2)(B)(i)(III) (West 2012). *But cf.* Tom Doggett & Ayesha Rascoe, *EPA Proposes 2012 Ethanol Use at 13.2 Billion Gallons*, REUTERS (June 21, 2011, 3:13 PM), http://www.reuters.com/article/2011/06/21/us-usa-ethanol-epa-idUSTRE75K5WV20110621 (indicating

assistance through the Department of Energy (DOE) to help develop the technology necessary to begin commercial production of cellulosic ethanol.[7] Apart from EISA, DOE has invested almost $904 million to build cellulosic ethanol biorefineries.[8]

In addition to the EISA and the DOE, the United States Department of Agriculture (USDA) offers incentives for farmers to switch from traditional crops to dedicated energy crops such as switchgrass, or to collect crop residue that can be used to produce cellulosic ethanol.[9] The 2008 Farm Bill introduced the Biomass Crop Assistance Program (BCAP).[10] The BCAP was designed to provide a financial incentive for farmers to grow energy crops in specific project areas while the market for those crops was established.[11] As of late 2011, nine approved project areas existed in the United States, spanning 173 counties in Arkansas, California, Kansas, Missouri, Montana, Ohio, Oklahoma, Oregon, Pennsylvania, and Washington.[12] The BCAP was initially authorized only through 2012.[13] [14]

Cellulosic ethanol provides a new opportunity for farmers because it can be produced from a wide variety of plants and crop residues, including biomass usually considered agricultural waste. Some examples are wheat straw, rice straw, and corn stover.[15] A farmer could generate additional revenue by selling crop residue to a cellulosic ethanol producer. The timber industry could also generate additional revenue by selling wood chips and other lumber residues to cellulosic ethanol producers.[16] Additionally, cellulosic ethanol can be produced from a dedicated energy crop.[17] Switchgrass, reed canary grass, and alfalfa are examples of

---

that the EPA recently proposed cutting the 2012 target for cellulosic ethanol production from 500 million gallons to between 3.45 million and 12.9 million gallons of cellulosic ethanol).

[7] Barbera, *supra* note 5, at 34.

[8] *See id.* at 42.

[9] *See* Megan Stubbs, Cong. Research Serv., RL 41296, *Biomass Crop Assistance Program (BCAP): Status and Issues*, 13-14 (2011), *available at* http://nationalaglawcenter.org/assets/crs/R41296.pdf.

[10] *Id.* at 1.

[11] John N. Moore & Kale Van Bruggen, *Agriculture's Fate Under Climate Change: Economic and Environmental Imperatives for Action*, 86 CHI.-KENT L. REV. 87, 97 (2011); *see also* 7 U.S.C.A. § 8111(a)(2) (West 2012) (indicating a "project area" is a specific area designated by a bioenergy sponsor; the sponsor has contracts for biomass production in the area, and is within a practical distance from the production facility).

[12] *See USDA Biomass Crop Assistance (BCAP) Program Deadline Approaching*, BEGINNING FARMERS (Aug. 29, 2011), http://www.beginningfarmers.org/usda-biomass-crop-assistance-bcap-program-deadline-approaches/.

[13] *See* Jim Monke, Cong. Research Serv., RL 41433, *Expiring Farm Bill Programs Without a Budget Baseline*, 7 (2012), *available at* http://nationalaglawcenter.org/assets/crs/R41433.pdf.

[14] *Id.*

[15] *See* Biomass Research & Dev. Bd., *The Ecomonics of Biomass Feedstocks in the United States: A Review of Literature, Occasional Paper No. 1*, at 16 (2008), *available at* http://www.usbiomassboard.gov/pdfs/feedstocks_literature_review.pdf.

[16] *See id.* at 24.

[17] *Id.* at 41.

herbaceous energy crops.[18] Woody crops including willow, poplar, cottonwood, sycamore, and southern pine, could also be grown as dedicated energy crops.[19]

Switchgrass production in Arkansas has been the subject of research at the University of Arkansas. One study by Dr. Michael P. Popp calculated the cost of establishing switchgrass in Arkansas. The study calculated the break-even prices for Arkansas farmers and ethanol producers, and looked at advantages and disadvantages of switching from conventional crops to switchgrass.[20] Dr. Popp and his colleagues also analyzed alternatives to traditional row crops in Arkansas' Delta region, where the current levels of irrigation are unsustainable.[21] This study found that the production of dedicated energy crops could increase returns and reduce farmers' losses if the use of the aquifers was restricted in the future.[22]

A farmer is faced with a new set of legal problems when deciding to supply a cellulosic ethanol producer with his crop residue, or when changing to a dedicated energy crop. Furthermore a cellulosic ethanol refinery requires a large capital investment to build, and the ethanol producer will need to guarantee access to a reliable supply of biomass.[23] The ethanol producer is likely to desire long-term contracts with farmers to guarantee the supply of biomass.

This article will discuss considerations in drafting a biomass production contract for farmers or cellulosic ethanol producers. Section II(A)(1) will discuss basic contract law principles in the context of the biomass industry. Section II(A)(2) will provide an overview of the Uniform Commercial Code (UCC) provisions which may apply to biomass. Section II(B) will analyze terms which would typically be included in a biomass production contract. Section II(C) will explain the consequences of possible financial distress or bankruptcy of the cellulosic ethanol producer. Although not exhaustive, this article will provide an overview of the common risks and issues that could arise in contracting for the sale of biomass.

---

[18] *Id.*

[19] *Id.* at 54.

[20] Michael P. Popp, *Assessment of Alternative Fuel Production from Switchgrass: An Example from Arkansas*, 39 J. AGRIC. & APPLIED ECON. 373, 374 (2007), *available at* http://ageconsearch.umn.edu/bitstream/6523/2/39020373.pdf.

[21] *See* Michael Popp, Lanier Nalley & Gina Vickery, *Irrigation Restriction and Biomass Market Interactions: The Case of the Alluvial Aquifer*, 42 J. AGRIC. & APPLIED ECON. 69, 69 (2010).

[22] *Id.* at 84.

[23] *See., e.g.,* David Shaffer, *Poet Breaks Ground on Cellulosic Ethanol plant in Iowa*, STARTRIBUNE (Mar. 13, 2012, 7:26 PM), http://www.startribune.com/business/142515155.html?refer=y (indicating that as recently as March 2012, the cost of building a cellulosic ethanol refinery in Iowa was projected at $250,000,000).

II. DISCUSSION

A. Contract Law

Contracting for biomass production is a developing area of law. Farmers have experience dealing with crop and livestock production contracts, but a biomass production contract presents contracting parties with unresolved legal issues, principally in the application of the UCC and common law. This article will examine a biomass production contract from the perspective of Farmer B, a hypothetical farmer, and Ethanol A, a hypothetical cellulosic ethanol producer. Both of the hypothetical parties are located in Arkansas, in one of the BCAP project areas.[24]

1. Basic Contract Law Principles

The biomass industry in the United States is in its infancy. Typically, a farmer will be presented with a written biomass production contract by the cellulosic ethanol plant. This is not just wise in order to provide a record of the parties' agreement, but will also be legally required. With a large investment at stake in a cellulosic ethanol plant, the ethanol producer will want multi-year commitments from farmers to ensure a sufficient supply of biomass to operate the facility.[25] Accordingly typical contracts will require deliveries of biomass over the course of many years and the statute of frauds, which requires all contracts that cannot be performed within one year to be in writing and signed by both parties, will apply.[26]

Farmers should always read and understand their contract before signing.[27] As is normally the case, the parties' legal rights are determined by the contract, and both parties need to fully understand the contract to understand what is expected of them over its duration.[28] If our hypothetical Farmer B finds the contract language unclear, he would be prudent to consult with an attorney.[29] Hiring an attorney should not be seen as an expense, but instead as an investment to avoid larger costs in the future.[30]

---

[24] *See USDA Biomass Crop Assistance (BCAP) Program Deadline Approaching*, *supra* note 12.

[25] *See* James A. Larson et al., *Risk and Return for Bioenergy Crops Under Alternative Contracting Agreements* 1 (2008), *available at* http://ageconsearch.umn.edu/bitstream/6842/2/sp08la02.pdf.

[26] *See* ARK. CODE ANN. § 4-59-101(6) (West 2011) (citing Arkansas law because the paper's hypothetical farmer is in that state).

[27] *See* Neil D. Hamilton, *Why Own the Farm If You Can Own the Farmer (and the Crop)?: Contract Production and Intellectual Property Protection of Grain Crops*, 73 NEB. L. REV. 48, 66 (1994), *available at* http://nationalaglawcenter.org/assets/bibarticles/hamilton_own.pdf.

[28] *See id.*

[29] *See id.*

[30] *See id.*

The party who drafted the contract will often have an advantage over the non-drafting party. Therefore, a farmer who signs a contract drafted by the ethanol producer may be at a disadvantage. After all, "[r]emember the first rule of contracts—the parties who write the contracts take care of themselves."[31] Although it should be noted, that courts have been willing to construe doubtful language in a contract against the drafting party, but a farmer would not want to count on language being doubtful and discuss unclear terms with an attorney.[32]

Farmer B's attorney should always explain the importance of having a final contract that reflects all discussions between the parties. Generally, in the "absence of fraud, accident or mistake, a written contract merges, and thereby extinguishes, all prior and contemporaneous negotiations, understandings and verbal agreements on the same subject."[33] Farmer B should be careful to ensure that everything he and Ethanol A agree upon is written down and included, because anything not in the written contract will not be legally binding.[34] In addition, any oral agreements should be incorporated into the contract or included in a separate writing signed by both parties.[35]

Because of the investment required to start a cellulosic ethanol plant and the constant supply of biomass needed, ethanol producers are likely to use long-term written contracts to ensure their supply. It should be noted, however, that the ethanol plant may still need to buy additional biomass to meet its demand. When the ethanol producer buys more than $500 of biomass, Arkansas law will require a written contract "sufficient to indicate that a contract for sale has been made between the parties and signed by the party against whom enforcement is sought."[36]

The law takes a broad view of what will qualify as a written contract. The contract can be traditional in the sense that it is written by one of the parties and signed by both, but courts have also found a letter or series of letters to be a contract.[37] "A receipt or release, an order blank or

---

[31] *Id.* at 67.

[32] *See* 17A AM. JUR.2D *Contracts* § 343 (2011).

[33] Farmers Coop Ass'n v. Garrison, 454 S.W.2d 644, 646 (Ark. 1970).

[34] *Id.*

[35] *See* Hamilton, *supra* note 27, at 67. *See generally* NEIL D. HAMILTON, FARMER'S LEGAL GUIDE TO PRODUCTION CONTRACTS 12-19 (1995) [hereinafter FARMER'S LEGAL GUIDE], *available at* http://www.nationalaglawcenter.org/assets/articles/hamilton_productioncontracts.pdf (providing additional suggestions on issues an agricultural producer should consider when looking at a production contract); Joseph A. Miller, *Contracting in Agriculture: Potential Problems*, 8 DRAKE J. AGRIC. L. 57, 88-89 (2003), *available at* http://nationalaglawcenter.org/assets/bibarticles/miller_contracting.pdf (presenting a list of the basic rules of agricultural contracting).

[36] ARK. CODE ANN. § 4-2-201(1) (West 2012).

[37] *See* 10 SAMUEL WILLISTON & RICHARD A. LORD, A TREATISE ON THE LAW OF CONTRACTS § 29:29 (4th ed. 2012).

invoice or statement of account, a draft or note, or a check" can also satisfy the requirement.[38]

One exception to the need for a sufficient written contract is when the goods have been received and accepted by the buyer.[39] For example, Farmer B has orally agreed to sell ten tons of wheat straw to Ethanol A. Ethanol A picks up the straw from the farmer. Two months later, Ethanol A has failed to pay for the straw, and Farmer B wishes to bring a legal action to get paid. Farmer B would not need to show a written contract because the biomass has been received and accepted by Ethanol A.[40]

Farmer B's attorney should also explain to him the concept of "accord and satisfaction," which may affect his legal rights if he accepts partial payment.[41] When two parties have a dispute over the amount allegedly owed under a contract, the parties may create a new contract for discharge of the amount owed.[42] When a good faith dispute exists, a new contract is created when a party accepts payment of less than the contract amount.[43] During a dispute over the amount owed, farmers who cash or deposit a check clearly marked "full payment" but that is for an amount less than the disputed sum, may forfeit the disputed difference.[44] But marking a check for an amount less than the debt with "full payment" does not actually create a new contract unless there is a good faith dispute over the amount owed.[45]

For example, Farmer B has signed a long-term contract to provide 100 tons of a specified quality of rice straw to Ethanol A each year. One year, Ethanol A determines that Farmer B's rice straw is below the quality specified in the contract, but still acceptable for cellulosic ethanol production. Ethanol A contacts Farmer B to tell him the rice straw is of lower quality, and that they will not pay the full contract price. Farmer B demands the contract price for the rice straw, but Ethanol A insists he will only pay the reduced rate because the straw is below quality. After negotiating fails to resolve the dispute, Ethanol A sends Farmer B a check for the lower rate marked "final payment for 2013's rice straw," and Farmer B deposits this check. This is an example of accord and satisfaction because

---

[38] *See id.*

[39] *See* ARK. CODE ANN. § 4-2-201(3)(c) (West 2012).

[40] *See generally* Tenn. Valley Cotton Oil Mill v. Oakland Gin Co., 341 So.2d 153, 155 (Ala. Civ. App. 1976) (finding that agricultural crops fall under this exception); O'Day v. George Arakelian Farms, Inc., 540 P.2d 197, 200-01 (Ariz. Ct. App. 1975); Seminole Peanut Co. v. Goodson, 335 S.E.2d 157, 159-160 (Ga. Ct. App. 1985); *In re* Estate of Nelson, 311 N.W.2d 508, 509-10 (Neb. 1981); Wilke v. Holdrege Coop. Equity Exch., 265 N.W.2d 672, 675 (Neb. 1978); Hofmann v. Stoller, 320 N.W.2d 786, 791 (N.D. 1982).

[41] *See* Hamilton, *supra* note 27, at 77.

[42] 29 SAMUEL WILLISTON & RICHARD A. LORD, A TREATISE ON THE LAW OF CONTRACTS § 73:29 (4th ed. 2012).

[43] *See id.*

[44] *See id.*

[45] *See id.*

the following requirements are met: there is a good faith dispute over the amount owed, a payment of a lesser amount made to discharge that debt, and acceptance of the payment by depositing the check. Farmers should be informed that in this situation they should not give in to the temptation to deposit or cash the check before contacting an attorney.[46]

2. The Uniform Commercial Code

The UCC provides a model law for commercial transactions, including biomass production contracts. Article 2 of the UCC encompasses the sale of goods and should be considered when drafting the biomass production contract.[47] The UCC has yet to be applied to biomass production contracting, but it is likely to govern biomass transactions.

Article 2 of the UCC applies to transactions involving the sale of goods.[48] The UCC has definition of goods includes "growing crops."[49] States have found "growing crops" to include wheat,[50] corn,[51] sunflowers,[52] cotton,[53] soybeans, [54]watermelons,[55] and potatoes.[56] A dedicated crop for biomass production, like switchgrass, will likely be encompassed in the definition of "growing crops" because of the similarities between the two.

Whether the "growing crops" designation also covers the crop residue left over after harvesting a crop is an unresolved issue. The drafters of the UCC state in the comments that "growing crops" should be given a broad definition to include "modern practices."[57] Arguably, "modern practices" include the use of crop residues to produce ethanol, thus crop residue should fall under this definition. Ultimately, a court may have to decide if crop residues are goods under Article 2 of the UCC.

The UCC also addresses issues that arise when one party provides the other party with notice of intent not to perform the contract.[58] For

---

[46] The reader should note that the lesser amount would satisfy the current disputed contract, but not future contracts. If the farmer and the ethanol producer negotiate another biomass production contract, then it is considered a separate legal transaction. Payments made under the new contract would not apply to the disputed amount. See 1 Am. Jur.2d *Accord and Satisfaction* § 49 (2011).

[47] *See* FARMER'S LEGAL GUIDE, *supra* note 35, at 20.

[48] *See* U.C.C. § 2-102 (2003).

[49] *See* U.C.C. § 2-105(1) (2003).

[50] *See* Balfour, Guthrie & Co., Ltd v. Gourmet Farms, 166 Cal. Rprt. 422, 426 (Cal. Ct. App. 1980).

[51] *See* Countrymark Coop, Inc. v. Smith, 705 N.E.2d 738 (Ohio Ct. App. 1997).

[52] *See* Red River Commodities, Inc. v. Eidsness, 459 N.W.2d 811 (N.D. 1990).

[53] *See* Harris v. Hine, 205 S.E.2d 847 (Ga. 1974).

[54] *See* Cargill v. Hale, 537 S.W.2d 667 (Mo. Ct. App. 1976).

[55] Zolman v. SEMO Produce, Inc. 875 S.W.2d 605 (Mo. Ct. App. 1994).

[56] *See* H.C. Schmieding Produce Co. *v.* Cagle, 529 So.2d 243 (Ala. 1988); Lickley v. Max Herbold, Inc., 984 P.2d 697 (Idaho 1999); G & H Land & Cattle Co. v. Heltzman & Nelson, Inc., 628 P.2d 1038 (Idaho 1981); Borges v. Magic Valley Foods, Inc., 616 P.2d 273 (Idaho1980).

[57] *See* U.C.C § 2-105 cmt. 1 (2003).

[58] *See* U.C.C. § 2-610 (2003).

example, Ethanol A gives notice to Farmer B that Ethanol A will refuse biomass deliveries from Farmer B. The issue is the amount of damages that should be paid to Farmer B. In this example, Farmer B would need to show that the breach "substantially impairs" the value of the whole contract in order to receive damages.

The Arkansas Court of Appeals recently analyzed when an agricultural contract is "substantially impaired." In *Cargill, Inc. v. Storms Agri Enterprises, Inc.*, a dairy entered into a contract to purchase seventeen truckloads of cottonseed from Cargill.[59] After the first three deliveries, the dairy received a better price for cottonseed from a third party and canceled delivery of the fourth truckload from Cargill.[60] Cargill then sent a letter to the dairy stating that they considered this a breach of the contract and demanded payment of the difference between the contract price and the current market price.[61] An Arkansas Court of Appeals found "substantially impair" to require "the fact finder to look at the materiality of a party's repudiation as it relates to the entire contract."[62] Looking at the facts, the court found repudiation of fourteen out of seventeen loads of cottonseed substantially impaired the whole contract.[63]

A court will have to decide whether repudiation "substantially impairs" a biomass-production contract and *Cargill* may provide guidance in analogous cases. For example, Ethanol A and Farmer B have a biomass production contract spanning a ten-year period. In year two of the contract, Ethanol A discovers that Farmer C is willing to supply biomass at a much lower price than Farmer B. Ethanol A tells Farmer B they will not accept any further shipments of biomass. Farmer B has only made two shipments and under the contract would make eight more. As in *Cargill*, there was repudiation early in the life of the contract with a majority of deliveries still outstanding. According to *Cargill*, this may substantially impair the contract.

A court could also consider the fact that Farmer B might have no other available markets for biomass if Ethanol A repudiates the biomass production contract. Biomass has fewer available markets compared to a traditional row crop, which is compelling evidence that the repudiation has "substantially impaired" the biomass production contract. A court would have to decide if availability of fewer alternative markets is sufficient proof the biomass contract was substantially impaired.

Once it is determined that the contract has been breached, damages awarded will obviously depend on whether the farmer or the ethanol producer is the breaching party. If the ethanol producer breaches the

---

[59] Cargill, Inc. v. Storms Agri Enter., 878 S.W.2d 786, 788 (Ark. Ct. App. 1994).
[60] *Id.*
[61] *Id.*
[62] *Id.* at 789.
[63] *Id.* at 790.

contract, then the farmer will have several remedies available.[64] The farmer can cancel the biomass production contract.[65] The farmer can withhold delivery of the biomass, including stopping any employee or third-party holding the biomass from delivering to the ethanol producer.[66] The farmer can also sell the biomass for another purpose and then sue the ethanol producer for any loss of income.[67]

For example, Farmer B and Ethanol A contract for five tons of biomass at $100/ton, and Ethanol A breaches the contract before the last delivery. Farmer B then sells the biomass to Farmer D as a feedstock at only $80/ton. Farmer B has lost $20/ton from Ethanol A's breach that he can recover. Farmer B may also get incidental damages for "any commercially reasonable charges, expenses or commissions incurred in stopping delivery, in the transportation, care and custody of goods after the [ethanol producer's] breach, in connection with return or resale of the goods or otherwise resulting from the breach."[68]

If the farmer is the breaching party, the ethanol producer will also have several available remedies. The ethanol producer can cancel the biomass production contract and recover any part of the price paid to the farmer.[69] The ethanol producer can also seek monetary damages.[70] There are two methods of calculating the producer's monetary damages.[71] One calculation is the difference between the price of replacement goods and the contract price.[72] The other is the difference between current market price and the contract price.[73]

The ethanol producer may also be able to recover incidental or consequential damages.[74] Incidental damages for the recipient of the goods under a breached contract include "expenses reasonably incurred in inspection, receipt, transportation and care and custody of goods rightfully rejected, any commercially reasonable charges, expenses or commissions in connection with effecting cover and any other reasonable expense incident to the delay or other breach."[75] Consequential damages are "[any] loss resulting from general or particular requirements and needs of which the

---

[64] U.C.C. § 2-703 (2003).
[65] U.C.C. § 2-703(f) (2003).
[66] U.C.C. § 2-703(a)-(b) (2003).
[67] U.C.C. § 2-706 (2003).
[68] U.C.C. § 2-710 (2003).
[69] U.C.C. § 2-711(1) (2003).
[70] U.C.C. § 2-712 (2003).
[71] Dickson v. Delhi Seed Co., 760 S.W.2d 382, 388-89 (Ark. Ct. App. 1988).
[72] *Id.*; *see also* Bradford Stone, *Uniform Commercial Code In a Nutshell*, 133-34 (West 8th Ed. 2012) (comparing cover to the seller's right to the difference between contract price and resale price).
[73] U.C.C. § 2-713 (2003); *see also* Stone, *supra* note 72, at 134-35 (comparing the buyer's remedy to the seller's right to the difference between contract price and market price).
[74] *Delhi Seed Co.*, 760 S.W.2d at 389.
[75] U.C.C. § 2-715(1) (2003).

seller at the time of contracting had reason to know and which could not reasonably be prevented by cover or otherwise."[76]

The UCC treats the sale of goods differently if the seller is a "merchant." A "merchant" is defined by the UCC as:

> a person who deals in goods of the kind or otherwise by his occupation holds himself out as having knowledge or skill peculiar to the practices or goods involved in the transaction or to whom such knowledge or skill may be attributed by his employment of an agent or broker or other intermediary who by his occupation holds himself out as having such knowledge or skill.[77]

States are divided on whether farmers are merchants under this definition. In Arkansas, where our hypothetical Farmer B is located, the Arkansas Supreme Court has held that farmers are not considered merchants under the UCC.[78] In *Cook Grains, Inc. v. Fallis*, Cook Grains believed that it had entered into a contract with a farmer for the delivery of 5,000 bushels of soybeans.[79] The grain company's agent signed a contract and mailed it to the farmer, but the farmer never signed it.[80] The farmer never delivered the soybeans.[81] The court found that insufficient evidence was presented to show the farmer was "a dealer in goods of the kind [soybeans] or by his occupation holds himself out as having knowledge or a skill peculiar to the practices of goods involved in the transaction, and no such knowledge or skill can be attributed to him."[82] The court turned to traditional definitions of a "farmer," and found a farmer is "one devoted to the tillage of the soil, such as an agriculturalist ... [and] a man who cultivates a considerable tract of land in some one of the usual recognized ways of farming."[83] According to the court, the UCC's definition of a merchant should not be applied to farmers when they are selling the commodities that they grow.[84] This decision dates from 1965, just four years after the passage of the UCC in Arkansas.[85] At that time, the court found no other state "holding that the word farmer may be construed to mean merchant."[86] Since 1965, a number

---

[76] U.C.C. § 2-715(2) (2003).
[77] U.C.C. § 2-104(1) (2003).
[78] Cook Grains, Inc. v. Fallis, 395 S.W.2d 555, 556-57 (Ark. 1965).
[79] *Id.* at 555.
[80] *Id.* at 556.
[81] *Id.*
[82] *Id.*
[83] Cook Grains, Inc., 395 S.W.2d at 556
[84] *Id.* at 557.
[85] *See* U.C.C. § 1-101 (2003).
[86] *Cook Grains, Inc.*, 395 S.W.2d at 556-57.

of states have found farmers to be merchants, while other states like Arkansas have held that they are not.[87]

States which have found farmers to be merchants did so with the view that modern agriculture is "far more than simply planting and harvesting crops ... [today's] farmers possess an extensive knowledge and sophistication regarding the purchase and sale of crops on the various agricultural markets."[88] Courts have looked at the length of time the farmer has been engaged in selling the particular commodity, the degree of the farmer's business understanding, the farmer's knowledge of agricultural markets, and the farmer's experience with the customs and practices of selling the commodity.[89] A farmer with a long history of marketing and contracting his crop would be more likely to be classified as a merchant. On the other hand, a farmer who has another profession and only farms as a hobby, with limited and only casual understandings of agricultural markets, may not meet the UCC's definition of merchant.

When courts find a farmer to be a merchant under the UCC. Farmers in that state would gain the UCC's protections for merchants.[90] Farmers would also have to deal with the protections that the UCC provides buyers, including implied warranties.[91]

The UCC contains multiple implied warranties, which should be considered when drafting a contract for biomass production.[92] The first is the implied warranty of merchantability. Because the biomass is being sold for cellulosic ethanol production, the UCC will imply a warranty that it is "fit for the ordinary purposes for which such goods are used."[93] Because the cellulosic ethanol industry is so new, ethanol producers may have trouble enforcing this warranty in court. Furthermore, the implied warranty of merchantability requires that the seller be a merchant in the kind of goods being sold.[94] As previously discussed, farmers are not considered merchants in all jurisdictions. Even in jurisdictions where farmers are considered merchants of their primary crop, farmers may not be merchants of crop residue. In *Fred J. Moore v. Schinmann*, a farmer who grew mint and usually sold his crop in the form of mint oil was considered a merchant of mint oil, but not a merchant of mint roots.[95] When the farmer made a single sale of mint roots, that sale was not accompanied by an implied warranty of

---

[87] *See* David B. Harrison, Annotation, *Farmers as "Merchants" Within Provisions of UCC Articles 2, Dealing With Sales*, 95 A.L.R.3d 484 (1979).

[88] Colorado-Kansas Grain Co. v. Reifschneider, 817 P.2d 637, 640 (Colo. App. 1991).

[89] *E.g., id.* at 640.

[90] *See* Hamilton, *supra* note 27, at 77.

[91] *See id.*at 76-84.

[92] *See* U.C.C. §§ 2-313 to -315 (2003).

[93] U.C.C. § 2-314(2)(c) (2003).

[94] U.C.C. § 2-314(1) (2003).

[95] Fred J. Moore Inc. v. Schinmann, 700 P.2d 754, 757 (Wash. Ct. App. 1985).

merchantability.[96] A similar distinction could be made between crops and crop residue.

The UCC provides an implied warranty of fitness for a particular purpose when "the seller at the time of contracting has reason to know any particular purpose for which the goods are required and that the buyer is relying on the seller's skill or judgment to select or furnish suitable goods."[97] Farmers contracting with cellulosic ethanol producers will usually know the particular purpose for which the goods are required. This warranty is implied even when the seller is not a merchant.[98] However, the buyer must rely on the seller's skill or judgment in some way.[99] Often, the cellulosic ethanol producer will know more than the farmer about what biomass is suitable for the ethanol production process, which may require a certain quality of biomass in order to operate.[100] When the buyer has superior knowledge about his purpose, this warranty will not apply. However, farmers entering the market should be cautious about marketing biomass for ethanol production unless they know it is fit for the purpose.

Although these legal questions are interesting, they can be avoided. The farmer can waive the implied warranties by including language such as "as is," "with all faults," or other language which calls the buyer's attention to the exclusion of warranties and communicates that there is no implied warranty.[101] The cellulosic ethanol producer should avoid trying to enforce an implied warranty by including a precise description of what he is bargaining for in the contract.[102]

This discussion of contract and commercial law is intended only an overview. There are other issues that may arise that have not been covered here. As mentioned previously, an inexperienced farmer should hire an attorney to ensure that all potential issues are addressed.

B. Common Biomass Contract Terms

Currently, the cellulosic ethanol industry is in its infancy and there is no model biomass production contract.[103] The industry has not had the time or experience to develop a standard production contract like the vegetable and poultry industries employ. Nevertheless, some terms will be

---

[96] *Id.*

[97] U.C.C § 2-315 (2003).

[98] *Id.*

[99] *Id.*

[100] *See* Ira J. Altman, Dwight R. Sanders, & Chris R. Boessen, *Applying Transaction Cost Economics: A Note on Biomass Supply Chains*, 25 J. OF AGRIBUSINESS 107, 112 (2007) [hereinafter *Applying Transaction Cost Economics*].

[101] U.C.C § 2-316(2) (2003).

[102] *See* U.C.C. § 2-313 (2003).

[103] *See* Zachary R. F. Schreiner, Comment, *Frankenfuel: Genetically Modified Corn, Ethanol, and Crop Diversity*, 30 ENERGY L. J. 169, 170 (2009).

shared between all biomass production contracts. The drafter of a biomass production contract should consider including: (1) the price to be paid to the farmer; (2) the quantity supplied; (3) the acceptable quality of biomass; (4) the storage of the biomass; (5) the cellulosic ethanol producer access to information about the biomass; (6) provisions binding future operators of the farm; (7) provisions requiring the use of arbitration; (8) an excuse in performance clause; and (9) a restoration clause.

1. Price Clause

All biomass production contracts will generally involve a price. This clause is one way for both the ethanol producer and the farmer to protect against the risks associated with changing prices.[104] With the high startup costs of the production facility, ethanol producers seek ways to reduce the costs of obtaining a sufficient supply of biomass.[105] Meanwhile the farmer faces uncertainties in price and market for his biomass. Contracting for a fixed price is one way both parties can reduce these risks.

For a short-term contract, the farmer could be offered a flat rate per pound or per ton of biomass supplied.[106] One solution to avoid a long-term, fixed-price contract is that the payment term could be tied to a relevant commodity price such as the price of oil. One contract states a price clause as follows: "[prices] range between $5/ton when oil is below 20/[barrel], $8/ton when the price of oil is between $30-$35/[barrel], and $15/ton when the price of oil is over $65/[barrel]."[107] These two payment methods can be combined. A portion could be priced at a fixed rate per pound or per ton and the other portion would be tied to the price of oil.[108] The price clause can take any form or any variation agreed upon by the ethanol producer and the farmer, so either party is free to come up with a creative way to protect himself from price volatility.

2. Quantity Clause

The amount of biomass to be supplied should be a term included in biomass production contracts. As discussed earlier, cellulosic ethanol plants

---

[104] *See* Christopher R. Kelley, *Agricultural Production Contracts: Drafting Considerations*, 18 HAMLINE L. REV. 397, 403 (1995), *available at* http://nationalaglawcenter.org/assets/bibarticles/kelley_agricultural.pdf.

[105] *See* Larson et al., *supra* note 25, at 1.

[106] *See* Williamette Biomass Processors, Inc.-Camelina Production Contract for 2008 (2008), *available at* http://www.willamettebiomass.com/files/WBP_Camelina_Contract3.pdf (providing an example of a contract using flat rate pricing for a dedicated energy crop, camelina).

[107] Ira J. Altman, Chris Boessen, & Dwight R. Sanders, *Contracting for Biomass: Supply Chain Strategies for Renewable Energy*, 71 J. ASFMRA 1, 12 (2008) [hereinafter *Contracting for Biomass*], *available at* http://portal.asfmra.org/userfiles/file/journal/281_altman_1.pdf.

[108] *See id.* at 13.

require a sufficient supply of biomass to keep the plant operating at capacity.[109] One cellulosic ethanol plant requires "approximately 1,500 tons per day of biomass material from 1,000 acres to produce approximately 45 million gallons of ethanol per year."[110] Cellulosic ethanol producers will want the contract to specify the amount of biomass to be delivered to ensure an adequate supply for the year.

The quantity clause will benefit farmers by creating some financial certainty. Farmers will gain a guaranteed demand for biomass each year and a steady source of yearly income.[111] This planned cash flow will give farmers some stability and will enable them to open lines of credit.[112] Knowing the quantity of biomass required will also affect the crop rotation decisions farmers make. The contract will require farmers to plant enough acreage of a specific crop to meet the contracted quantity. This will limit planting decisions if the farmer is using a crop rotation system or limit the ability to change to an alternative crop when crop prices fluctuate. The farmer will want to consider the future impact on their other business decisions before signing a long-term agreement.

3. Quality Clause

Depending on the conversion process used, biomass might need to be a specific quality in order to be converted into cellulosic ethanol.[113] When the cellulosic ethanol production process requires a certain biomass quality, the production contract should specify that quality. For example, the biomass production contract used by Iogen specifies the quality of straw that would be acceptable on delivery.[114] To be acceptable, the wheat or barley straw quality must "be harvested, golden without rot or weathering, maximum of 18% moisture content, segregated as the type of straw as agreed, and free of any preventable toxins as identified by the processor in advance of harvest."[115] When quality is included in the contract, farmers should use appropriate tests to make sure that the biomass delivered is up to the quality levels required in the contract.

4. Storage Clause

As discussed earlier, a cellulosic ethanol plant requires a large volume of biomass. One typical facility requires 547,500 tons of biomass

---

[109] *See* Larson et al., *supra* note 25, at 1.
[110] *Contracting for Biomass*, *supra* note 107, at 3.
[111] *See* Hamilton, *supra* note 27, at 9.
[112] *See generally id.*
[113] *See Applying Transaction Cost Economics*, *supra* note 100, at 112.
[114] *Contracting for Biomass*, *supra* note 107, at 13.
[115] *Id.*

per year just to operate.[116] It is difficult for one facility to have the storage capacity to handle such a quantity of biomass at one time. For this reason, the ethanol producer should consider including a storage term in the biomass production contract, requiring the farmer to store biomass until the producer needs it.[117] In some biomass production contracts, the ethanol producer also requires the farmer to provide ready access so that the cellulosic ethanol producer can pick up the stored biomass as needed.[118]

Cellulosic ethanol producers should consider adding in a storage clause. Requiring the farmer to store the biomass until needed would keep the ethanol producer from building costly storage facilities. However, placing storage responsibilities with the farmer increases the farmer's costs. The farmer may not have adequate storage space to store the biomass and would need to rent additional land to store the biomass. If the quality of the biomass is a concern, the farmer may also be forced to invest in equipment to protect the biomass. Farmers should negotiate for increased rates to compensate for these increased costs.

Another concern with the storage clause arises when obtaining insurance to cover possible loss of the biomass. In Arkansas, where our hypothetical parties are contracting, a party needs to have an "insurable interest" in the property to purchase insurance.[119] Arkansas courts have defined an "insurable interest" to be some lawful or substantial economic interest in the property, including when the parties have a contract right.[120] The biomass production contract would give the cellulosic ethanol producer a contract right in the biomass produced by the farmer. If the contract does not address insurance, both parties can purchase insurance policies to cover the risk of losses. However, it may be more economically efficient to assign the responsibility of purchasing insurance to one party, negotiating a higher or lower selling price depending on which party takes out the insurance on the stored biomass.

5. Logistics Clause

The cellulosic ethanol producer should also consider a "planning and logistics" clause.[121] When this provision is included, the farmer grants the cellulosic ethanol producer access to his land and agrees to provide the ethanol producer with information as required.[122] The information may include access to the farmer's Farm Service Agency reports, a biomass

---

[116] *See id.* at 3.
[117] *See id.*
[118] *See id.*
[119] ARK. CODE. ANN. § 23-79-104(a) (West 2012).
[120] *See Beatty v. USAA Cas. Ins. Co.*, 954 S.W.2d 250, 254 (Ark. 1997).
[121] *See Contracting for Biomass, supra* note 107, at 13.
[122] *See id.*

production forecast by a certain date, and "notice of all changes to acres farmed, crop rotation, or any other pertinent information for straw volume or yields."[123]

6. Transfer of Agreement Clause

The remaining terms are common in contracts, but should not be forgotten in the context of a biomass production contract. A transfer of agreement clause would require the farmer to transfer the contract if he transfers his farm.[124] With this clause, if the farmer decides to stop farming during the life of the biomass production contract, he will make his best effort to extend the biomass production contract to the successor in interest in the farmland.[125] If the farmer were to die during the term of the contract, this clause would bind the farmer's heirs to perform the contract.[126] This clause assists the cellulosic ethanol producer in guaranteeing a stable supply of biomass.

7. Alternative Dispute Resolution

Another common contract clause requires any contract disputes to be settled by alternative dispute resolution (ADR) techniques. Arbitration and mediation are the most common ADR techniques.[127] Arbitration is a process of settling disputes outside of the court system by the use of a neutral third party.[128] This process allows for negotiating of flexible solutions, costs less, and provides quicker resolutions of disputes than the court system, while remaining confidential and private.[129] Arbitration can be binding or nonbinding depending on the language in the contract.[130] Binding arbitration makes the decision of the third party is legally enforceable.[131] In non-binding arbitration, the decision of the third party is not mandated on the two parties and no enforceable award is granted.[132]

---

[123] *Id.*

[124] *See id.* at 15.

[125] *Id.*

[126] *See* FARMER'S LEGAL GUIDE, *supra* note 35, at 44.

[127] *See* BLACK'S LAW DICTIONARY 86 (8th ed. 2004).

[128] *Id.*at 86, 112.

[129] *See Arbitration 101: The Basics of Arbitration*, NATIONAL ARBITRATION FORUM, http://www.adrforum.com/users/naf/resources/arb%20101-21.pdf (last visited Oct. 11, 2012).

[130] *Alternative Dispute Resolution*, ALTERNATIVE DISPUTE RESOLUTION – JON GRIFFIN, http://jongriffin.com/business-articles/business-law/alternative-dispute-resolution/ (last visited Oct. 11, 2012).

[131] *See* Steven C. Bennett, *Non-Binding Arbitration: An Introduction*, 61-2 DISP. RESOL. J. 22 (2006), *available at* http://www.jonesday.com/files/Publication/266ff349-03e1-4610-a7c1-6cd0f951e8bb/Presentation/PublicationAttachment/1d047cae-3d31-4b6b-b280-71ed96efa8e5/Bennett,%20Steven%5B2%5D.pdf.

[132] *See id.*

The other common ADR method is mediation. Mediation is "[a] method of nonbinding dispute resolution involving a neutral third party who tries to help the disputing parties reach a mutually agreeable solution."[133] Mediation, like arbitration, allows for flexible outcomes, lower costs, and quicker resolutions compared to the court system, and it can also be confidential.[134] The biomass production contract may contain a clause requiring disputes arising under the contract to be resolved using ADR.

8. Excuse in Performance Clause

The parties may also include an "excuse in performance" clause, also known as a "force majeure" or "act of God" clause. The excuse in performance clause covers situations where a flood, drought, or some other action out of a party's control prevents one party from performing.[135] Performance will typically be excused for causes like "a government act, such as a grain embargo, a strike by truck drivers, or a natural event, such as flood or drought."[136] Arkansas courts have rarely dealt with the application of a force majeure clause in the agricultural contracts context. Recently, an Arkansas Court of Appeals found that flooding on the Mississippi River preventing a rice merchant from picking up a farmer's rice during the contractual delivery period fell under the force majeure clause.[137]

9. Restoration Bonds Clause

A farmer who decides to switch production to a dedicated energy crop, such as switchgrass or miscanthus, may consider including a clause for restoration bonds to lower the risk that the cellulosic ethanol plant will prematurely close or enter bankruptcy. The restoration bond provision designates a certain amount of money at the start of the contract to be used to restore the farmer's land to the previous use should the farmer wish to return to conventional crops. This fixed sum would be reduced by specified amounts over the life of the biomass production contract. It covers costs associated with removing the established dedicated energy crop and returning the land to the previous crop production.

---

[133] BLACK'S LAW DICTIONARY 1003 (8th ed. 2004).

[134] *See* Mediation, A.B.A., http://www.americanbar.org/groups/public_education/resources/law_related_education_network/how_courts_work/mediation_advantages.html (last visited Oct. 11, 2012).

[135] *See* FARMER'S LEGAL GUIDE, *supra* note 35, at 28.

[136] *Id.*

[137] *See* Cassinger v. Poinsett Cnty. Rice & Grain, Inc., No. CA 09-677, 2010 WL 1478773, at *1-3 (2010 Ark. Ct. App. Apr. 14, 2010).

This clause may be worth special consideration because, as the next section will discuss, the risk that a cellulosic ethanol plant will enter bankruptcy is significant.

C. Bankruptcy Issues

While a production contract with a cellulosic ethanol plant may provide our farmer with a new source of income and other benefits, the contract also presents uncertainties. Because biomass production is a new field, it is a real possibility that the cellulosic ethanol plant will fail and file for bankruptcy. In 2008, sixteen ethanol plants filed for bankruptcy protection, including VeraSun Energy, one of the largest ethanol producers in the United States.[138] Analysts have warned that the ethanol industry could see more bankruptcy filings in the near future.[139] The bankruptcies in 2008 were the result of high crop prices, and 2011 also saw a spike in crop prices.[140]

Although cellulosic ethanol plants can lock in the price for biomass through a biomass production contract, the cellulosic ethanol producer can face pressure from rising commodity prices. As the price of other crops increase, the cellulosic ethanol producer will be forced to pay a higher price for dedicated energy crops to ensure the required level of biomass is delivered. There are few, if any, risk management tools to protect cellulosic ethanol producers from increasing biomass prices.

As a consequence of this risk, farmers will need to know how to protect themselves in the event that the cellulosic ethanol producer files for bankruptcy. Farmers should realize that nothing would provide complete protection from the cellulosic ethanol producer's bankruptcy, but that the law does provide some options. These protections focus on compensating the farmer for biomass already delivered, not future deliveries. This section will also discuss features of the Bankruptcy Code that a bankrupt ethanol producer could use for his protection and possible defenses a farmer could use against these protections.

---

[138] *See* Dan Piller, *Ethanol Plant Failures to Climb, Banker Predicts*, DES MOINES REG., Nov. 18, 2008, at D1.

[139] *See Ethanol Plants at Risk of Another 'Shake-out'*, AGRIMONEY.COM (Feb. 23, 2011), http://www.agrimoney.com/news.php?id=2857.

[140] *See id.*

1. Protections for Farmers

(a) UCC Protections

Prior to a bankruptcy filing, the UCC provides protection when one party believes the other party may not be able to perform.[141] The actual performance, and not just the promise to perform, is essential to all contracts.[142] This provision of the UCC protects the farmer when he has reasonable grounds to believe the cellulosic ethanol producer will not be able to perform.[143] The farmer can make a written demand to the cellulosic ethanol producer for adequate assurances of his ability to perform his contractual obligations.[144] Until the cellulosic ethanol producer gives adequate assurances, any deliveries by the farmer can be suspended.[145] The UCC gives the ethanol producer thirty days to respond to this demand.[146]

In order to utilize this section of the UCC, the farmer would need reasonable grounds for insecurity in the ethanol producer's performance and for the ethanol producer's failure to give adequate assurances of his ability to perform. In determining whether reasonable grounds for insecurity exist, the Arkansas Supreme Court has set forth the following factors to consider:

> (1) the nature of the sales contract; (2) the repetition by the party upon whom demand is made of conduct that caused insecurity in other transactions; (3) insecurity existing in the performance of other contracts unrelated legally to the contract at issue; (4) the expanding use of a credit term by the party upon whom demand is made; and (5) reputation and rumors concerning the stability and conduct of the party upon whom demand is made.[147]

Another time to demand adequate assurance is when the buyer is delinquent in paying the seller for goods delivered.[148] If the ethanol producer falls behind in paying the farmer for biomass delivered, the farmer would generally have reasonable grounds for insecurity in the ethanol producer's performance and could make a written demand for adequate assurances

---

[141] U.C.C. § 2-609 (2003).
[142] *See* 67 Am. Jur. 2d *Sales* § 480 (2011).
[143] U.C.C. § 2-609(1) (2003).
[144] *See id.*
[145] *See id.*
[146] *Id.*
[147] Ford Motor Co. v. Ellison, 974 S.W.2d 464, 467 (Ark. 1998).
[148] U.C.C. § 2-609 cmt. 3 (2003).

from the ethanol producer.[149] Other examples include a reasonable belief that the cellulosic producer is insolvent, or that the cellulosic ethanol producer has failed to perform some aspect of the contract.[150] The farmer will be responsible for proving that he had reasonable grounds for insecurity in the ethanol producer's performance.[151]

Next, the farmer will need to show that the ethanol producer failed to give "adequate assurances" of his ability to perform. The farmer does not get to dictate the form that the assurance will take, because the farmer could ask for assurances that would not satisfy a reasonable person in the position of the farmer.[152] If the farmer is not considered a merchant, then adequate assurances are only "the minimum kinds of promises or acts on the part of the [ethanol producer] that would satisfy a reasonable man in the position of the [farmer] that his expectation of receiving due performance will be fulfilled."[153] If the farmer is a "merchant," the test will be whether the ethanol producer made "the minimum kind of promises or acts . . . that would satisfy a reasonable merchant in the position of the [farmer] that his expectation of receiving due performance will be fulfilled."[154]

The example given in the UCC for sufficient adequate assurance is where "the buyer can make use of a defective delivery, a mere promise by a seller of good repute that he is giving the matter his attention and that the defect will not be repeated, is normally sufficient."[155] However, the UCC comments also explain that if a merchant is known to cut corners, then the merchant's statement that he is giving the matter his attention could be insufficient based on his reputation.[156] The adequacy of the assurance is judged in light of the situation between the farmer and the ethanol producer and the reputation of the party giving the assurance using the reasonable person or reasonable merchant standards.[157]

For example, Farmer B has made three deliveries on time to Ethanol A, but Ethanol A has failed to pay Farmer B for any of the deliveries. Before Farmer B makes the fourth delivery, he sends Ethanol A a written letter demanding assurances that Ethanol A still plans to perform the contract. Ethanol A responds by paying in full for the previous three deliveries. By paying in full, Ethanol A has given an adequate assurance to

---

[149] *See generally*, Matthew C. Brenneman, Annotation, *Sales: What Constitutes "Reasonable Grounds for Insecurity" Justifying Demand for Adequate Assurance of Performance Under UCC § 2-609*, 37 A.L.R.5th 459 (1996).

[150] *See* William D. Hawkland, *Reasonable Grounds for Insecurity*, 2 HAWKLAND UCC SERIES § 2-609:2 (2012).

[151] *See Ford Motor Co.*, 974 S.W.2d at 467.

[152] *See* U.C.C. § 2-609 cmt. 3 (2003).

[153] *Id.*

[154] *Id.*

[155] U.C.C. § 2-609 cmt. 4 (2003).

[156] *See id.*

[157] *See id.* at cmt. 4 (providing additional examples of the adequacy of assurance).

Farmer B, and Farmer B will not be able to claim the contract was repudiated.

If no adequate assurances are given within thirty days of the written demand, the contract is viewed as repudiated by the ethanol producer.[158] At this point, the farmer will no longer be required to make any outstanding deliveries of biomass.[159] The farmer could then bring a claim against the ethanol producer for damages resulting from the breach of contract, but the farmer must show that the value of the contract as a whole was substantially impaired by the ethanol producer's repudiation.[160]

The farmer would then want to consider alternative markets for his biomass. If a biomass production contract is repudiated, then under the UCC, the farmer will need to try to find a new market for the biomass. If the farmer was selling crop residue, the farmer's alternative markets are limited, because there is unlikely to be another ethanol plant in the area. Some markets do exist for crop residue for uses other than cellulosic ethanol production. For example, the farmer could still sell rice straw or wheat straw as a forage crop.

The issue becomes more complicated when the farmer has switched to a dedicated energy crop, such as switchgrass in Arkansas. The farmer should consider the alternative markets for the dedicated energy crop before switching completely from a traditional crop. For switchgrass, one alternative market that exists is as a forage crop.[161] Switchgrass can be used as a hay crop or cattle can be allowed to graze switchgrass.[162] One existing market for forage sorghum is as silage. If the farmer is not already involved in cattle production or near an area with an existing hay or silage market, these alternative markets for switchgrass or forage sorghum may not be available. The farmer should consider the possibility that the cellulosic ethanol plant may close, and carefully consider the alternative markets that exist for a dedicated energy crop before making any decision to switch production.

(b) Bankruptcy Code Protections

The Bankruptcy Code offers protections for farmers dealing with an ethanol producer in bankruptcy. Section 503(b)(9) of the Bankruptcy Code allows the farmer, as a supplier of goods, to claim as an administrative expense the value of any goods received by the cellulosic

---

[158] *See id.*

[159] *See* Thos. Cox & Sons Mach. Co. v. Forshee, 131 S.W. 454, 456 (Ark. 1910); *see also* Kirchman v. Tuffli Bros. Pig Iron & Coke Co., 122 S.W. 239, 240-41 (Ark. 1909).

[160] *See* Cargill, Inc. v. Storms Agri Enter., 878 S.W.2d 786, 789 (Ark. Ct. App. 1994).

[161] U.T. AGRIC. EXTENSION SERV., PUB. NO. SP701B-5M-3/08(REP) R12-4110-070-012-08 08-0166, USING SWITCHGRASS FOR FORAGE (2008) *available at* https://utextension.tennessee.edu/publications/Documents/SP701-B.pdf.

[162] *Id.*

ethanol producer within 20 days before the producer's bankruptcy was filed when the goods have been sold to the producer in the ordinary course of the producer's business.[163] In a bankruptcy case, an administrative expense is given priority over unsecured debts owed by the ethanol producer.[164] This means the farmer, if the bankruptcy court decides that he meets the requirements for an administrative expense, will be paid after secured creditors but before the unsecured creditors.[165]

No bankruptcy court has yet ruled that supplying biomass qualifies as an administrative expense, but it is a plausible claim. In order to bring a claim for an administrative expense, the farmer will need to establish that: (1) the vendor sold "goods" to the debtor; (2) the goods were received by the debtor within twenty days prior to filing; and (3) the goods were sold to the debtor in the ordinary course of business.[166] The Bankruptcy Code does not define a "good," but courts faced with this issue have turned to the UCC's § 2-105 definition of a "good."[167] As previously discussed, the UCC includes growing crops in the definition of "goods."[168] Although courts have not yet applied it to them, dedicated energy crops should be included in this definition of "goods."[169] Another unresolved issue is whether the crop residue used to produce cellulosic ethanol, such as rice straw or wheat straw, is included in "growing crops."[170] These issues need to be resolved by the courts before a farmer could be certain that his biomass qualifies as a "good" and will meet the requirements of an administrative expense.

Next, the farmer will need to establish that the ethanol producer received goods within twenty days prior to the bankruptcy filing. The twenty-day time period exists to prevent the ethanol producer from acquiring goods during a period when he knows that bankruptcy filing is imminent.[171] The farmer could establish this requirement by presenting records of the deliveries that took place within twenty days of the bankruptcy filing.

Finally, the farmer must establish that the biomass was sold in the "ordinary course of business." The Bankruptcy Code does not define this term and courts have yet to consider its meaning. *Black's Legal Dictionary* defines the "ordinary course of business" as "normal routine in managing a trade or business."[172] A farmer selling biomass to an ethanol producer will

---

[163] 11 U.S.C.A. § 503(b)(9) (West 2011).

[164] *See* Hartford Underwriters Ins. Co. v. Union Planters Bank, 530 U.S. 1, 4-5 (2000).

[165] *Id.*

[166] *In re* Goody's Family Clothing Inc., 401 B.R. 131, 133 (Bankr. D. Del. 2009).

[167] *Id.* at 134.

[168] *See supra* notes 48-57 and accompanying text.

[169] *Id.*

[170] *Id.*

[171] See Lauren C. Cohen, *The Application of Section 502(d) to Section 503(b)(9) Claims – "You Can Put Lipstick on a Pig,"* 18 J. Bankr. L. & Prac. 2 (2009).

[172] BLACK'S LAW DICTIONARY 378 (8th ed. 2004).

generally meet this requirement because the selling of commodities is part of a normal farm management routine. Any farmer that believes they meet the three requirements, and is dealing with an ethanol producer in bankruptcy, should put forward an administrative expense claim.

2. Protections for Bankrupt Ethanol Producer

(a) Executory Contracts

There are several issues that a farmer should keep in mind in the event that the ethanol producer files for bankruptcy. When in bankruptcy, the ethanol producer will have the opportunity to accept or reject certain contracts.[173] This means the ethanol producer could decide to accept or reject the farmer's biomass production contract. This power to accept or reject contracts is limited to contracts classified as "executory contracts."[174] An "executory contract" is "[a] contract that remains wholly unperformed or for which there remains something still to be done on both sides."[175] The ethanol producer would have until the confirmation of the bankruptcy plan to decide which executory contracts to accept or reject.[176] A bankruptcy plan can take time to develop, and farmers may not want to sit in limbo waiting for the bankruptcy plan to be confirmed. To protect the farmer or any other person that has contracted with someone in bankruptcy, the Bankruptcy Code allows for any party with an "executory contract" to request that the bankruptcy court set a specified period of time for the ethanol producer to reject or accept his biomass production contract.[177]

For a contract to be an "executory contract" in bankruptcy, there must be some performance due from both parties.[178] In an example biomass production contract, the farmer would still owe future deliveries of biomass and the ethanol producer would owe payments for those future deliveries. If the only remaining performance is payment of money, or there is no continuing obligation, the contract is not considered an "executory contract."[179] In previous corn ethanol producers' bankruptcies, corn growers who contracted with the bankrupt ethanol plants were warned that the ethanol producer would have the right to accept or reject their corn

---

[173] 11 U.S.C.A. § 365 (West 2011).
[174] 11 U.S.C.A. § 365(a) (West 2011).
[175] BLACK'S LAW DICTIONARY 344 (8th ed. 2004).
[176] 11 U.S.C.A. § 365(d)(2) (West 2011).
[177] *Id.*
[178] *See* 31 SAMUEL WILLISTON & RICHARD A. LORD, A TREATISE ON THE LAW OF CONTRACTS § 78:38 (4th ed. 2012).
[179] *Id.*

contracts.[180] A biomass production contract may be similar enough to these corn producers' contracts that it will be held to be an executory contract by a bankruptcy court.

If contracts are rejected, it will be considered a breach of contract that will relate back to the day before the filing of the bankruptcy petition.[181] The breach claim can be any breach of contract claim for damages that the relevant state law allows.[182] Any claim for damages by the farmer for breach of the rejected biomass production contract would be a pre-bankruptcy unsecured claim.[183] As a result of the fact that the claim for damages would be unsecured, the farmer will not get his whole value of damages owed to him because he would be among the last in line to get paid from the ethanol producer.

(b) Preferential Payments

Farmers should also consider the danger of being classified a preferential payment. Consider for a moment that Ethanol A has recently filed for bankruptcy, but Farmer B has made no recent deliveries, and Ethanol A has paid Farmer B for all deliveries to date. Farmer B might think that the bankruptcy does not affect him, but Ethanol A may try to recover money already paid to him.

The Bankruptcy Code allows the ethanol producer to avoid certain payments made to creditors.[184] Section 547 allows the ethanol producer to avoid, or "render void,"[185] any payment made to a creditor such as a farmer with a biomass production contract that was made while the ethanol producer was insolvent or within the 90-day period before the bankruptcy petition was filed.[186] If Ethanol A has paid Farmer B for past deliveries within 90 days of the bankruptcy petition being filed, or while Ethanol A was insolvent, then any payments made to Farmer B could be voided. When payment is voided, Farmer B would be required to pay back any money received during that period.

The reasons to allow avoidance is to prevent the ethanol producer from choosing his preferred creditors, paying the full debt owed to the

---

[180] *See* Roger McEowen, *VeraSun Energy Bankruptcy Poses Perils for Farmers and Elevators,* IOWA ST. U. CENTER FOR AGRIC. L. & TAX'N (Nov. 18, 2008), http://www.calt.iastate.edu/verasun.html.

[181] 9C AM. JUR. 2D *Bankruptcy* § 2374 (2011).

[182] Roger McEowen, *The Assumption or Rejection of Executory Contracts in Bankruptcy – Are Commodity Contracts Within a Safe Harbor?*, IOWA ST. U. CENTER FOR AGRIC. L. & TAX'N (Mar. 18, 2009), http://www.calt.iastate.edu/briefs/CALTLegalBrief-Executory%20Contracts%20in%20Bankruptcy.pdf.

[183] *Id.*

[184] 11 U.S.C.A. § 547(b) (West 2011).

[185] BLACK'S LAW DICTIONARY 146 (8th ed. 2004).

[186] *See* 11 U.S.C.A. § 547(b) (West 2011).

preferred creditors, and not paying other creditors during a time period when he knew he might file for bankruptcy.[187] The bankruptcy trustee or creditor's committee will need to establish six elements to prove that the payment was a preference: (1) that the ethanol producer made a payment, or any transfer of the ethanol producer's property, to the farmer; (2) the transfer was because of a preexisting debt; (3) the transfer was to or for the benefit of the farmer; (4) the transfer was made while the ethanol producer was insolvent; (5) the transfer was within 90 days of the ethanol producer filing for bankruptcy; and (6) the transfer left the farmer in a better position than if the farmer had asserted a claim for the same debt in a Chapter 7 bankruptcy proceeding.[188]

Additionally, the Bankruptcy Code allows one to defend against a claim of a preference payment.[189] The farmer has the burden to prove each defense.[190] The most likely defense to be applicable is that payment was received in the ordinary course of business.[191] This defense allows a farmer to keep any payment made by the ethanol producer when the payment is "made in the ordinary course of business or financial affairs of the [ethanol producer.]"[192] To show the payment was made in the ordinary course of business, the farmer must present all receipts for biomass delivered or picked up, slips for deposit of checks from the ethanol producer, or any records that establish delivery and payment history by the ethanol producer.[193] For normal payments made to the farmer for delivery of biomass, the ordinary course of business defense would be the best defense against a claim of preference payment.

If the farmer receives a letter demanding return of payments made to the farmer on the grounds that the payments are preferential, the farmer should immediately contact an attorney. The attorney can help the farmer determine if the farmer qualifies for this defense or any other possible defenses to a claim of preference payment. In one ethanol bankruptcy, VeraSun sent letters to farmers seeking repayment of any payments for corn deliveries made 90 days before the ethanol producer filed bankruptcy.[194] The letters stated that if the farmer acted quickly, they would only have to repay 80% of the payments made 90 days before the bankruptcy was

---

[187] *See* Roger A. McEowen, *The Agriprocessors Bankruptcy – Can The Bankruptcy Trustee Recover Payments Made to Suppliers Within 90 Days of the Bankruptcy Filing?*, IOWA ST. U. CENTER FOR AGRIC. L. & TAX'N (Dec. 3, 2009), http://www.calt.iastate.edu/briefs/CALT%20Legal%20Brief%20-%20Agriprocessors%20Bankruptcy.pdf [hereinafter *Agriprocessors Bankruptcy*].

[188] *See id.*

[189] *See* 11 U.S.C.A. § 547(c) (West 2011).

[190] *See* McEowen, *supra* note 187.

[191] *See* 11 U.S.C.A. § 547(c)(2) (West 2011).

[192] *Id.*

[193] *See* McEowen, *supra* note 187.

[194] *Id.*

filed.[195] The farmers were also warned that they would have to respond to the letter promptly.[196] The farmers' attorneys responded to VeraSun's letters, and the claims against the farmers were ultimately dropped before the farmers paid the money.[197] If our hypothetical farmer got a similar letter from a cellulosic ethanol producer, the farmer should not return any payments made within 90 days of the bankruptcy being filed. Instead, the farmer should meet with an attorney to determine what defenses are available to the ethanol producer's demands.

III. CONCLUSION

This article presented a framework for drafting and evaluating biomass production contracts. General contract law has been applied to the specific context of cellulosic ethanol production. Possible provisions of a biomass production contract have been discussed. Finally, the consequences of an ethanol producer's potential insolvency and bankruptcy have been explored.

Despite recent dramatic cuts in the 2012 cellulosic ethanol production mandates, the United States is dedicated to making the cellulosic ethanol industry a viable alternative to corn-based ethanol.[198] New incentives to encourage cellulosic ethanol production are still being added. The United States Army recently issued a seven billion dollar solicitation to encourage the development of renewable energy facilities near Department of Defense facilities and biomass processing facilities are specifically mentioned.[199] As biomass crops become a viable alternative commodity and the industry grows, farmers will be presented with new opportunities to diversify their operations, and attorneys will have an opportunity to shape the contracts of this new industry.

---

[195] *Id.*

[196] *See* Todd Neeley, *What Should Farmers Do About VeraSun Letters?*, PROGRESSIVE FARMER'S ETHANOL BLOG (Sept. 2, 2010, 10:41 AM), http://www.dtnprogressivefarmer.com/ag/blogs/template1&blogHandle=ethanol&blogEntryId=8a82c0bc2a8c8730012ad303c5b6037f.

[197] *See* Holly Jessen, *VeraSun Drops Demands Made to Corn Farmers*, ETHANOL PRODUCER MAG. (Oct. 14, 2010), http://www.ethanolproducer.com/articles/7050/verasun-drops-demands-made-to-corn-farmers.

[198] *See* Doggett & Rascoe, *supra* note 6.

[199] Foley & Lardner LLP, *Army Issues Multi-Billion-Dollar Solicitation for Large-Scale Renewable and Alternative Energy Production for Federal Installations*, JDSUPRA (Aug. 22 2012), http://www.jdsupra.com/legalnews/army-issues-multi-billion-dollar-solicit-11300/.